

Image Services

Installation & Configuration Procedures for Windows Server®

Release 4.0.0

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Contents

Getting Started

Overview 14

Required Skills 15

Documentation Conventions 16

New Features of the Image Services 4.0.0 Installation 17

Windows 2000 Operating System Support 17

Cross-Committal and Multi-Committal System Support 17

Only Site-Controlled RDBMS Software Supported 18

Remote Oracle Server Compatibility 18

New Document for Installing RDBMS Software 19

Microsoft SQLServer 2000

Oracle9i RDBMS Software

CSS Worldwide Customer Support 20

Release Notes for Image Services 4.0.0 20

Release Dependency Spreadsheet 21

Terminal Services 22

Installation Prerequisites 23

Install RDBMS Software 23

National Language Support 24

Hardware Requirements 27

Minimum Disk Space 29

Minimum Disk Space Requirements 30

Software Requirements 31

Windows 2000 Operating System Software 31

FileNet Software Media 32

RDBMS Software Media 32

Communication Software 34

Universal SLAC Key 35

Debugger 36

Server Naming Convention 37

Domain Security and Planning 38

FileNet Users and Groups 42

Additional System Information 44

Related Documentation 46

Preparing for the Installation

Installation Worksheet 49

System Information 50

Compatible System Information 51

Storage Library Information 52

Printer Information 53

Optical Drive information 54

File System and Dataset Information 55

System Cache Information 57

System Configuration Issues 58

Check/Configure Paging File Size 58

Configure TCP/IP and SNMP Protocol (Required For All Systems) 64

Set Server Optimization Level (Recommended) 65

Determining if Your Storage Management System Supports

Synchronous Writes 68

3 Installing FileNet Image Services Software 70

Install the IS Software 72

Reboot the Server 89

Install Required Pre-Startup Fixes 90

Configuring FileNet Image Services Software

Create the Configuration Database 92

Verify the Image Services Character Set 98

Configure Oracle 99

Create Optional Datasets 99

Define RDB Object Locations for Oracle 101

Configure Microsoft SQL Server 104

Set Microsoft SQL Server Default Language 104

Define RDB Object Locations for Microsoft SQL Server 104

Register the SQL Database Server on the IS Server 110

Optional Configuration Procedures 111

Modify Dataset File Sizes (Optional) 111

Configure Logical Cache (Optional) 114

Configure System Document Services Parameters (Optional) 116

Configure the Database Parameters (Optional) 117

Configure Relational Database Parameters 117

Configure MKF Database Parameters 118

Optional Storage Library Configuration Procedures 119

Verify/Configure Storage Library Device Settings (Optional) 120

Connect/Configure Storage Library Devices (Optional) 122

Configure Third-Party Access to Optical Libraries (Optional) 124

Exit the System Configuration Editor 128

Initialize the Server Software 129

Initialization Procedures for Local Installations 130

Initialization Procedures for Remote Oracle Installations 132

Verify FileNet Dataset Permissions (Optional) 136

5 Completing the Installation 137

Setup Storage Library Server (Optional) 137

Install Image Services Software on Storage Library Server 138

Connect Storage Library Device(s) 138

Configure Third-Party Access to Optical Libraries (Optional) 141

Build Configuration Files on the Storage Library Server 145

Configure Storage Devices on Storage Library Server 150

Configure RES, Cross-Committal, or Multi-Committal Systems (Optional) 152

Verify the System Serial Number 153

Start the FileNet Software 154

Set f maint Password 162

Setup SQL Server Transaction Logs (SQL Server Only)

Install Remaining Fixes 164

Make System Backups 165

Configure Image Services Processes to Autostart (Optional) 168

MSAR Systems 169

Appendix A – Adding an Application Server

Before You Begin 171

Installation Prerequisites 171

Additional System Information 172

Other Sources of Information 173

Install RDBMS Software 173

Install Image Services Software 174

Configure the Root Server 174

Add Application Server(s) 174

Add Services 179

Add Batch Services 180

Add Cache Services 182

Add Print Services 183

Add SQL Services 184

Add WorkFlo Queue Services 187

Add VWService 188

Configure the Application Server 189

Build and Initialize the Application Server

Initialize FileNet Databases 190 Verify FileNet Dataset Permissions (Optional) 191 Bring Up FileNet Software 192

Appendix B – Adding Additional **Storage Library Servers** 195

Overview 196

Multiple Optical Library Server Uses 196

Prerequisites 198

Install IS Software on the Storage Library Server 199

Configure the Root Server 199

Commit Documents in the Transient Database (Existing Systems ONLY) 200 Add Storage Library Servers 201

Connect Storage Library Device(s) 207

Start the FileNet Software 210

Build Configuration Files on the Storage Library Server 210

Make System Backups 216

Storage Library Server Utilities (Optional) 217

Moving Disks Between Storage Library Servers 218 Deleting a Storage Library Server 220

Appendix C – IS and CS Collocation Requirements 225

Read Release Notes 225

Supported Platform Configurations 226

Server-Based Services 226 Operating System 226 **RDBMS 226**

Installation Order 227

SQL Server Service Ownership 228

Microsoft SQL Server Parameters 229

Storage Library Optical Units 229

Appendix D – Remote Access Procedures 230

Adding Remote Access Software 232

Granting Remote Access Rights to the FNADMIN User 249

pcAnywhere TCP Remote Control Service 252

Why Use pcAnywhere? 252 Installing pcAnywhere 254

Granting Users Permission to Logon 261

Appendix E – De-Installation Procedures 263

De-Install FileNet Image Services Release 4.0.0 Software 265

De-Install Oracle RDBMS Software 272

Reboot Server 280

Appendix F – Microsoft Systems Management Server (SMS) **Procedures 281**

What is Microsoft Systems Management Server (SMS)? 282

Overview 283

Setting up the SMS Site Server Package 284

Copy FileNet Image Services Software to Site Server 284

Modify the Isetup.iss File 285

Create Package 287

Configure the Distribution Points for Your Site 291

Installing FileNet Image Services Software 294

Complete the SMS Install of FileNet Software 296

Reboot the Server 297

Install your SLAC Key 298

Uninstalling FileNet Image Services software 301

Create Package 301

Configure the Distribution Points for Your Site 305

Uninstall FileNet Image Services Software 307

Index 309

Getting Started

This document explains how to install and configure FileNet Image Services Software on a Windows Server.

Overview

The procedures in this document can be used to set up a server as a **Combined server** (Root/Index/Storage Library), a **Dual** server (separate Root/Index and Storage Library servers), an **Entry** server ((Root/Index/Storage Library), or an **Application** Server.

Image Services and configuration procedures are described in the main body of this document. In addition, several appendices contain the following procedures:

Adding an Application Server (page 170)

- Adding Additional Storage Library Servers (page 195)
- IS and CS Collocation Requirements (page 225)
- Remote Access (page 230)
- De-installation (page 263)
- Microsoft System Management Server (SMS) (page 281)

Please read this entire document (including appendices) before performing any procedures.

Required Skills

This document assumes you are familiar with these topics:

- Knowledge of the Windows Server operating environment
- Knowledge of Windows Server network models
- Experience with Notepad (i.e., text editor)
- Experience with Windows Server Administrative Tools
- Oracle Database Administration or Microsoft SQL

Documentation Conventions

We have tried to make this procedure easy to follow, whether you are a new or experienced technician. The organization and format of this procedure are designed to clarify the tasks you are about to perform.

To familiarize yourself with the conventions used in this document and for other general information, link to the <u>Doc_Conventions</u> file on the Image Services documentation CD.

New Features of the Image Services 4.0.0 Installation

This release of Image Services software includes the following major improvements and features.

Windows 2000 Operating System Support

Only the Windows 2000 Operating System, with Service Pack 3, is supported with this release of Image Services software.

Note

The service pack must be installed. You can download the service pack from: http://www.microsoft.com/downloads/search.asp?

Cross-Committal and Multi-Committal System Support

A new document, <u>Multi-Committal and Cross-Committal Configura-tion Handbook</u>, is included in this release. It supplements the section in this document that deals with configuring Image Services servers in a cross-committal or multi-committal environment. This new document

focuses on the important planning and coordination that must occur prior to the installation and configuration of the software.

Please read the <u>Multi-Committal and Cross-Committal Configura-</u> <u>tion Handbook</u> for complete information on the concepts and prerequisites for configuring both Source and Target servers in this environment.

Only Site-Controlled RDBMS Software Supported

Beginning with this release of Image Services software, **only** Site-controlled Relational Database Management Software (RDBMS) installations, both **local** and **remote**, are supported for new installations.

Remote Oracle Server Compatibility

For customers with remote Oracle databases, Image Services 4.0.0 is compatible with either Oracle 8.1.7 or 9.2.0 databases on the **remote** server, as long as Oracle 9.2.0 client software has been installed on the Image Services (**client**) server.

New Document for Installing RDBMS Software

Beginning with this release of Image Services software, installation guidelines for installing RDBMS software will no longer be contained within this document. A new document, *Guidelines for Installing and Updating RDBMS Software for Windows Server*, has been created for this purpose.

Microsoft SQLServer 2000

If you will be using a SQL Server RDBMS, only Microsoft SQLServer 2000 software is supported in this Image Services release. 350 MB of free disk space is required for installation. Microsoft SQL Server 7.0 will **not** be supported.

Oracle9i RDBMS Software

If you will be using an Oracle RDBMS, only Oracle9i Release 2 (9.2.0.2) is supported in this Image Services release. 2 GB of free disk space is required for installation. Oracle8i will **not** be supported.

Note

The Oracle9i CD-ROM media is not supplied by FileNet.

CSS Worldwide Customer Support

The following sub-sections describe various support documents and tables that will give you additional, up-to-the-minute information concerning your installation. These are all available on the FileNet web site at http://www.css.filenet.com. Login to CSS Worldwide Customer Support to review these topics.

Release Notes for Image Services 4.0.0

The Release Notes file is available in two places.

- The Image Services 4.0.0 CD-ROM in location, \relnotes.htm
- The FileNet website at http://www.css.filenet.com.

Since the latest Release Notes are located on the FileNet website, it is **highly recommended** that you obtain the Release Notes file from that location instead using the file on the IS 4.0.0 CD-ROM.

The Release Notes contain valuable information you need to install and configure Image Services software. Do not start the install without first reading the Release Notes.

Pay special attention to the "Patches" mentioned in the Release Notes. (Search for the keywords PRE-INSTALL and REQUIRED to locate information about Windows Server, Oracle, Microsoft SQL Server and Image Services patches that need to be applied before starting this update.) Image Services patches are located on the FileNet Web Site.

Note

If you are planning to install an Image Services/Document Services Coexistence system, search through the Release Notes file for the latest information using the key words IS/DS Coexistence.

Release Dependency Spreadsheet

Review the Release Dependency spreadsheet for information that might be pertinent to the entire system configuration. The Release Dependency spreadsheet contains software compatibility information for client workstations, fax servers, and printer servers.

You may see this spreadsheet referred to as the Support Matrix or the Compatibility/Dependency Matrix.

Note

Version 3.6 or higher of the Image Services Toolkit (formerly known as WAL) is required when running Image Services 4.0.0 and the IS Toolkit on the same server. Make sure any IS Toolkit SCRs listed in the Release Dependency spreadsheet have been downloaded and installed.

Terminal Services

Windows 2000 Terminal Services is not supported with this release of Image Services. This is because Terminal Services does not allow Xapex and other GUI functions to operate correctly. Some GUI's will lock-up, not generate correctly, or might be missing selection options.

Installation Prerequisites

The prerequisites for your installation are included in the following sections.

For your convenience, an Installation Worksheet is included at the end of this chapter. You should transfer all of the requested information to the appropriate sections on the Installation Worksheet. In this manner, all the information necessary to complete the Image Services installation will be in one easy-to-find place.

Install RDBMS Software

Beginning in this release, only **Site-controlled** RDBMS software is supported for new installations of IS software. The RDBMS software must be installed before installing Image Services software.

In addition, the guidelines for installing Oracle or Microsoft SQL Server database software are no longer contained within this document. A new document, *Guidelines for Installing and Updating RDBMS*Software for Windows Server, has been created for this purpose.

Refer to this document to install the RDBMS software **before** installing Image Services. After the RDBMS software has been installed, return to this document to continue with the Image Services installation.

National Language Support

This release of Image Services provides additional information on using character sets other than US7ASCII and ISO 8859-1. It's extremely important that the character set you select for one product matches the character sets you select for all the others.

For example, when you install the operating system, be sure to select the character set you plan to use with Image Services and Oracle. Likewise, when you install Oracle software, be sure to select the same character set as you did for the operating system.

And when you install the FileNet Image Services software, be sure to select the appropriate character set on both the System Attributes tab in the System Configuration Editor and on the Relational Databases/ Oracle tab.

Later, when you create indexes, document classes, and media families, you'll be able to use the appropriate alphanumeric characters for your locale.

Note

Folders are created and named using Desktop client software. Because the folders are stored in the index database, their names must also use the Windows code page character set that is the equivalent of the character set used by Oracle and IS on the Image Services server.

For FileNet systems configured with Western European character sets, valid alphanumeric characters must be in the 7-bit ASCII range. For FileNet systems configured with non-Western European character sets, any valid 8-bit alphanumeric character is acceptable.

Both Western and non-Western 8-bit character sets (character values range from 0 to 255) have valid alphanumeric characters above the ASCII range. ASCII characters occupy the first half of all 8-bit character sets and range in value from 0 to 127. Non-ASCII characters have values ranging from 128 to 255.

The following table summarizes FileNet support for both ISO and MS single-byte character sets.

Character Sets			Decimal Values	
ISO (International Organization for Standardization)		Microsoft Windows Code Page	ASCII (0 to 127)	Non-ASCII (128 to 255)
Western European	8859-1	CP 1252	Yes	No
Eastern European	8859-2	CP 1250	Yes	Yes
South European	8859-3	**	Yes	Yes
Northern and North- eastern European	8859-4	CP 1257	Yes	Yes
Latin/Cyrillic	8859-5	CP 1251	Yes	Yes
Latin/Arabic	8859-6	CP 1256	Yes	Yes
Latin/Greek	8859-7	CP 1253	Yes	Yes
Latin/Hebrew	8859-8	CP 1255	Yes	Yes
Western European and Turkish	8859-9	CP 1254	Yes	Yes
North European	8859-10	**	Yes	Yes

** Microsoft does not have character set code pages that correspond to ISO 8859-3 and ISO 8859-10. Be sure to choose an ISO character set for Oracle and Image Services that has a corresponding Windows code page.

Hardware Requirements

To complete the procedures is this document, your server must meet the following minimum hardware requirements.

Note

If your server will be used with an eProcess system, refer to the eProcess documentation for hardware requirements.

- Minimal Processor: 800Mhz Pentium III.
- 256 MB or more memory per CPU (512 MB recommended)

Tip

To check the amount of memory, logon on the server as **fnsw** or **Administrator**. From the Command Prompt window, enter the **winmsd** command, click the *Memory...* tab, and look for the entry that says *Physical Memory Total*:

- A tape device (e.g., DAT Cartridge, 8mm, QIC, etc.) (Record the tape device type here: _______.)
- An NTFS file system with the required amount of disk space as described in the Total Disk Space section below.

Tip To see how much disk space is available, use the *Windows Explorer*, and select the drive where you plan to install the Image Services software. The available disk (free) space appears in the message area at the bottom of the window. Refer to the *FileNet Disk Sizing Spread-sheet* for actual FileNet dataset sizes.

- A modem installed (and configured for operation) on your server
- An HP Optical Disk Library (optional)

Minimum Disk Space

For FileNet Image Services software, minimum datasets, and Oracle, or Microsoft SQL Server software:

- At least 6.5 GB with Oracle
- At least 4.35 GB with Microsoft SQL Server

These sizes include a 30% growth factor.

Note

The Windows 2000 Operating System itself requires at least 3GB of disk space.

Minimum Disk Space Requirements

For FileNet Image Services software, RDBMS software, and temporary working storage, this install requires the following minimum disk space for Combined Root/Index servers and Storage Library servers.

Software	SQL Server Com- bined or Root/Index Server	Oracle Combined or Root/Index Server	Storage Library Server
Windows Operating System	3 GB	3 GB	3 GB
FileNet datasets	1 GB	1 GB	1 GB
SQL Server 2000 Software	350 MB	-	-
Oracle 9i Software	-	2 GB	-
Free space on drive c: for Oracle installation software*	-	500 MB*	-
Total disk space	4.35 GB	6.5 GB	4 GB

^{*} This space is required for decompressing Oracle files from the media onto the c: drive, and is only needed temporarily for the install. These files are automatically deleted when the install is finished. If desired, this space can be moved to another drive by setting the TEMP variable.

To check your free disk space, open the Windows Explorer, right click on the drive containing your FileNet or RDBMS software, and choose Properties.

Software Requirements

To complete the installation and configuration procedures is this document, your server must have the following:

Windows 2000 Operating System Software

The following Windows 2000 operating systems are supported with this release of Image Services software.

- Windows 2000 Server
- Windows 2000 Advanced Server
- Windows 2000 Datacenter Server (for Unisys ES7000 Server)

In addition, you must also install Windows 2000 Service Pack 3.

Note

You can download the service pack from: http://www.microsoft.com/downloads/search.asp?

FileNet Software Media

Image Services media: *Image Services 4.0.0* for Windows Server, CD-ROM. (This CD-ROM contains the Image Services 4.0.0 software, COLD 4.0 software, and the four Universal SLAC Keys.)

RDBMS Software Media

Depending on the RDBMS software you intend to use on your system, you will need one of the following:

- Microsoft SQL Server 2000 CD-ROM
- Oracle9i Release 2 Enterprise/Standard Edition CD-ROM's

Note

The Oracle media CD-ROM's are **not** shipped with the FileNet Image Services software.

Also required for Oracle are:

- Oracle patch set version 9.2.0.2
- Oracle 9.2.0.2.1 patch 3 (patch number 2901676)*
- * The Oracle 9.2.0.2.1 patch 3 corrects a problem with the US7ASCII character set. If you plan to use a different character set, such as WE8ISO8859P1, this patch is not required.

Oracle patches can be downloaded from the Oracle MetaLink Web site at: http://www.oracle.com/support/metalink/index.html.

Note

At the time this document was published, Oracle Patch Set 3 (9.2.0.3) did not include the fix for the US7ASCII problem, and no equivalent patch for Patch Set 3 was available. However, Oracle may include this patch in subsequent Patch Sets. Check the Image Services 4.0.0 Release Notes on FileNet's Web site http://www.css.filenet.com for the latest news.

If you intend to set up your own Oracle RDBMS user (e.g., default=**oracle**) and database administration group

(default=**dba*** and default=**ora_dba***), make sure that both the FileNet Image Services user (default=**fnsw**) and the RDBMS user belong to the existing database administration group.

* dba and ora_dba are the default group names for FileNet-controlled Oracle databases. Your Oracle database may use the existing group name.

Communication Software

In order to enable FileNet engineers to remotely manage products that are installed on servers running a Windows Server operating system, pcANYWHERE32 TCP Remote Control Service software must be installed on your server.

For information on installing pcANYWHERE32, refer to <u>"Appendix D – Remote Access Procedures" on page 230</u>.

Universal SLAC Key

In the IDMIS 3.5.0 release, a Universal SLAC Key replaced the Hardware-specific SLAC Key.

Hardware-specific SLAC Keys, which were available for releases prior to IDMIS 3.5.0, were generated specifically for each system and were tied to the servers' machine IDs.

Universal SLAC Keys now allow hardware and software re-configuration and expansion without requiring a new key, and they are no longer tied to specific machine IDs. Only four Universal SLAC Keys exist:

- Image Services with eProcess for Oracle
- Image Services with eProcess for MS SQL
- eProcess only (no Imaging) for Oracle
- eProcess only (no Imaging) for MS SQL

Debugger

The debugger program is recommended for Image Services 4.0.0. The debugger enables FileNet support personnel to troubleshoot both FileNet and Windows-related problems and must be installed on each Image Services server.

To determine if the debugger is already installed, use the Windows Explorer to locate the file **/Windbg** on each Windows Server. If this file is present, the debugger is installed.

If this file is *not* present, and if the media and license are available, we recommend that you install it. Contact your Microsoft retailer for complete ordering information.

Note

The debugger and C compiler are included with the Microsoft Developer Network (MSDN) professional subscription (formerly level2).

Server Naming Convention

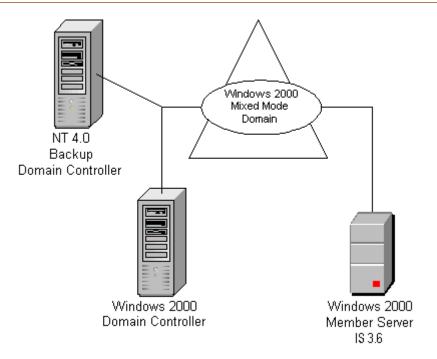
Properly naming Image Services servers is an important step when setting up your Image Services system. Server domain names can have a maximum of 128 characters and should only contain ASCII alpha-numeric characters and hyphens. Non-alphanumeric or underscore characters should **not** be used.

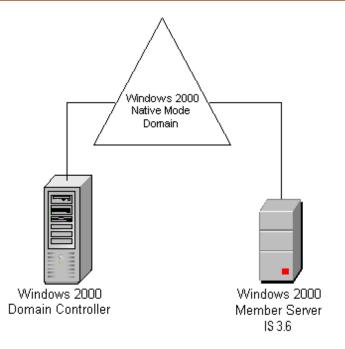
The reason for this convention is to prevent server names from changing when NCH crosses a router to find a server. When NCH crosses a router to find a server, it converts the domain name to an IP host name using specific criteria, one of which is dropping the underscore character. In fact, all non-alphanumeric or underscore characters are eliminated. If these characters were in the servers name, the name would not be correctly converted.

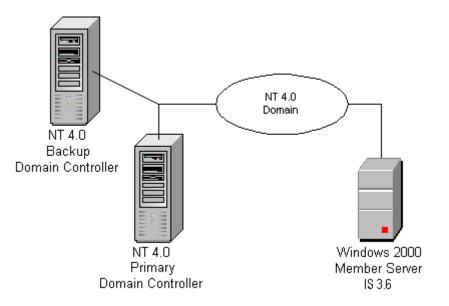
Domain Security and Planning

Although Image Services 4.0.0 can be installed on both Windows 2000 member servers and domain controllers, FileNet strongly recommends that you **DO NOT** install Image Services on domain controllers. Installations on member servers or stand alone servers are preferred. The Windows 2000 domains can be in mixed or native mode.

You can also install IS 4.0.0 on a Windows 2000 member server if you are still using NT 4.0 Primary and Backup domain controllers. Image Services 4.0.0 does not have to be installed on a server in a domain to function properly. Here are a few very basic examples.







FileNet Users and Groups

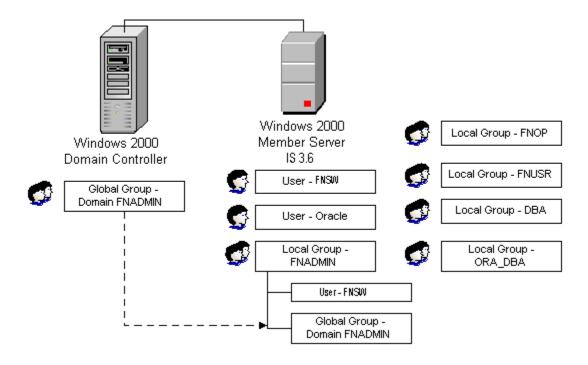
FileNet users and groups must be created on the local machine. To facilitate centralized security, you can create Global Groups on the domain controller and then add the Global Groups to the local FileNet groups.

FileNet strongly recommends that **ONLY** local IS users and groups be established on the IS server for the following reasons:

- This configuration reduces security complexity and aids in IS troubleshooting.
- It is NOT necessary to configure Global Groups and users in order to effectively implement the Windows Domain security model.

The following page shows a simple example of how you can configure users and groups.

For information regarding group membership for using IS tools, see the **IS System Tools Reference Manual**.



Additional System Information

In addition to verifying that your system meets the minimum hardware and software requirements detailed above, you must gather the following information to complete the Image Services installation on your Windows server.

Once you have gathered the information requested in this section, transfer the information to the "Installation Worksheet" on page 49.

- 1 Determine the password for the user **Administrator**. Record the password on the Installation Worksheet on page 49.
- Verify that the PC server name and Internet Protocol (IP) address are in the hosts file (which is where the Windows software is installed, for example, \winnt\system32\drivers\etc) along with the names and addresses of any other servers you want to communicate with remotely. (You can use Notepad to view this file.)

Note

The location of the **hosts** file can change, depending on where the Windows software is installed.

- 3 Determine the Domain name(s), IP address(es) and System Serial Number(s) (SSN) of all Image Services servers (peer servers) that will be communicating with the PC server. For information on naming servers, see "Server Naming Convention" on page 37.
 - Each IP address should contain four numbers separated by decimals [e.g., 135.0.20.39].

Note

FileNet Image Services software requires that the server have a static IP address. Verify that a specific IP address has been assigned to the server. Use of a dynamic IP address (DHCP) is not supported.

• Each System Serial Number (SSN) should contain 10 digits.

Note

After installation, your SSN can be determined by entering the SSN command at a Command Prompt on each compatible system's root server.

4 Record the Domain Name, IP address, and System Serial Number for each peer server in the Compatible System Information table on

<u>page 51</u>. For information on naming servers, see <u>"Server Naming Convention"</u> on page 37.

- Determine the NCH (Network Clearing House) Name, Printer Type, and Printer Server Static IP address for all printers on the system and record the information in the Printer Information table on <u>page 53</u>. For information on naming servers, see <u>"Server Naming Convention" on page 37</u>.
- 6 Configure Remote Access Service (RAS) on your Windows server. RAS will allow FileNet CSS to dial in to your system and perform remote problem diagnosis. Refer to <u>"Appendix D – Remote Access Procedures" on page 230</u> for instructions on how to set this up.)

Related Documentation

As you read this document you may see references to other documentation, or Online Help, that you might need to consult. This information is listed below.

Guidelines for Installing and Updating RDBMS Software for Windows Server

- System Administrator's Companion for Windows Server
- System Administrator's Handbook
- FileNet Image Services System Configuration Editor Online Help

Note

For information on Microsoft or Oracle products, refer to the documentation that came with your software.

Preparing for the Installation

This chapter contains procedures that are necessary to modify your system environment. These procedures must be performed before beginning your installation.

Note

If you are updating previously installed FileNet and RDBMS software, the criteria specified in this chapter should already have been met. However, you may still want to read this chapter to ensure that all prerequisites are satisfied before updating your software.

Installation Worksheet

Pages <u>50</u> through <u>57</u> contain useful tables that can be used as an installation worksheet. These worksheet tables are intended to help you organize the information you have gathered in a single place for easy reference during the installation process.

Print these pages and use them for recording the specified required information. You will refer to them often during the installation of your software.

In addition, this section details specific file system and dataset information that you must gather (or determine) to complete the Image Services installation successfully.

System Information

Password for the user Administrator :	
--	--

Record the appropriate information in the table below.

Installation Information	System Information
Server Static IP Address	
Network Address (cluster servers only)	
FileNet System Serial Number (SSN)	
NCH Domain Name	
Organization Name	

Important

The 10-digit ssn, which is assigned by FileNet, is written onto all storage media and **must** be unique for each Image Services system. If you have more than one Image Services system (domain), each **must** use its own unique ssn to prevent potential problems if media are ever transferred from one IS system to another.

Compatible System Information

Record information about compatible (peer) servers and systems in the table below.

NCH Domain Name	Static IP Address	SSN

Storage Library Information

Record the appropriate Storage Library device information for each Storage Library device on your system in the table below.

Storage Library Device (SLD) Information	SLD 1	SLD 2	SLD 3	SLD 4
Storage Library Type (e.g., ODU, OSAR 96, OSAR 125, etc.)				
SBUS Slot Number				
SCSI Target Number				
SCSI Logical Unit Number				

Record	the patl	h for the	Storage	Library	Device I	Driver
nere:						

Printer Information

Record the information for each printer on your system in the table below.

NCH Name	Printer Type	Printer Server Static IP Address

Optical Drive information

Record the appropriate Optical Drive information for each optical drive on your system in the table below.

Optical Drive Information	Drive 1	Drive 2	Drive 3	Drive 4
Drive Type (e.g., Hitachi_II, etc.)				
SCSI Adapter Number (0-3)				
SCSI ID Number (0-6)				
Logical Unit Number (0-3)				

Record the path for the Optical Drive Driver here:

File System and Dataset Information

You must determine the expected size of the datasets (in Mb), and on which NTFS file system to install each dataset. Refer to your Scout analysis report and complete the following table appropriately for your system.

Dataset Name	RDBMS	Required Minimum Size	Actual System Size (Mb)
cache0	Oracle/SQL	100 Mb	
permanent_db0	Oracle/SQL	100 Mb	
permanent_rl0	Oracle/SQL	40 Mb	
transient_db0	Oracle/SQL	20 Mb	
transient_rl0	Oracle/SQL	40 Mb	
sec_db0	Oracle/SQL	12 Mb	
sec_rl0	Oracle/SQL	4 Mb	
ms_db0.mdf	SQL	200 Mb	
ms_pri0.mdf	SQL	20 Mb	

Dataset Name	RDBMS	Required Minimum Size	Actual System Size (Mb)
ms_tl0.ldf	SQL	20 Mb	
ms_udb0.dat	SQL	200 Mb	
ms_tmp0.mdf	SQL	80 Mb	
master.mdf	SQL	52 Mb	

Note

The FileNet Image Services software and all FileNet configuration files and datasets must reside on NTFS file systems to maintain data integrity, security, and file naming requirements.

System Cache Information

You must determine the minimum and maximum cache sizes (in%) for the following caches. Refer to your Scout analyisis report and record the cache information for your system in the table below.

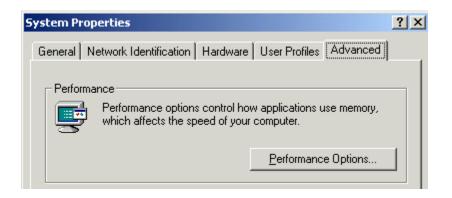
Cache Type	Min./Max. Default Size (%)	Min. Size (%)	Max. Size (%)
Retrieval	20% / 20%		
Fill-in	1% / 10%		
System Print	10% / 20%		
Application Print	10% / 30%		
Batch	10% / 60%		
Folder View	10% / 20%		
Revise	10% / 20%		

System Configuration Issues

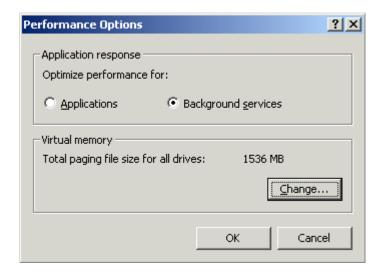
This section contains procedures that must be followed to ensure that your system is properly configured before installing Image Services and RDBMS software.

Check/Configure Paging File Size

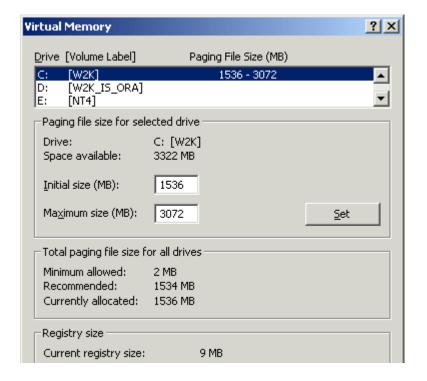
Open the Control Panel, and double-click the *System* icon. The System Properties window opens.



2 Click on the *Advanced* tab of the System Properties window and choose the Performance button.



3 In the Virtual Memory section, click the *Change* button. The Virtual Memory dialog box opens.



- 4 In the Virtual Memory dialog box, select the drive where you want to allocate the virtual memory.
- **Tip** Performance is enhanced if virtual memory is not on the same drive as the FileNet datasets. In addition, you can allocate virtual memory on more than one drive.
 - 5 Ensure that the initial paging file size for FileNet software (alone) is at least 128 Mb. Therefore, you must increase the current virtual memory allocated (if any) by at least 128 Mb. In addition, the Maximum Size value must be equal to, or greater than, the Initial Size value.
 - a If you DO NOT need to increase the paging file size:
 - Click Cancel in the Virtual Memory dialog box.
 - Click Cancel in the Performance Options dialog box.
 - Click OK in the System Properties dialog box.

- Close the Control Panel, and skip to the next section, "Configure TCP/IP and SNMP Protocol (Required For All Systems)" on page 64.
- b If you DO need to increase the paging file size, enter the initial size and maximum size (in Mb) in the Virtual Memory dialog box.

Note

If your system requires more virtual memory than specified here, the error message: "System running low on virtual memory. Please close some applications...." will display during normal Image Services operation. Use this procedure to increase the virtual memory paging size.

- **6** Click the *Set* button to accept the new settings.
- 7 Click the OK button to close the Virtual Memory window.
- **8** Click the *OK* button to close the Performance Options window.
- **9** Click *OK* to exit the System Properties window.

System Configuration Issues

10 The System Settings Change dialog appears next with a message asking if you want to restart your computer now. Click No. (Do Not reboot the server at this time.)

Configure TCP/IP and SNMP Protocol (Required For All Systems)

FileNet software requires that TCP/IP protocol be installed on your server for complete functionality. If TCP/IP is not currently installed on your server, you can install it by opening the Network and Dial-up Connections dialog box. Click the *Start* button, point to *Settings*, and double-click the *Network and Dial-up Connections* icon.

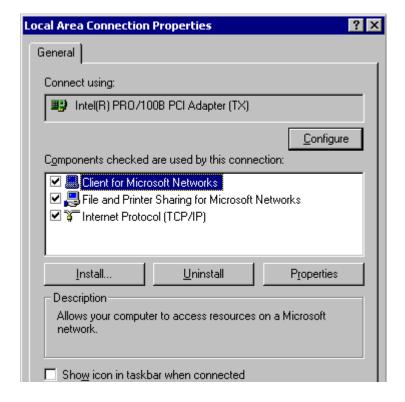
You must also install the SNMP (Simple Network Management Protocol) service. Refer to your Windows Server documentation for further details on installing both these components.

Set Server Optimization Level (Recommended)

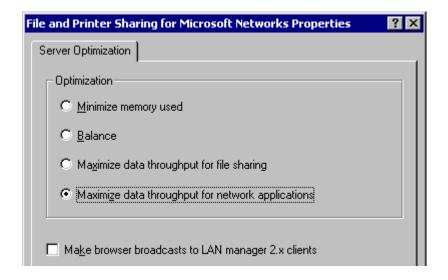
While the steps in this section are optional, FileNet Image Services software operates much better when the system is optimized for network applications.

- 1 From the Taskbar, click the *Start* button, point to Settings, and double-click the *Network and Dial-up Connections* icon.
- 2 Right-click on "Local Area Connection," and choose *Properties*.

The Local Area Connection Properties dialog box opens.



3 Select "File and Printer Sharing for Microsoft Networks" and click *Properties*. The following window appears.



- 4 Select the Maximize data throughput for network applications radio button, and click OK.
- 5 Close the Network and Dial-up Connections window.

Determining if Your Storage Management System Supports Synchronous Writes

If your system uses a storage management system such as NAS (Network Attached Storage) to store database files or CSM cache data files, it **must** support synchronous writes. This requirement is not unusual. Directories which are used for storing database files, and any directories used for storing CSM cache files must support synchronous writes. Otherwise, data may be lost. It is also a specific requirement of database vendors for storing database files.

A program called the **sync_write_test** program is used to determine if a given storage management system directory supports synchronous writes. This stand-alone program can also be used without other IS software.

Note

Local SCSI magnetic disk drives and SAN devices always support synchronous writes. So, it is not necessary to run this tool on SCSI or SAN devices. Local ATA magnetic disk storage devices do not always support synchronous writes, so they must be tested.

For information on how the sync_write_test program works and how to run the test, see the **IS System Tools Reference Manual**.

Installing FileNet Image Services Software

This chapter contains instructions for installing FileNet Image Services software.

CAUTION

The RDBMS software must be installed **before** installing the FileNet Image Services software. If you have not yet installed the RDBMS software you must do that first. Refer to the <u>Guidelines for Installing and Updating RDBMS Software for Windows Server</u>.

Note

FileNet strongly recommends that you **do not** install the IS and RDBMS software on the drive where the Windows Operating System is installed. The Windows OS should reside on a separate drive.

If you are using Microsoft Systems Management Server (SMS) to install your software, proceed to <u>"Appendix F – Microsoft Systems Management Server (SMS) Procedures" on page 281</u>.

Tip

Before installing any software, make sure that the Windows Explorer is set to display file names and extensions. (Do this by selecting Folder Options, View tab from the Windows Explorer Tools menu.)

CAUTION

If you are re-installing Image Services software that had previously been installed on your server, be sure to perform all required de-installation procedures first. Failure to properly de-install software, may cause problems with your installation. See <u>"Appendix E – De-Installation Procedures" on page 263</u>.

Or, if you want to use the Microsoft Systems Management Server (SMS) product for uninstalling software, see "Uninstalling FileNet Image Services software" on page 301.

Install the IS Software

The FileNet Setup Program will also not allow the installation of FileNet Image Services on a FAT file system. Only NTFS formatted target drives are supported in this release.

Tip

Use the Computer Management tool to determine the file system of a particular drive before installing the IS software. The Computer Management tool is located in the Administrative Tools folder.

The Setup program will attempt to perform the following functions before and during the Image Services software installation process:

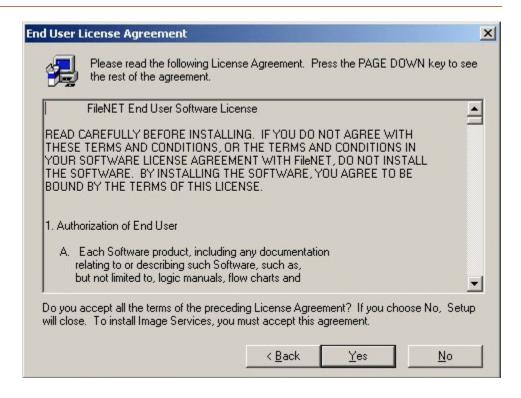
- Verify and create the basic operating environment required to install FileNet Image Services on a Windows server (for example, verifying resource requirements and the presence of required FileNet security group accounts)
- Verify the Windows Operating System version required for this release
- Create FileNet groups and users

- Assign advanced user rights to fnsw user
- Extract the FileNet Image Services objects from the distribution medium and install them to the respective target locations on the server. (An icon for the COLD 2.2 software will also be created and the software installed, but a license will be required to use the program.)
- Create basic System and FileNet specific Registry keys, services, and program groups necessary for the subsequent configuration of Image Services software
- Place appropriate security restrictions on released files or other objects

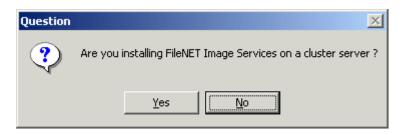
If you are licensed for COLD, you will see the COLD icon in the *FileNet Image Services Server Application* Program Group once the Setup program completes the installation process.

1 If you aren't already, logon as the *local* Windows **Administrator**.

- 2 Load the Image Services 4.0.0 for Windows Server CD-ROM into the CD-ROM drive.
- 3 In a few seconds, the Logo screen appears followed by the Welcome to FileNet Image Services Setup Program message box.
- 4 Click the Continue button to proceed. The End User License Agreement screen appears.



5 Click Yes to accept the agreement. The following screen appears.



6 Since you are not installing a cluster server, click *No* to continue.

Note

If you are, in fact, installing a Cluster Server system refer to the <u>Microsoft Cluster Server Installation and Update Procedures for Windows Server document.</u>

7 A screen displays with the message, "Setup has added the user Administrator to FileNet IS FNADMIN group. To continue installation of IS software, please log off and log on again."

This screen informs you that you need to restart your computer to save fnadmin privileges before it can continue with the installation.

- **8** To continue with the installation, click *OK*.
- 9 Reboot your server and logon again as Windows Administrator.

Note

It is necessary to logoff and log back on to refresh security information for the session.

10 When the *Welcome to FileNet Image Services Setup Program* message box appears, click the *Continue* button to proceed.

The License window appears.

11 Read the license agreement and click Yes.

The System Environment window will display.

12 Verify that the information displayed in the System Environment window is correct, and that the Image Services release number that

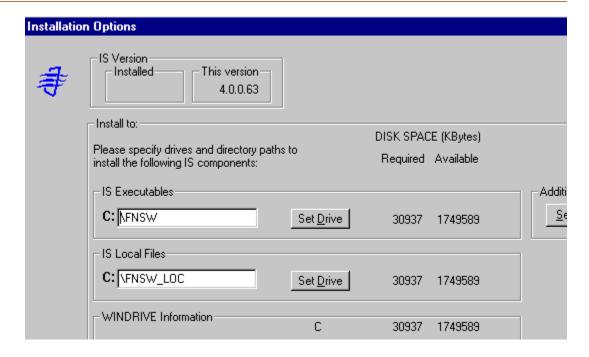
you have requested corresponds with what the Setup Program has detected on the screen. Then click the the *OK* button.

The Release Notes screen appears.

Read the information in the Release Notes that pertain to Windows Server, then close the window.

Note

You must *close* the Release Notes window before you can continue.



14 In the Installation Options dialog box, the setup program lists default directories for the Image Services Executables and Image Services Local Files.

Note

FileNet strongly recommends that you **do not** install the IS and RDBMS software on the drive where the Windows Operating System is installed. The Windows OS should reside on a separate drive.

To change either of these default drives:

- a Click the Set Drive button next to the selection you want to change.
- b From the drive list, select the drive you want.
- c Click the OK button.

Note

The selected disk for executable files must have at least 159 Mb of free space available to accommodate the Image Services 4.0.0 software installation.

To change the drive for additional files, repeat the step above. Otherwise, continue to the next step.

Note

The installation setup program sets the permissions for the drive where the additional datasets will be located so that the database directories can be created. Therefore, you cannot select the drive where the \fnsw and \fnsw_loc directories are located, because the permissions for this drive has already been set. The drive you use for additional datasets must be different from the drive where \fnsw and \fnsw_loc is located.

- When the drive and directory information is correct, click the *Install* button to start the installation.
- 17 When the Confirmation message window appears, click the Yes button to begin installing the Image Services software.

As the Image Services software is being installed, the Setup window appears and indicates the status of the installation.

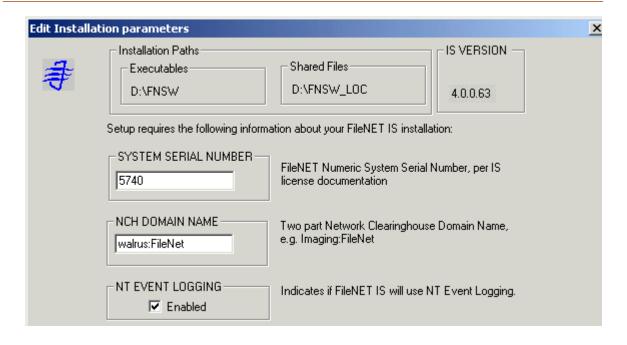
The installation process takes approximately 5 minutes to complete. The Setup Program will automatically create two FileNet program groups:

- FileNet Image Services Server Applications Contains all Image Services related GUI applications
- FileNet Image Services Configuration Contains the system configuration tools, the setup program, and the license administration program
- Near the end of the installation, the following message appears, "Is this going to be an Image Services Combined server?"

Answer Yes or No.

19 If you choose No to the question above, the message, "Is this going to be an Image Services Index Server?" appears. Answer Yes or No as appropriate.

The Installation parameters dialog box appears.



20 In the Installation parameters dialog box: a Enter the System Serial Number (**ssn**) and the two-part Domain:Organization name in the fields provided.

Note

Refer to the "Installation Worksheet" on page 49 for your ssn. If you are installing an Application Server or Storage Library Server, the domain name should be the Root Domain.

- b If desired, you can disable WINDOWS EVENT LOGGING (enabled by default) by clicking in the EVENT LOGGING checkbox to toggle the check mark off.
- 21 After you have completed the above fields, click the *OK* button.
- At the confirmation message prompt, click the Yes button to save the installation parameters.
- 23 At the next screen you can choose one of the following three button choices:
 - SLAC License Entry

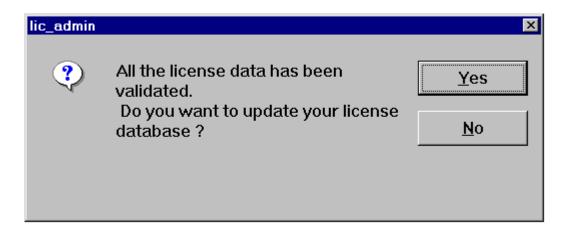
- Edit Parameters
- Exit

If you are installing an Application or Storage Library Server, click *Exit* and proceed to Appendix A, section "Configure the Root Server" on page 174.

Otherwise, continue below.

- The Universal SLAC Key for the FileNet Image Services system you're installing is located on the Images Services CD-ROM. Only four Universal SLAC Keys exist. They include the following:
 - uisora.key Image Services with eProcess for Oracle
 - uissql.key Image Services with eProcess for MS SQL
 - uvwora.key eProcess only (no Imaging) for Oracle
 - uvwsql.key eProcess only (no Imaging) for MS SQL
 - a Click the SLAC License Entry button to set up the system licensing.

- b From the "Please select the file to import license data from" window, using the *Look in* list box, select the cd-rom drive and browse to where your SLAC Key resides. Highlight your system SLAC Key file and click *Open*.
- After you have selected the system SLAC Key file, you will see the FileNet Software License (SLAC) Manager window. Click the *OK* button if you want to proceed with the SLAC Key installation on your system. Otherwise, click *Cancel* to exit this window and continue to step 25.
- d If you selected *OK* in Step **c**, you will receive the following message window. Otherwise, continue to **step 25**.



e Click Yes to have your SLAC Key updated. Your system SLAC Key is now installed.

Tip The SLAC Key is stored only in the NCH database. Therefore, if you ever need to re-initialize the NCH database, you must also reinstall the SLAC Key.

- Install the IS Software
- 25 If you want to make changes to any of the installation parameters you selected above, click the *Edit Parameters* button. Once all changes (if any) have been made, click the *Exit* button to exit the Setup Program.
- Unload the **Image Services 4.0.0** for **Windows Server** CD-ROM from the drive, and store it in a safe place.

Reboot the Server

At this point you must reboot the server so that newly installed device drivers can take effect. The time needed for the shutdown/reboot process varies for each system.

- 1 Reboot the server.
- 2 After the server reboots, logon as **fnsw** with password **fnsw**.

Note

When the IS software is first installed, the fnsw password is set to fnsw.

Install Required Pre-Startup Fixes

At this time, install only the fixes that directly relate to Image Services 4.0.0 initial configuration issues. Search through the Release Notes file for the key words **PRE-STARTUP** and **REQUIRED**.

Note

These are only the fixes required ot start the FileNet Image Services software successfully. Install any other fixes after the Image Services installation has been successfully completed.

You can also retrieve the latest fixes from the CSS Worldwide Customer Support web site at http://www.css.filenet.com or from the Tech Info CD.

Configuring FileNet Image Services Software

This chapter provides instructions to help you construct an Image Services system configuration database customized to your installation.

When using the various Tabs in the FileNet Image Services - System Configuration Editor window, you will click on a tab, complete the fields, and then click on the next tab as directed.

Tip

Every screen or dialog box in the FileNet Image Services - System Configuration Editor has Online Help available for it. In addition, most screens can be re-sized (for example, "maximized") for your convenience and to satisfy your preference.

Note

The text shown in some screens or dialog boxes may not appear exactly as depicted in this chapter. This results because some text in screens or dialog boxes is dependent on the template you select or the type of relational database that you have installed on your server. The overall examples, however, should still apply to all configurations.

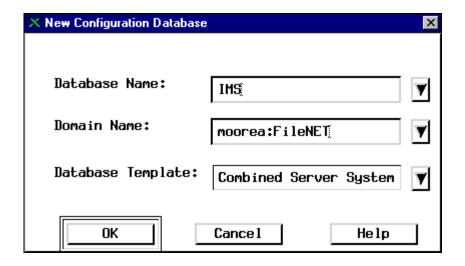
Create the Configuration Database

Follow the procedures in this section to create the configuration database.

- 1 If you have not already done so, logon as **fnsw**.
- **2** Open the Configuration Editor.

From the *Taskbar*, click the *Start* button, point to *Programs*, point to the *FileNet Image Services*, point to *System Configuration*, and click the *Configuration Editor* icon.

The New Configuration Database dialog box will open.



The *Configuration Editor* program will detect that no databases exist and will open the New Configuration Database dialog box automatically.

CAUTION

If the Open Configuration Database dialog box displays instead of the New Configuration Database dialog box, you have an existing Image Services configuration (cdb) file. Click *Cancel*, then select *New* from the File menu.

- Verify that the two-part domain information is correct in the New Configuration Database dialog box. (The proper syntax is: <Domain>:<Organization>.)
- **4** From the Database Template: pull-down list, select a template type from the following template choices:
 - Combined server system
 - Dual server system
 - Remote entry system
 - WorkFlo Management System
- 5 Click the OK button.



- **6** Enter the base directory for all datasets, and click the *Next* button. In the next dialog box, select the type of database installed on your system.
- 7 Select the relational database type (Oracle or MS-SQL) for your new configuration and click *Next*.

A series of dialog boxes and prompts for the specific template you selected above, appear next. Answer each prompt to configure your system. In necessary, refer to your "Installation Worksheet" on page 49 for dataset sizes, etc.

Important

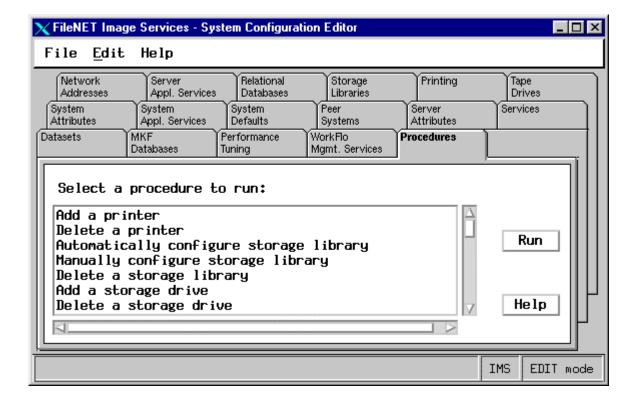
For Oracle installations ... when you are prompted to enter the dataset size for the Oracle temporary and rollback dataset, FileNet recommends that you enter at least **400 MB**.

Note

Accept the default values offered for dataset names. This information will not be saved and you will have the opportunity to change the table names before exiting the Configuration Editor.

9 When your configuration is complete, a Configuration Complete message appears. Click *Next* to continue.

The FileNet Image Services - System Configuration Editor window displays.



- **Tip** When you are finished configuring the database, you can select tabs in the Configuration Editor to verify that you entered the information correctly.
 - Before you exit the Configuration Editor, complete any remaining configuration sections in this chapter that apply to your system.

Verify the Image Services Character Set

On the System Attributes tab, scroll to the right and check the settings for **Default Character Set** and **Former Character Set**. On a new server, both are initially set to ISO 8859-1.

Change the Default Character Set to match the current Windows Server code page and the Oracle character set (if Oracle is installed); for example, ISO 8859-2.

If the FileNet system has been converted from an older character set, such as FileNet International, set the Former Character Set appropriately. If the system has never been converted, set the Former Character Set to match the Default Character Set.

See "National Language Support" on page 24 for more information.

Configure Oracle

If you are installing a **local** Oracle database, complete the following procedures.

To install a dedicated **remote** Oracle server, see the document, <u>Guidelines for Installing and Updating RDBMS Software for Windows</u>
<u>Server</u> for further information.

If your installing a Microsoft SQL Server RDBMS, proceed to the procedure,

"Configure Microsoft SQL Server" on page 104.

Create Optional Datasets

If you are installing Oracle, you must complete this section.

Note Refer to "Installation Worksheet" on page 49 for previously defined or calculated datasets and their sizes.

- 1 Click on the Procedures tab in the FileNet Image Services System Configuration Editor window.
- **2** Select the Create an optional relational DB dataset option from the Procedure List Box, and then click *Run*.
- 3 Select the Oracle User Database option and click the Next button. This will set up the oracle_udb0 dataset.
- 4 In the next window, verify that the drive and path where you want this dataset to be created is correct, then click the *Next* button.
- 5 The default dataset size will be displayed in the next window. Set the dataset size to 200 Mb and click *Next*.
- **6** Click on the Datasets tab to view a list of the datasets currently configured on your server.

Define RDB Object Locations for Oracle

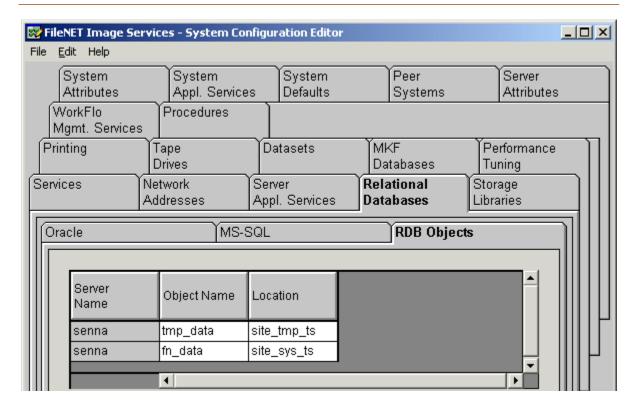
Use the procedure in this section to define RDB Object locations for your Oracle RDBMS. If you have a Microsoft SQL RDBMS, skip to the section, "Define RDB Object Locations for Microsoft SQL Server" on page 104.

CAUTION

This procedure assumes that the Oracle table spaces and devices that you specify in the System Configuration Editor either already exist, or that you will create them before you initialize the FileNet databases. These names **must** exist before you initialize the FileNet Image Services databases.

In this section you are defining the ownership and the names of the Oracle tables that will be used with the FileNet software.

Click the Relational Databases tab, then click the RDB Objects subtab.



2 In the Location column of the RDB Objects subtab, click on a cell and replace the default FileNet tablespace names with your site-specific tablespace names.

Note

Refer to the "FileNet Guidelines for FileNet-Used Tablespaces" table in the Oracle chapter of the <u>Guidelines for Installing and Updating</u> <u>RDBMS Software for Windows Server</u> document for your system tablespace names.

While replacing the tablespace names, use the following criteria:

- Change all occurrences of fnsys_ts to the name of your dedicated
 FileNet default Oracle tablespace name.
- Change all occurrences of fntmp_ts to the name of your dedicated
 FileNet temporary Oracle tablespace name.
- FileNet Guidelines for FileNet-Used Tablespaces

Configure Microsoft SQL Server

Perform the following procedures to configure your Microsoft SQL Server database.

Set Microsoft SQL Server Default Language

- 1 On the Relational Database tab, click the MS-SQL subtab.
- 2 Click on the Default Language field drop-down list, and select the language in which you want FileNet system messages to appear. Valid languages are US_English, German, French, and Japanese.

Define RDB Object Locations for Microsoft SQL Server

Use the procedure in this section to define RDB Object locations for your SQL Server RDBMS. If you have an Oracle RDBMS, continue to the optional sections which follow and perform any procedure that relates to your system.

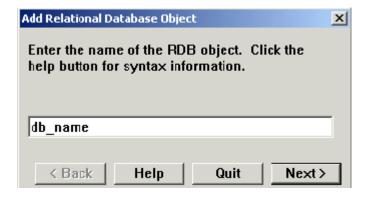
CAUTION

This procedure assumes that the Microsoft SQL Server file groups and devices that you specify in the System Configuration Editor either already exist, or that you will create them before you initialize the FileNet databases. These names **must** exist before you initialize the FileNet Image Services databases.

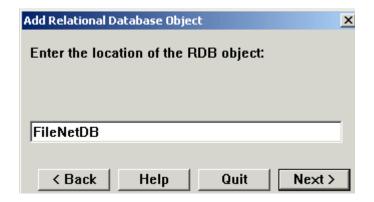
In this section you are defining the ownership and the names of the Microsoft SQL Server file groups that will be used with the FileNet software.

1 From the Procedure tab, select the Add Relational Database Object procedure, and click *Run*.

The following dialog box opens.



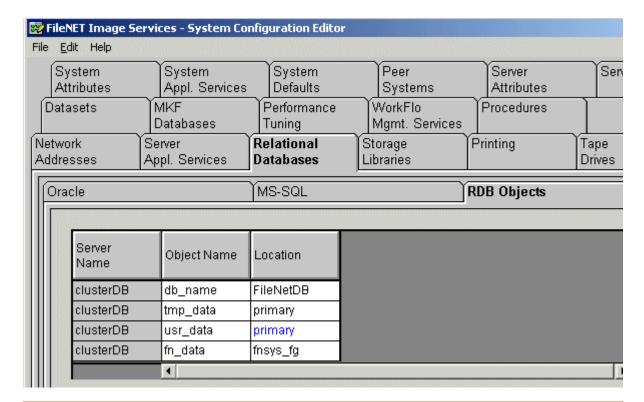
2 Enter **db_name** in this box, and click *Next*.



3 Enter the location of the database object you added (case sensitive), and click Next. This is the actual name of your database and can be provided by your Database Administrator.

A message appears indicating that the Edit procedure completed successfully.

- Click OK to continue. 4
- 5 Click the Relational Databases tab, then click the RDB Objects subtab.



6 In the Location column of the RDB Objects subtab, click on the location cells for tmp_data and usr_data and change the default location to Primary.

Note Leave the location parameter for fn_data as is, set to fnsys_fg or what was created for your system.

- **7** Save the configuration changes you just made.
 - a From the FileNet Image Services System Configuration Editor window, click on the File menu and choose the Save option.
 - b Leave the FileNet Image Services System Configuration Editor window open.

Note The Image Services software will use the Microsoft SQL Server database names you entered in the RDB Objects subtab above.

Register the SQL Database Server on the IS Server

- As **fnsw** user on the Image Services server, open the SQL Server 1 Enterprise Manager.
- 2 Right click the SQL Server Group to display the popup menu.
- 3 Select New SQL Server Registration....
- 4 In the Server Registration window, highlight your SQL database server in the left pane and add it to the Added Servers list in the right pane.
- 5 As you are prompted, select the appropriate authentication mode for that server and, if necessary, enter the login name and password.

Optional Configuration Procedures

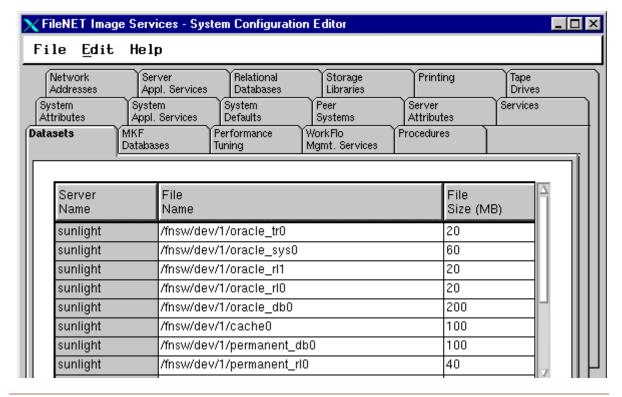
The following configuration procedures are optional:

- "Modify Dataset File Sizes (Optional)" on page 111
- "Configure Logical Cache (Optional)" on page 114
- "Configure System Document Services Parameters (Optional)" on page 116
- "Configure the Database Parameters (Optional)" on page 117

Read these sections and perform any procedures that are needed for your system.

Modify Dataset File Sizes (Optional)

This section discusses how to modify dataset file sizes. The example shown below lists datasets that were added to a Combined server system.



All of the dataset sizes are set by default. If you want to change any of them, do so in their respective File Size (MB) spreadsheet cells on the Datasets tab.

Important

For Oracle installations ... FileNet recommends that you enter 400MB for the Oracle_tr(n) dataset size.

When creating larger datasets, note the following:

- The sizes of all of the datasets can be changed in the Datasets tab in the File Size column.
- Maximum and minimum sizes in number of megabytes is checked by the Editor program.
- If you need a larger cache, you need to run the Add Additional Dataset procedure from the Procedures tab.
- The maximum number of dataset cache partitions is 255, and each partition can be up to 16GB in size.

Refer to the "Installation Worksheet" on page 49 for defined or calculated dataset sizes.

Note

Supporting 255, 16GB partitions allows for terabyte caches. The maximum cache size is 4080GB, or 4 terabytes. The maximum partition size depends on two operating system features: 1) The host operating system must support 16GB partitions; and 2) The host operating system must provide a mechanism which allows seeking to any offset up to 16GB from the beginning of a partition. Due to memory requirements, you should use EBR rather than CSM_exim to backup the millions of cache objects.

Configure Logical Cache (Optional)

- Click on the Server Application Services tab in the FileNet Image Services - System Configuration Editor window.
- 2 Select the Cache subtab to view a list of caches configured on your server. Default values are automatically given to each of the caches.

Note

Refer to <u>"Installation Worksheet" on page 49</u> for information concerning your cache percentages.

- 3 To modify the minimum or maximum allocation for each cache configured, click on the white box below the minimum or maximum column of each cache allocation you want to change, and enter the new value into the field.
- 4 The Locked, Daemon, and Write Threshold (%) values are set to default values. FileNet recommends that these default values be left unchanged.

Note

The following remaining sub-tabs in the Server Application Services tab do not need to be configured unless you want to assign non-default values to the application parameters:

Scheduling subtab: sets up station document services parameters.

Cache Duration subtab: sets up the prefetch, migrate, and refresh duration for the System Cache.

Batch subtab: sets up station batch services parameters.

ICR subtab: ICR (Intelligent Character Recognition) cache is NOT SUPPORTED in this release.

Configure System Document Services Parameters (Optional)

Click on the System Application Services tab in the FileNet Image Ser-1 vices - System Configuration Editor window.

- 2 Select the Document Services sub-tab if you want to change the values of any of the document services parameters. Document number and surface ID ranges can be changed from this menu.
- 3 If you want to change the way images are sent to the optical disk, select the Others sub-tab. These parameters are set to default values by the software. To change any of these parameters, click on the field of each parameter you want to change, and type in the new value.

Configure the Database Parameters (Optional)

Complete the steps in this section as required.

Configure Relational Database Parameters

- Click on the Relational Databases tab in the FileNet Image Services -System Configuration Editor window.
- 2 Click on the appropriate sub-tab for the installed RDBMS software.

3 The relational database parameters are set to default values by the software. These parameters should be left at their default values unless changes are necessary.

Note

Refer to "Installation Worksheet" on page 49 for information concerning your relational database parameters.

If you need to change any of these parameter values, select the field 4 next to the database parameter you want to change and type in the new value.

Configure MKF Database Parameters

- Click on the MKF Databases tab in the FileNet Image Services -System Configuration Editor window.
- The MKF database parameters are set to default by the installer soft-2 ware. These parameters should be left at the default values unless changes are necessary.

Note

The default MKF database block size in Image Services 4.0.0 is 8 KB. Other possible block sizes are 1 KB, 4 KB, or 16 KB. If you select 1 KB, the maximum size of the database is limited to 16 GB (eight 2 GB datafiles). The other block sizes enable you to have Permanent and Transient databases larger than 16 GB. Click Help if you have any questions on the parameter values.

Optional Storage Library Configuration Procedures

The following optional Storage Library procedures are for configuring a combined server (Root/Index/Storage Library).

- "Verify/Configure Storage Library Device Settings (Optional)" on page 120
- "Connect/Configure Storage Library Devices (Optional)" on **page 122**
- "Configure Third-Party Access to Optical Libraries (Optional)" on page 124

Read these sections and perform any procedures that are needed for your system. If you do not need to perform any of these procedures, continue to the section, <u>"Exit the System Configuration Editor" on page 128</u>.

Note

Procedures for configuring a **Dual server** (separate Root/Index and Storage Library servers) are found in <u>"Setup Storage Library Server"</u> (Optional)" on page 137. To configure an MSAR System, refer to the <u>MSAR Procedures and Guidelines</u> document for information.

Verify/Configure Storage Library Device Settings (Optional)

To view the information concerning the storage libraries configured on your server, select the Storage Libraries tab from *FileNet Image Services - System Configuration Editor* window.

Tip

Even though an ODU (Optical Disk Unit) is technically not a storage library because it lacks a robotic arm, for the purposes of configuration be sure to perform the same steps for an ODU that you would perform for a storage library.

Note

If you select the Manually configure optical storage library option from the Procedure list, consult your Help Text to configure the storage library. The ID format for both the storage library arm and drive devices must be:

<#> <#> <#> <#> <#> or example: 1 2 3 4 where:

The first number is the SCSI adapter id The second number is the bus id The third number is the device id The *fourth* number is the *LU*#

Refer to "Installation Worksheet" on page 49 for information concerning your storage library devices.

Connect/Configure Storage Library Devices (Optional)

Complete the steps in this section only if the following criteria are met:

- Your system is a combined Root/Index/Storage Library server.
- You did not attach a Storage Library device before installing and configuring the FileNet Image Services software on your server.
- 1 Logoff the Windows Server, and turn the server off.
- 2 Connect the storage library device, and power the device on.
- 3 Logon as fnsw.
- 4 Open a Command Prompt window, and enter the following command:

fnddcfg

Once the command is finished, you will receive a message instructing you to reboot the server to make the changes effective.

5 Reboot the server, and logon as **fnsw** again. 6 Open a Command Prompt window, and enter the following command:

fndev

The physical addresses of all attached storage library devices should appear.

7 Open the Configuration Editor.

> From the Taskbar, click Start, point to Programs, point to the FileNet Image Services Configuration folder, and click the Configuration Editor icon.

- 8 Verify that the two-part domain information is correct, and click OK.
 - The FileNet Image Services System Configuration Editor window opens with the Procedures tab displayed.
- 9 From the Procedures tab, select Automatically Configure a Storage Library from the list of available procedures.
- 10 Click *Run* and respond to each of the dialog box prompts that display.

Configure Third-Party Access to Optical Libraries (Optional)

Image Services normally reserves all the optical drives and library arms on the SCSI bus for its own use. However, if other third-party software products that access these devices are also going to run on this server, a text file named fnsod foreign needs to be created in the <drive>:\fnsw_loc\sd directory to specify which devices are available for use by the third-party products.

If this server is dedicated to running Image Services only, skip this section and continue to "Exit the System Configuration Editor" on page 128

If this server is going to be used for both Image Services and thirdparty software, continue with the following steps.

Note

Image Services must not be running during this procedure.

1 List the available devices by opening a command prompt and entering:

fndev

The fndev display from a server that has a 160ex library and a 2.6GB ODU would look similar to this:

```
SOD.1010 1 1 0 1 0 HP C1113F 1.22
ARM.1020 1 1 0 2 0 HP C1160J 1.47
SOD.1030 1 1 0 3 0 HP C1113J 1.06
SOD.1040 1 1 0 4 0 HP C1113J 1.06
```

2 Open Notepad to create the fnsod foreign file.

In this file, list all the SCSI device nodes that the third-party application will use. The format is:

ARM.bctl or SOD.bctl

where:

ARM indicates the device is a robotic arm.

SOD indicates the device is a SCSI Optical Device.

bctl are the bus, controller, target, and lun (logical unit number).

To exclude the 160ex storage library as shown in step 2, the contents of your fnsod.foreign file would look similar to this:

```
ARM.1020
SOD.1030
SOD.1040
```

To exclude just the ODU, the fnsod foreign file would look like this:

```
SOD.1010
```

To exclude a tape library, only an ARM.bctl entry is required for the library's robotic arm. No SOD.bctl entry is needed.

3 When you've finished adding entries to the file, exit Notepad and save the file as fnsod foreign.

Note

Notepad adds a .txt extension to the file name when you save it, so you must rename the file in the next step to remove the .txt extension.

- 4 Locate the fnsod.foreign.txt file in the <drive>:\fnsw_loc\sd folder and remove the .txt extension.
- 5 As Administrator, reconfigure the device driver by entering:

fnddcfg -u fnddcfg

- 6 Then restart the server.
- When the server has finished restarting, list the available SCSI devices by entering:

fndev

The resulting list of devices should contain all the attached optical arms and disks NOT listed in the fnsod foreign file you just created.

Important

DO NOT use the fnsod foreign file to exclude a broken drive within a Storage Library. The library arm informs the system software of the drives in the library, and this would cause problems with auto-configuration routines.

Exit the System Configuration Editor

- 1 From the *FileNet Image Services System Configuration Editor* window, click on the File menu and click the Exit option.
- **2** Click the Yes button to save the configuration and exit the System Configuration Editor.

Initialize the Server Software

This section includes procedures for initializing the server software. Make sure you perform the correct procedures for your system.

CAUTION

You must start the database before initializing the FileNet databases. If you do not start the database, the initialization process will fail.

For Oracle Installations ...

Your Oracle default table spaces must already exist with the names you entered in the FileNet System Configuration Editor. If you do not start the Oracle database and create the new table spaces, the initialization process will fail.

Initialization Procedures for Local Installations

The initialization procedures in this section are required for local installations running either Oracle or Microsoft SQL Server software.

Note

If you have not yet installed the SLAC key, you must do so now before proceeding and initializing the server. See page-85 for information on installing the SLAC key.

- 1 If you aren't already, logon as **fnsw.**
- 2 To initialize the index database and all the MKF databases (includes permanent, transient, and security databases), enter the following command at the Command Prompt:

fn_build -a

fn_util init

Note

During the initialization process you will receive several "Could not find <file>" error messages. You can ignore these messages because during the initialization process these files do not yet exist.

The initialization will take approximately 10 - 30 minutes during which there is very little status feedback to the display. The larger the datasets, the longer the process will take.

When the prompt returns to the Command Prompt window, the initialization is complete.

When initialization is complete, view the \fnsw_loc\logs\fn_util\init.log and oracle.log (or mssql.log) files to make sure that there were no errors in the database initialization process.

Note

The init.log file does not always display.

Tip

You can monitor the progress of the initialization by viewing the init.log and oracle.log (or init.log) files in a command prompt window. These files are located in the following directories:

\fnsw_loc\logs\fn_util\fn_util.log \fnsw_loc\logs\fn_util\oracle.log \fnsw_loc\logs\fn_util\init.log

The file size increases each time you view the log files, indicating the progress of the initialization.

Initialization Procedures for Remote Oracle Installations

The initialization procedures in this section are required for installations running remote Oracle software.

Note

The filenet_site.sql and fn_oraupgrade_sp.sql scripts below reside on the FileNet server at location \fnsw\oracle.

1 If you aren't already, logon to the FileNet (client) server as **fnsw.**

2 Copy these four scripts to the \fnsw\oracle directory on the remote server:

> \fnsw\oracle\FileNet_site.sql \fnsw\oracle\fn_oraupgrade_sp.sql \fnsw\oracle\fn CreateStoredProcedures.sql \fnsw\oracle\fn_GrantSPPermissions.sql

3 Connect to the **remote** Oracle server, and run the following script:

filenet_site.sql

This script creates FileNet users in the Oracle database.

4 At the **remote** Oracle server, run the following script:

fn_oraupgrade_sp.sql

This script stores several new procedures in the Oracle database, which is a requirement of Image Services 4.0.0.

- 5 When you are prompted to enter a password. You can enter any password you want. (This password is only temporary and you will reset it when the fn_oraupgrade_sp.sql script is finished.)
- 6 Enter the same password when you are asked to confirm it.

The **fn_oraupgrade_sp.sql** utility runs very quickly. When the utility is finished, you return to the Command Prompt.

7 Reset the password by entering:

fndba -s f_sw

8 At the **FileNet** server, run the following command:

fn_util init

This command initializes the index database and all the MKF databases (permanent, transient, and security databases) and creates the ora users.sql script below in location \fnsw loc\oracle.

9 At the **remote** Oracle server, run the following script:

Initialize the Server Software

ora_users.sql

This script assigns FileNet users to the designated tablespaces.

Verify FileNet Dataset Permissions (Optional)

If the FileNet datasets reside on a different disk than the FileNet Image Services software, you must set the group permissions.

- 1 As **fnsw** user, open Windows Explorer and select a directory containing the desired FileNet dataset.
- **2** From the File menu, select the Properties menu option, click the Security tab, and click the *Permission* button. Set the following permissions:

Group	Permissions
Administrators	Full Control
Everyone	Read
fnadmin	Full Control
fnop	Read & Execute and Write
fnusr	Read & Execute and Write

Repeat step 3 for all datasets affected.

Completing the Installation

This chapter contains the final procedures necessary to complete the installation of your system.

Setup Storage Library Server (Optional)

Complete the procedures in this section *only* on the Storage Library server of a **Dual** server configuration.

Note

If your system is not configured for Dual server operation, skip this section, and proceed to <u>"Start the FileNet Software" on page 154.</u>

Install Image Services Software on Storage Library Server

Refer to the chapter, Chapter 3, "Installing FileNet Image Services **Software," on page 70** to install FileNet software on the Storage Library server.

Note

The Image Services software that you will install on the Storage Library Server must be the same version as the software installed on the Root/Index server.

Once the Image Services software is installed on the Storage Library server, verify that the Image Services software is running on the Root/ Index server before proceeding with the next section.

Connect Storage Library Device(s)

- Logoff the server, and turn the server off.
- 2 Connect the ODU or storage library device, and power the device on.
- 3 Logon as **fnsw**.

4 Before running the command in this step, make sure that the SCSI devices and not configured to be bootable devices.

Open a Command Prompt window, and enter the following command:

fnddcfg

Once the command is finished, you will receive a message instructing you to reboot the server to make the changes effective.

- **5** Reboot the server, and logon as **fnsw** again.
- 6 Open a Command Prompt window, and enter the following command:

fndev

The physical addresses of all attached storage library device will display on the screen.

7 Open the Configuration Editor.

From the *Taskbar*, click the *Start* button, point to *Programs*, point to the *FileNet Image Services*, point to *System Configuration*, and click the *Configuration Editor* icon.

8 Verify that the two-part domain information is correct, and click *OK*.

The FileNet Image Services - System Configuration Editor window opens with the Procedures tab displayed.

- **9** From the Procedures tab, select Automatically Configure a Storage Library from the list of available procedures.
- 10 Click Run.

Note

If you are configuring an RES template, a dialog box prompting you for the domain name of the peer system will display. Respond to these prompts as appropriate.

11 From the *FileNet Image Services - System Configuration Editor* window, click the *File* menu and select the *Exit* option.

12 Click the Yes button to save the configuration and exit the System Configuration Editor.

Configure Third-Party Access to Optical Libraries (Optional)

Image Services normally reserves all the optical drives and library arms on the SCSI bus for its own use. However, if other third-party software products that access these devices are also going to run on this server, a text file named fnsod foreign needs to be created in the <drive>:\fnsw loc\sd directory to specify which devices are available for use by the third-party products.

If this server is dedicated to running Image Services only, skip this section and continue to "Build Configuration Files on the Storage" Library Server" on page 145.

If this server is going to be used for both Image Services and thirdparty software, continue with the following steps.

Note

Image Services must not be running during this procedure.

1 List the available devices by opening a command prompt and entering:

fndev

The fndev display from a server that has a 160ex library and a 2.6GB ODU would look similar to this:

```
SOD.1010 1 1 0 1 0 HP C1113F 1.22
ARM.1020 1 1 0 2 0 HP C1160J 1.47
SOD.1030 1 1 0 3 0 HP C1113J 1.06
SOD.1040 1 1 0 4 0 HP C1113J 1.06
```

2 Open Notepad and create the fnsod.foreign file.

In this file, list all the SCSI device nodes that the third-party application will use. The format is:

ARM.bctl or SOD.bctl

where:

ARM indicates the device is a robotic arm.

SOD indicates the device is a SCSI Optical Device.

bctl are the bus, controller, target, and lun (logical unit number).

To exclude the 160ex storage library as shown in step 2, the contents of your fnsod.foreign file would look similar to this:

```
ARM.1020
SOD.1030
SOD.1040
```

To exclude just the ODU, the fnsod foreign file would look like this:

```
SOD.1010
```

To exclude a tape library, only an ARM.bctl entry is required for the library's robotic arm. No SOD.bctl entry is needed.

- 3 When you've finished adding entries to the file, exit Notepad and save the file as fnsod.foreign.
- 4 Locate the file in the <drive>:\fnsw loc\sd folder and remove the .txt extension.

Note

Notepad adds a .txt extension to the file name when you save it, so you must rename the file to remove the .txt extension.

5 As Administrator, reconfigure the device driver by entering:

> fnddcfg -u fnddcfg

- 6 Then restart the server.
- 7 When the server has finished restarting, list the available SCSI devices by entering:

fndev

The resulting list of devices should contain all the attached optical arms and disks NOT listed in the fnsod foreign file you just created.

Important

DO NOT use the fnsod foreign file to exclude a broken drive within a Storage Library. The library arm informs the system software of the drives in the library, and this would cause problems with auto-configuration routines.

Build Configuration Files on the Storage Library Server

This section assumes that the FileNet Image Services software has already installed and configured on the Storage Library server. The Image Services version on the Storage Library server must match the version installed on the Root/Index server.

Note

You must start the FileNet software on the Root/Index server before starting the Image Services software on the Storage Library server.

- 1 Verify that the FileNet Image Services software is running on the Root/ Index server before continuing.
- 2 On the Storage Library server, logon as **fnsw**.
- 3 If necessary, shutdown the FileNet software on the Storage Library Server by entering the following command:

initfnsw stop

4 Build the appropriate configuration files by entering the following at the Command Prompt:

fn build -a

5 Still as fnsw on the Storage Library server, switch to the directory containing the links to the Storage Library device drivers and databases by entering a command similar to the following:

cd \fnsw\dev\1

6 List the directory contents by entering the following command:

dir

The following items should appear in the directory listing:

- cache0
- oddX1 (X=device ID, one for each optical drive)
- osarx (x=arm ID, one for each optical library arm)
- permanent db0
- permanent rl0
- transient db0
- transient rl0

Note

If the datasets do not exist in the /fnsw/dev/1 directory, you must run the FileNet System Configuration Editor program on the Root/Index server again and configure the appropriate partitions for the Storage Library server.

(In addition, you must run the fn_build -a tool on the Root/Index server and start the FileNet Image Services software before repeating the steps in this section.)

7 Finally, as **fnsw**, enter the following commands:

fn_util init

The fn_util init program will initialize the transient and permanent databases on the Storage Library server. (When the fn_util programs are done, a message displays indicating that the new database partitions are initialized and zeroed out.)

Note

You can monitor the progress of the initialization by viewing the init.log file in a command prompt window. The directory location of this file is, \fnsw_loc\logs\fn_util\fn_util.log

Note

If you are attaching an existing Storage Library server to a new system, you may receive the following message:

63,0,10 <fnsw> ds_init (14983) ... CRITICAL The Scalar Numbers Table is behind the snt.chkpt file.

This message indicates the scalar numbers table and the checkpoint file are out of synchronization. Continuing in this condition may cause multple documents to be committed with the same doc ID. To solve this problem, run the following commands to start the permanent database and update the scalar numbers table:

fn_util startdb SNT update

After SNT_update is finished, run fn_util init again.

Configure Storage Devices on Storage Library Server

- 1 On the Storage Library server, logon as **fnsw**.
- **2** Open the Configuration Editor.

From the *Taskbar*, click the *Start* button, point to *Programs*, point to the *FileNet Image Services*, point to *System Configuration*, and click the *Configuration Editor* icon.

- Verify that the database and domain names are correct, and click OK. (The two-part domain name is set up as follows:<Domain>:<Organization>.)
 - The FileNet Image Services System Configuration Editor window opens with the Procedures tab displayed.
- **4** From the Procedures tab, select *Automatically* Configure a Storage Library from the list of available procedures.
- 5 Click Run.

- **6** Check the Optical Library tabs to verify that the correct Storage Library devices were configured.
- 7 Finally, still as **fnsw**, open a Command Prompt window, and enter the commands similar to the following:

fn_util inittrans fn_util initperm

The **fn_util inittrans** and **fn_util initperm** scripts initialize the transient and permanent databases on the Storage Library server. Once the databases are initialized, the scripts check for the presence of permanent.ddl and transient.ddl files in the /fnsw/local/sd/1 directory.

8 Start the FileNet Image Services software on all servers: Root/Index server first, then Storage Library server. (See <u>"Start the FileNet Software"</u> on page 154 for instructions on starting the FileNet software.)

Configure RES, Cross-Committal, or Multi-Committal Systems (Optional)

This section presents a brief description of these systems, for detailed information refer to the *Image Services Multi-Committal and Cross-*Committal Configuration Handbook

Each of the FileNet systems in an RES configuration, Cross-Committal configuration, or a Multi-Committal System configuration is technically an independent system with a Root/Index server and is considered a peer system by all the others.

- A Cross-Committal System is composed of a **source** Image Services system and a target Image Services system. The source system commits images to the target system, but does not retain the images locally.
- A Remote Entry Server (RES) is a specific type of Cross-Committal system that has no storage library and is used only for entering images for committal to another independent system (the target) that does have a storage library. The target system is also capable of entering and committing images, so in this situation the two sys-

tems must be "compatible," that is, they must have non-overlapping document IDs and surface IDs.

 A Multi-Committal System is an independent FileNet system that contains a Storage Library server and commits images both to its own Storage Library and to the Storage Library of another independent FileNet system. Multi-Committal Systems may or may not be "compatible" systems with non-overlapping document IDs. If they aren't compatible, new doc IDs are assigned on the target system, a minor performance consideration.

Verify the System Serial Number

Use the **ssn** command to display the system serial number. At a Command Prompt, enter the following command:

ssn

Important

The 10-digit ssn, which is assigned by FileNet, is written onto all storage media and **must** be unique for each Image Services system. If you have more than one Image Services system (domain), each

must use its own unique ssn to prevent potential problems if media are ever transferred from one IS system to another.

Start the FileNet Software

Use this procedure to start the FileNet Image Services software.

Note

If you configured your system as a Dual server, make sure that the FileNet Image Services software in started first on the Root/Index server and then on the Storage Library server. Complete the steps in this section on both servers.

- Logon as **fnsw**, if you aren't already. 1
- 2 Open the Administrative Tools and double-click the Services icon.

The Services dialog box appears.

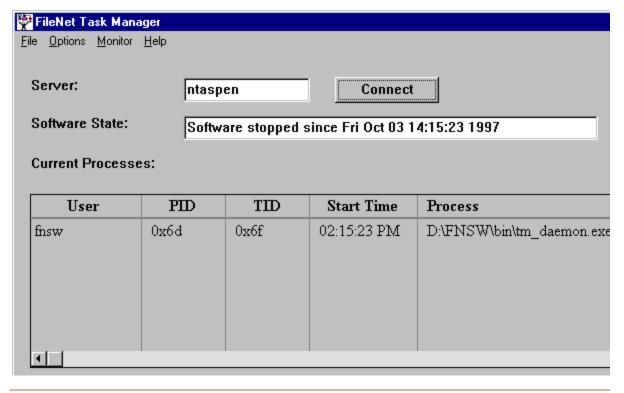


3 In the list of Services, verify that IS ControlService is Started with Startup Type set to *Automatic*. (If the service is not started the TM daemon is not running.)

If the settings for IS ControlService are correct, skip to Step 6 on page 156.

- 4 If the properties are **not** correct, right-click *IS ControlS*ervice. The IS ControlService Properties dialog opens.
- 5 In the IS ControlService Properties window do the following as necessary:
 - a Set the Startup type to Automatic
 - b Click the Start button to start the IS ControlService
 - c Click OK to exit the IS ControlService Properties window
- 6 Close the Services window.
- 7 Open the FileNet Task Manager.

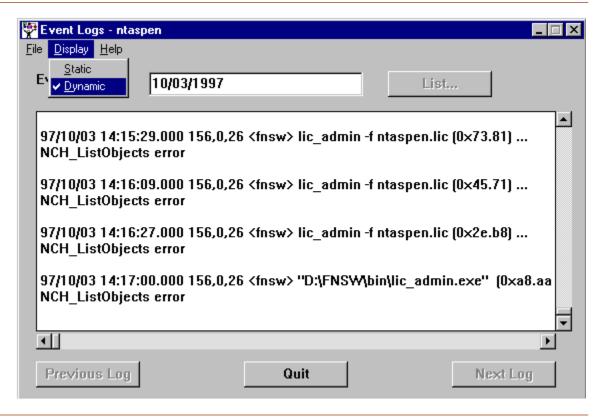
From the *Taskbar*, point to *Programs*, *FileNet Image Services*, *Server Applications*, and click the *Task Manager* icon.



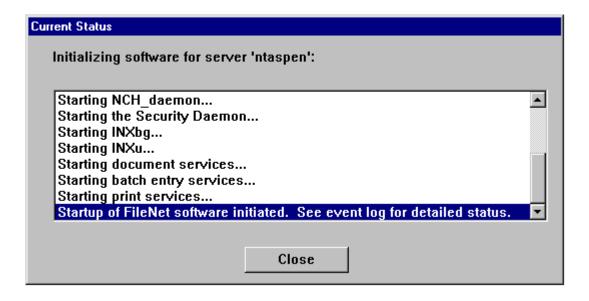
Since the Image Services ControlService is running, the TM_ daemon.exe process will be listed in the Process column.

8 Click the *Monitor* pull-down menu and select the *Event Logs...* option.

The Event Logs window appears.



- **9** Click the *Display* pull down menu and select the *Dynamic* option. This will enable the event window to be refreshed whenever messages are logged. Leave the Event Logs window open.
- 10 At the FileNet Task Manager window, click *Start* to bring up the FileNet software. Messages will display in the Current Status window as FileNet software is being started.



11 After the FileNet software has been initiated, click the Close button to close the Current Status window.

- 12 View the Event Logs window to make sure there are no error messages.
- 13 After viewing the Event Logs, close any other open windows.

Set f maint Password

Use this procedure to set the f_maint password.

1 Enter the following command after running the fn_util init command.

set_f_maint_pw

- 2 Enter a Carriage Return to accept the initial default password.
- 3 Enter (and then confirm) the password you want to use for F_MAINT.

The information displayed in the Command Prompt window should look similar to the window below.

🔏 Command Prompt D:\FNSW_LOC\tmp>set_f_maint_pw Enter current password for F_MAINT: (CR = initial default): Enter new password for F_MAINT: Confirm (re-enter) new password: D:\FNSW_LOC\tmp>_

Setup SQL Server Transaction Logs (SQL Server Only)

Microsoft SQL Server requires adequate transaction log space for each SQL Server Server database. If not enough space is allocated for the transaction log, the log becomes full and no further data will be written to the log until it is archived.

Furthermore, until the transaction log is archived, SQL Server stops processing to the affected database. This situation usually results in SQL Server error 1105.

Because of the serious nature of this problem, FileNet recommends that you set up the transaction logs for each database to prevent them from becoming full without being archived. It is also recommended that you perform these actions now, during the installation of the software, to ensure that your system will operate smoothly and without interruption.

For complete information on performing these actions, refer to "Setting up SQL Server Transaction Logs for Archiving" in chapter three of the **System Administrator's Companion for Windows Server**, Release 4.0.0 document.

Install Remaining Fixes

You can now install the remaining fixes that apply to the Image Services 4.0.0 release. Be sure to read the README file on the Tech Info CD, which contains the fixes that were available when the CD was made.

You can also retrieve the latest fixes from the FileNet Worldwide Customer Support web site at http://www.css.filenet.com.

Make System Backups

Backups should be made of your system configuration in case something unforeseen occurs. You should do this for both the root and application servers.

- If you aren't already, logon as fnsw. 1
- 2 Shutdown the FileNet software by entering the following command:

initfnsw stop

- 3 Load a blank tape into the tape drive.
- 4 Double-click on the Administrative Tools icon to open the Administrative Tools window.
- 5 From the Administrative Tools window, locate and double-click the Backup icon.

- 6 The backup tool should list all of the drives on your server which can be backed up. Locate and select the drive(s) containing the files and databases for both the operating system and FileNet system (for example, drive *C* and *D*.) This can be done by clicking on the white box to the left of the drive(s) you intend to backup.
- 7 Next, click the *Operations* pull down menu, and select the *Backup...* option.
- **8** Select the following options in the Backup Information window:
 - · Verify After Backup
 - Backup Registry
 - Restrict Access to Owner or Administrator

Also, if you need to, you may change the tape name in this window.

9 Type in the back up type (for example, *Full Backup*, *<System Name>*, *W/E 2-26-95*) in the *Description* field.

Note the location of the backup logfile and record the location for future reference.

- 10 Click the *OK* button to begin the backup. The backup program will display its status while it is in progress. The backup and verification will take about 20 30 minutes to complete, depending on the system.
- 11 When the backup is complete, make sure it can successfully verify the database file, and click the *OK* button.
- To exit the backup tool, click the *Operations* pull down menu and select the *Exit* option.
- 13 Unload and label the backup tape.

Configure Image Services Processes to Autostart (Optional)

This procedure allows you to configure your system to automatically start the Image Services processes immediately after the IS ControlService has started. This preference will prevent you from having to start the Image Services processes manually from the FileNet Task Manager every time you restart your computer.

- From the Start menu, select Programs, FileNet Image Services, Sys-1 tem Configuration, and click Setup.
- 2 When you are asked whether you are logged on using a Domain User account, select either Yes or No as appropriate for your site.
- 3 At the FileNet Image Services Installation Maintenance screen, click the Edit Parameters button.
- At the Edit Installation parameters dialog box, check the AUTOSTART 4 Image Services PROCESSES option and click OK

- **5** At the CONFIRM SAVE dialog box, click *Yes* to save the installation parameters.
- **6** Exit the FileNet Image Services Installation Maintenance window.
- 7 Click the Yes button at the CONFIRM EXIT window.

MSAR Systems

The Magnetic Storage and Retrieval (MSAR) storage library is a new feature that was added to FileNet Image Services in release 3.6.30. It provides high speed and high capacity storage libraries on magnetic disk media instead of using optical media or large magnetic disk caches (Cache-only systems).

If you will be configuring and setting up an MSAR System, refer to the **MSAR Procedures and Guidelines** document for information.

Appendix A – Adding an Application Server

This appendix describes how to add an Application server to your system, and uses some of the procedures in the main body of this document. All the steps in this appendix should be done on the Application server unless specified otherwise.

In addition to installing and configuring a new Application server, use this appendix to:

- Add services to an existing server (for example, adding Batch Entry Services to an existing server). See, <u>"Add Services" on</u> <u>page 179</u>.
- Reconfigure an old server because the functions it performs are no longer required. (Reconfiguring an old server should be handled the same as installing and configuring a new Application server.)

Before You Begin

Before using this appendix ensure that:

- FileNet Image Services Release 4.0.0 and RDBMS software has already been installed and configured on a Combined server.
- The Combined server will be the Root server for the Application server.

If a Root server has not already been installed and configured you should do so now. Refer to the **Guidelines for Installing and** Updating RDBMS Software for Windows Server document, and Chapter 3, "Installing FileNet Image Services Software" of this document to install the necessary software.

Installation Prerequisites

Certain prerequisites (software and system requirements) are required to be performed prior to beginning the installation of the Application server software. Refer to "Installation Prerequisites" on page 23 of this document to complete these requirements.

The Installation Prerequisites section also details specific file system and dataset information that you must gather (or determine) to successfully complete the Image Services installation on the Application server.

An "Installation Worksheet" on page 49 is available for your use. You should transfer all of the requested information to the appropriate sections on the Installation Worksheet. All of the information necessary to complete the Image Services installation on the Application server will be in one easy-to-find place.

Additional System Information

In addition to verifying that your system meets the minimum software and system requirements detailed above, you must gather other important information to complete the Application server installation.

Follow the procedure in the section "Additional System Information" on page 44 to obtain this information. Once you have gathered the information requested, transfer the data to the "Installation Worksheet" on page 49.

Other Sources of Information

As you read this procedure, you will see references to other documents you may need to consult. Refer to "Related Documentation" on page 46 for a list of the documents you might need during the software installation procedure.

Install RDBMS Software

If you are configuring an Application server with only Batch, Print, and/ or Cache Services, or if Oracle9i Release 2 is already installed, you **do not** need to install RDBMS software. Instead, proceed to the section "Install Image Services Software" on page 174.

If you are configuring an Application server with either WorkFlo Queue Services, SQL Services, or VWServices, you need to install RDBMS software. Refer to the *Guidelines for Installing and Updating RDBMS Software for Windows Server* document to install the RDBMS software.

Install Image Services Software

The procedures for installing Image Services software on your Application server are the same as the procedures in the main body of this document.

Refer to Chapter 3, "Installing FileNet Image Services Software," on page 70 to install your Application server software.

Configure the Root Server

This section describes how to configure the Root server. Repeat the steps in this section as necessary to configure additional application servers.

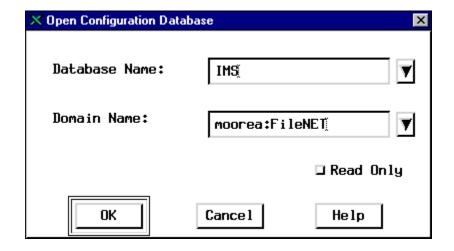
Add Application Server(s)

Perform the steps in this section on the **Root server**.

- Logon as **fnsw**, if you aren't already.
- 2 Open the Configuration Editor.

From the *Taskbar*, click the *Start* button, point to *Programs*, point to the FileNet Image Services, point to System Configuration, and click the Configuration Editor icon.

The Open Configuration Database dialog box appears.



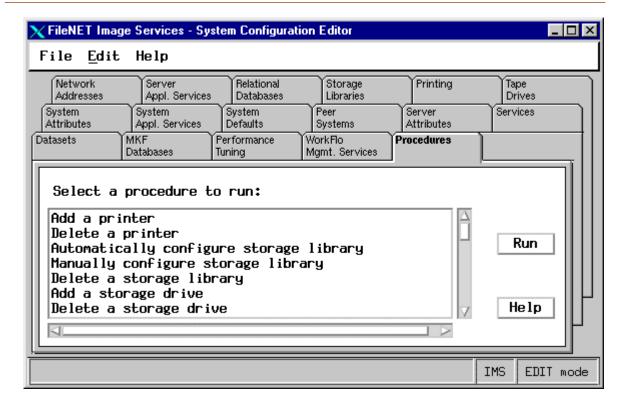
Note

The configuration database on the root server contains configuration information for the entire NCH domain of this FileNet system. Since this is an Application server, it does not have its own configuration database.

The configuration information you entered when setting up your root server will be displayed. Keep in mind that the Image Services software must be running on the root server when you open the configuration database.

In the Open Configuration Database dialog box, verify that the two-part domain information is correct and click *OK*. (The two-part domain name is set up as follows: <Domain>:<Organization>.)

The FileNet Image Services - System Configuration Editor window displays with the *Procedures* tab opened by default.



Note

If your system has a workgroup Image Services license, some screens may not appear as shown in this document.

4 Select the *Add an Application Server* option from the list of procedures, and click the Run button.

Note

Refer to FileNet Image Services - System Configuration Editor online help when completing the following fields.

- 5 In the next dialog box, enter the name of the Application server and click *Next*. This name is user defined. It can be whatever you want.
- 6 In the next dialog, enter the network address of the Application server and click Next.
- 7 After completing the Add an Application Server procedure, verify that you entered the information correctly.

To verify, click on the *Network* tab in the *FileNet Image Services* -System Configuration Editor window. You should see the Application server listed.

Add Services

Use the steps in this section to add Application Services to your Application server. You can add one or more of the following Application Services:

- **Batch Entry Service**
- Cache Service
- **Print Service**
- Structured Query Language (SQL) Service
- WorkFlo Queue Service
- **VWService**

If you will be adding a VWService to this Application server, use the procedures in this appendix to install and configure the Image Services and RDBMS software, and configure a SQL Service on this Application server. After completing those procedures, see the

installation handbook for your Process Engine platform for instructions on adding a VWService to the server.

Note

Although ICR Service appears in the list of services to add, ICR is NOT SUPPORTED in this release.

Add Batch Services

- 1 From FileNet Image Services System Configuration Editor window, click on the Procedures tab.
- **2** Select *Add a Service to a Server* from the list of *Procedures and* click *Run.*
- 3 Click on the domain name of the Application server.
- 4 Choose Batch Services and click OK.
- 5 Enter the dataset path. (e.g., D:\FNSW\dev\1\cache0)

Note The path must be on the Application server, NOT the root/index server.

Respond to the *Do you want to use fast batch committal?* prompt by clicking *yes* or *no.* If you accept fast batch committal, you will accept the defaults. If you want, you can change the configuration later.

Note

If fast batch committal is enabled, you cannot use cluster indexes. See the <u>System Administrator's Handbook</u> or the System Configuration Editor online Help for more details on fast batch committal and clustering.

- You are prompted for the number of BES commitment processes. Choose 2 (the default) or 4.
- **8** To save your changes, choose *File*, then *Close*.

A pop-up window asks if you want to save changes. Click YES, then choose File and Exit.

Add Cache Services

If you have added Batch Services, you do not need to perform this procedure.

- From FileNet Image Services System Configuration Editor window, 1 click on the *Procedures* tab.
- 2 Select Add a Service to a Server from the list of Procedures, and click Run.
- 3 Click on the domain name of the Application server.
- Choose Cache Services. Click OK. 4
- 5 To save your changes, choose File, then Close.

A pop-up window asks if you want to save changes. Click YES, then choose File and Exit.

Add Print Services

- From FileNet Image Services System Configuration Editor window, click on the *Procedures* tab.
- 2 Select Add a Service to a Server from the list of Procedures and click Run.
- 3 Click on the domain name of the Application server.
- 4 Choose *Print Services*. You will be asked if you want to add print services. Click Yes.
- 5 Click on the *Procedures* tab in the *FileNet Image Services - System* Configuration Editor window.
- 6 Choose Add Printer.
- 7 You will be asked if this is the default printer you are adding. If it is, click Yes. If you are not adding the default printer, click No.
- 8 Enter the printer name, which is user-defined.

- 9 Enter the NCH printer name (for example, LJ4M).
- 10 Enter the network address for the printer (for example, 125.0.85.245).
- 11 Select the paper printer size.
- 12 Select the printer eject tray. The default is *Default*.
- 13 You are prompted about adding additional printers. Repeat steps 7 through 13 to add more printers as necessary.
- 14 To save your changes, choose File, then Close.

A pop-up window asks if you want to save changes. Click YES, then choose File and Exit.

Add SQL Services

Before beginning this procedure, you must first install the RDBMS software.

- 1 From FileNet Image Services System Configuration Editor window, click on the Procedures tab.
- **2** Select *Add a Service to a Server* from the list of *Procedures and* click *Run.*
- 3 Click on the domain name of the Application server.
- 4 Choose SQL Services.
- 5 You are prompted for dataset path for the RDBMS on your Application server. Use the default, if correct, or enter a new dataset path.
- **6** You are prompted for the size of the Oracle or Microsoft SQL Server database. Use the default, if correct, or enter a new size.
- 7 You are prompted for the dataset path for the first redo log. Use the default, if correct, or enter a new dataset path.
- **8** You are prompted for the size in MB of the redo log. Accept the defaut, or enter a new size.

- **9** You are prompted for the dataset path for the second redo log. Use the default, if correct, or enter a new dataset path.
- You are prompted for the size in MB of the second redo log. Accept the defaut, or enter a new size.
- You are prompted for the dataset path for Oracle_sys0. Accept the default, or enter a new dataset path.
- You are prompted for the size in MB for Oracle_sys0. Accept the defaut, or enter a new size.
- You are prompted for the dataset path for Oracle_tr0. Accept the default, or enter a new dataset path.
- You are prompted for the size in MB for Oracle_tr0. Accept the defaut, or enter a new size.
- **15** Exit the System Configuration Editor and save your changes.

Add WorkFlo Queue Services

Before beginning this procedure, you must first install the RDBMS software.

- 1 From FileNet Image Services - System Configuration Editor window, click on the *Procedures* tab.
- 2 Select Add a Service to a Server from the list of Procedures and click Run.
- 3 Click on the domain name of the Application server.
- Choose WorkFlo Queue Services. 4
- 5 You are prompted for dataset path for RDBMS on your Application server. Use the default, if correct, or enter a new dataset path.
- 6 You are prompted for the size of the RDBMS database. The default is 200.

- 7 You are prompted for the dataset path for the first redo log. Use the default, if correct, or enter a new dataset path.
- **8** You are prompted for the size in MB of the redo log. The default is 20.
- **9** You are prompted for the dataset path for the second redo log. Use the default, if correct, or enter a new dataset path.
- 10 You are prompted for the size in MB of the redo log. The default is 20.
- 11 To save your changes, choose *File*, then *Close*.

A pop-up window asks if you want to save changes. Click YES, then choose File and Exit.

Add VWService

For instructions on adding a VWService, see the installation handbook for your Process Engine platform.

Configure the Application Server

Perform the steps in this section and its sub-sections on the Application server.

It is now necessary to build the Application server's configuration files and initialize the server. The same version of Image Services software must already be installed on the Root/Index server and the Application server.

Note

Make sure FileNet Software is running on the Root server, and *not* on the Application server.

Build and Initialize the Application Server

- On the Application server, logon as **fnsw**.
- 2 Open an Command Prompt window, and type in the following command to build the system configuration files:

fn_build -a

The **fn_build** program will generate configuration files used by the components of the Image Services software. Each file is produced in two steps. First a temporary file is produced with a *.new* extension. Then, if there is a difference between the *.new* version and the existing version, the *.new* version of the file is copied over the existing version of the file. (In addition, **fn_build -a** checks the validity of the software license.)

Make sure fn_build ran successfully by checking that no errors have occurred. If you get an error, enter the following commands, then repeat the steps in this sub-section:

cd \fnsw_loc\sd
echo <domain:Organization> nch_<domain>
killfnsw -A -D -y

Initialize FileNet Databases

1 As **fnsw**, initialize the appropriate databases.

2 To initialize the index database and all the MKF databases (includes permanent, transient, and security databases), enter the following command at the Command Prompt:

fn util init

This process may take a while (a minimum of 10 minutes without any feedback to the user); the larger the datasets, the longer the wait.

Note

You can monitor the progress of the initialization by viewing the init.log file in a command prompt window. The directory location of this file is, \fnsw_loc\logs\fn_util\fn_util.log

Verify FileNet Dataset Permissions (Optional)

Use this procedure to verify and/or set your FileNet dataset permissions.

Note

If the FileNet datasets reside on a different disk than the FileNet Image Services software, you must set the permissions.

- Open Windows Explorer.
- 2 Select a directory containing a FileNet dataset.
- 3 Select Security and set the following permissions:

Group	Permissions
Administrators	Full Control
Everyone	Read
fnadmin	Full Control
fnop	Read & Execute and Write

4 Repeat steps 2 and 3 for all datasets affected.

Bring Up FileNet Software

Reboot the server.

Note

The time needed for the shutdown/reboot process varies for each system.

- **2** Logon to the Application server as **fnsw**, if you aren't already.
- **3** Locate the FileNet Image Services Server Applications window, and double-click on the *Task Manager* icon.
- 4 Once you see the TM_daemon.exe process message appear under the *Process* column, bring up the FileNet event log window by clicking on the *Monitor* pull down menu and selecting the *Event Logs...* option.
- 5 From the Event Logs window, enable the event window to be refreshed whenever messages are logged by clicking on the *Display* pull down window and selecting the *Dynamic* option.
- **6** To bring up the FileNet software, return to the FileNet Task Manager window and click on *Start*. The system will display messages in the Current Status pop-up window as FileNet software is being started up.

- When the FileNet software is up and the Close button is highlighted, 7 click on the Close button to close the Current Status window.
- 8 View the *Event Log* window to make sure there are no error messages.

Appendix B – Adding Additional Storage Library Servers

This appendix describes how to install and configure multiple Storage Library servers on your FileNet Windows Server system. It is structured for use with some of the procedures already documented in the main body of this document, and where necessary, it references procedures that you must perform.

You can use this procedure to add Storage Libraries to a brand new Windows Server System, or to an existing system where you want to add more storage library servers.

Note

If this is a brand new system, perform the procedures in this appendix after you have installed and configured the Root/Index server and have verifying that it is functioning properly.

Overview

Use this appendix and repeat the procedures for each Storage Library Server that you intend to add.

Note the following:

- You can add addtional Storage Library Servers on either a Combined or Dual server system.
- You **do not** need to install RDBMS software on any of the Storage Library servers you are adding

Multiple Optical Library Server Uses

The portion of the FileNet Image Services software that files and retrieves document images is known as Storage Library Services. This software controls every activity in the Optical Disk Library to make sure that all documents are stored and retrieved from the optical disks in an orderly manner. Storage library services can be added to any system on a Combined server, Dual server, or multi-server installation. The Storage Library server keeps track of the name and location of every

document stored in the Optical Disk library (or on magnetic disk in a cache-only system). In addition, the server contains one or more magnetic disk drives to store images temporarily before they are permanently written to optical disk.

Multiple Storage Library servers are setup on a system to enhance capacity and/or performance:

- If you already have as many optical disk libraries on a server as possible, or if you cannot physically fit another optical disk library in close enough proximity to the existing server, you may need another server in order to add an optical disk library to the system and to allow the system to handle more disks on-line.
- If the CPU, I/O bus, or magnetic disks on a Storage Library server are already pushed to their maximum throughput, adding a Storage Library server will increase performance. However, if the existing server has not reached its performance limit, adding another Storage Library server will decrease performance slightly because of the overhead of controlling a second server.
- If you have a cache-only system all images remain on the Storage Library servier's hard drive. Because addressing considerations limit

the maximum size of cache on one server to only 4 TB, a cache-only system might need to have more than one Storage Library server

Multiple Storage Library servers are **not** a solution for a disaster recovery plan because you cannot write the primary copy of one document to one Storage Library server and the transaction log copy to another Storage Library server. Both copies will always be written to the same Storage Library server. Note that Database Maintenance will not let you select destination Storage Library servers for a transaction log family.

Prerequisites

To successfully complete the instructions in this document, you must have already performed the following actions for the Storage Library Servers you plan to install:

- Reviewed all <u>"Installation Prerequisites" on page 23</u> in chapter one.
- Transferred all necessary information to the "Installation Work-sheet" on page 49 in chapter one.

Completed all of the steps that are in the subsection <u>"System Configuration Issues" on page 58</u> in chapter two.

Return to this appendix after you complete the steps above.

Install IS Software on the Storage Library Server

Refer to Chapter 3, "Installing FileNet Image Services Software," and install the FileNet Image Services software on the storage library server(s) you are installing. Return to this section after you complete the steps in Chapter 3.

Note

You do not need to install RDBMS software on the Storage Library server(s).

Configure the Root Server

Server Types

Perform the steps in this section and its sub-sections on the Root server, or on each server with a cache.

Commit Documents in the Transient Database (Existing Systems ONLY)

If you are adding a storage library server to an already existing and operational Windows Server system, you must commit documents in the transient database to make sure that the batches not yet committed are not lost while you configure the Storage Library server.

- 1 Open the FileNet Task Manager and verify that the FileNet Image Services software is up and running.
- **2** Print or delete all outstanding print requests.
- 3 Commit all uncommitted documents or batches.
- 4 Open the FileNet Application Executive and then the Cache Export/Import application.
- **5** Examine the remaining contents of cache.
- **6** Examine the statistics on bes_cache, page_cache, and print_cache.

All caches should show no locked objects. These represent uncommitted batches, unwritten images, and pending print jobs.

Note

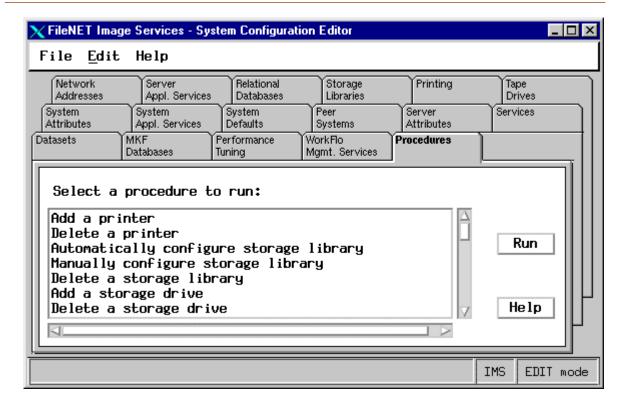
If you have any FAX servers, there will be two locked objects per FAX server in print_cache.

7 Close the Cache Export/Import application, and the FileNet Application Executive.

Add Storage Library Servers

- 1 As **fnsw** user, open the System Configuration Editor.
- 2 Verify the two-part domain information is correct. (The two-part domain name is set up as follows: <Domain>:<Organization>.)

The System Configuration Editor window appears with the Procedures tab opened by default.



3 Select Add a Storage Library server from the Select a procedure to run: listbox and click *Run*.

Note

Use online help when completing the following steps.

- **4** Enter the name of the Storage Library server. The server name of the storage library server is user defined. Click *Next*.
- 5 Enter the network address of the Storage Library server (refer to the "Installation Worksheet" on page 49). Click *Next*.
- 6 Enter the network name for the Storage Library server, and click Next.
- 7 Enter the path for the cache partition (default: <drive>:\fnsw\dev\1\cache0).
- **8** Enter the cache dataset size.
- 9 Enter the path for the transient database (default: <drive>:\fnsw\dev\1\transient_db0).

- **10** Enter the dataset size for the transient database.
- 11 Enter the path for the transient database redo log (default: <drive>:\fnsw\dev\1\transient_rl0).
- **12** Enter the dataset size for the transient database redo log.
- Respond to the "Do you want to use fast batch committal?" prompt by clicking Yes or No. If you accept fast batch committal, you will accept the defaults. You can change the configuration later.

Note

If fast batch committal is configured, you cannot use cluster indexes. See the **System Administrator's Handbook** for more details on fast batch committal and clustering.

The maximum document size for remote committals using fast batch is 2.1 GB. See the *Multi-Committal and Cross-Committal Configuration Handbook* for more information on remote committal.

You are prompted for the number of BES commitment processes. Choose 1 - 4.

- Enter the path for the permanent database (default: <drive>:\fnsw\dev\1\permanent_db0)
- 16 Enter the dataset size for the permanent database.
- 17 Enter the path for the permanent database redo log (default: <drive>:\fnsw\dev\1\permanent_rl0).
- 18 Enter the dataset size for the permanent database redo log.
- After the procedure has been completed, do the following to make sure you have entered the information correctly:
 - Click on the Network Addresses Tab in the System Configuration Editor window; you should see the Storage Library server listed.
 - Click on Server Application Services Tab; you should also see the Storage Library server listed.
 - Click on the Dataset Tab to see the datasets you added to the Storage Library server including cache0, transient_db0, transient_rl0, permanent_db0, permanent_rl0.

- 20 If you are adding another storage library server, repeat steps:3 through 18. Otherwise continue to the step below.
- 21 Exit the System Configuration Editor and save your changes.

Connect Storage Library Device(s)

Use this procedure to connect your storage library devices.

Note

Before performing this procedure, make sure that the SCSI card is not configured as a bootable device.

- 1 Logoff the Storage Library Server, and turn the server off.
- **2** Connect the storage library device, and power the device on.
- **3** Turn-on power to the Storage Library Server.
- 4 After the Storage Library Server boots-up, logon as **fnsw**.
- **5** Open a Command Prompt window, and enter the following command:

fnddcfg

Once the command is finished, you will receive a message instructing you to reboot the server to make the changes effective.

- 6 Reboot the server, and logon as **fnsw** again.
- Open a Command Prompt window, and enter the following command:

fndev

The physical addresses of all attached storage library device will display on the screen. You should see an output similar to the following:

```
Arm3030 1 3 0 3 0
Sod3040 1 3 0 4 0
```

Note

The example above shows the output for one osar and one drive.

- 8 From the Taskbar, click the *Start* button, point to Programs, and click on the FileNet Image Services Configuration icon.
- 9 From the FileNet Image Services Configuration window, locate and click on the Configuration Editor icon.
- 10 Verify that the two-part domain information is correct, and click OK.

The FileNet Image Services System Configuration Editor window opens with the Procedures tab displayed.

- 11 From the Procedures tab, select Automatically Configure a Storage Library from the list of available procedures.
- 12 Click Run.

Note

If you are configuring an RES template, a dialog box prompting you for the domain name of the peer system will display. Respond to these prompts as appropriate.

13 After you have completed configuring the storage library, exit the FileNet Image Services System Configuration Editor and save your changes.

Start the FileNet Software

Start the FileNet Image Services software on all servers: Root/Index server first, then Storage Library server(s).

Refer to <u>"Start the FileNet Software" on page 154</u> in this document. Return to this section after you complete the steps in the section above.

Build Configuration Files on the Storage Library Server

This section assumes that the FileNet Image Services software has already been installed and configured on the Storage Library server. The Image Services version on the Storage Library server must match the version installed on the Root/Index server.

Note

You must start the FileNet software on the Root/Index server **before** starting the Image Services software on the Storage Library server.

- 1 Verify that the FileNet Image Services software is running on the Root/ Index server.
- 2 On the Storage Library server, logon as **fnsw**.
- 3 If necessary, shutdown the FileNet software on the Storage Library Server by entering the following command:

initfnsw stop

Build the appropriate configuration files by entering the following com-4 mand at a Command Prompt:

fn build -a

5 Run the following command to initialize the databases:

fn_util init

The fn util init program will initialize the transient and permanent databases on the Storage Library server. (When the fn_util programs are

done, a message displays indicating that the new database partitions are initialized and zeroed out.)

You can monitor the progress of the initialization by viewing the init.log file in a command prompt window. The directory location of this file is, \fnsw loc\logs\fn util\fn util.log

6 On the Combined server, enter the following commands from a command prompt:

nch_tool

listprop OsarServer(x)*

(Where x is the new osar server number.)

See the following example:

```
nch tool>listprop OsarServer1
Properties for OsarServer1:<domain>:FileNet
(addressList, [172.25.50.24,32769])
(osarService, "Library Service")
(osarDesc, 0 2 DocServer: <domain>:FileNet page_cachel:Persistent:FileNet
nch tool>listprop OsarServer2
Properties for OsarServer2:<domain>:FileNet
(addressList, [172.25.50.127,32769])
(osarService, "Library Service")
(osarDesc, 0 3 DocServer: <domain >: FileNet page cache 2: <domain >: FileNet)
```

Note

In the example above, OsarServer2 would be the new osar server. On the line begining with: "osarDesc, 0 3 ..." 3 is the number used for the add_osvr command, which you will run in Step 12 on page 214.

7 Open the FileNet Task Manager. From the Taskbar, point to Programs, FileNet Image Services, Server Applications, and click the *Task Manager* icon.

- 8 Select Backup Mode. This step is necessary to bring up courier.
- 9 Repeat steps 7 and 8 on the new Storage Library server.
- 10 On the Combined server, enter the following command from a command prompt:

fn util startdb

- 11 Repeat **step 10** above on the new Storage Library server.
- 12 On the Combined server, enter the following command from a command prompt:

add osvr x

(where x is the number you got from the listprop command earlier in this procedure. See the "Note" on page 213.)

The add_osvr command creates the family_locator table on the Combined server and updates the family disk table on the new osar server. When it completes the message, "Program terminated successfully" appears.

Note

After running the add_osvr command, there will be a message in the elog which reads, "Run Database maintenance to re-save all media families." On a new installation of root or Storage Library servers there are no media families, so this message can be ignored.

For more information on the add_osvr, del_osvr, and move_disk commands, see the **System Tools Reference Manual**.

- 13 At the new Storage Library server, select *Stop* from the FileNet Task Manager.
- 14 At the Combined server, select *Restart* from the FileNet Task Manager.
- 15 At the new Storage Library server, select *Start* from the FileNet Task Manager.

Make System Backups

Backups should be now be made of your system configuration in case something unforeseen occurs. You should do this for the Root, Application, and Storage Library servers.

Refer to "Make System Backups" on page 165 in this document.

Storage Library Server Utilities (Optional)

This section briefly describes the function and uses of the following Storage Library server utilities:

- move_disk, which allows you to move optical disks from one optical disk library to another.
- del_osvr, which allows you to remove a Storage Library server from your system.

The utilities described in this section need not be used on any Storage Library server unless a specific need exists. For more information about Storage Library server utilities, refer to the <u>System Tools Reference Manual</u>.

Note

For information on MSAR Storage Libraries, see the <u>MSAR Procedures and Guidelines</u> document.

CAUTION

Whenever any change in Storage Library configuration occurs, especially when a Storage Library is deleted, it's extremely important to resave all the media families manually and resolve any errors. See the Database Maintenance chapter of the <u>System Administrator's Handbook</u> for information on saving media families.

Moving Disks Between Storage Library Servers

Run the **move_disk** utility if you want to move optical disks from an Optical Disk Library attached to your old Storage Library server to an Optical Disk Library attached to your new Storage Library server in order to balance disks equally between each server.

The **move_disk** utility does the following:

- Reads optical disk information from the Storage Library server database where it currently resides.
- Inserts the optical disk information into the destination Storage Library server database.

- Updates the surface locator table to point to the new location of the optical disk.
- Deletes the optical disk information from the source Storage Library server database where the disk previously resided.

To run **move_disk**, follow these steps:

- Eject all disks to be moved from the Optical Disk Library as described in the "Storage Library Control" chapter of the <u>Image Services</u> System Administrator's Handbook.
- 2 Run the move_disk utility from the source Storage Library server attached to the Optical Disk Library where the disks currently reside. Type:

move_disk <surfid 1> ... <surfid n> <dest_server_name>

where **<surfid 1> ... <surfidn>** represents the surface ids and **<dest_server_name>** represents the server id of the Storage Library server attached to the Optical Disk Library to which you want to move the disks.

Insert the disks into the Optical Disk Library attached to the destination Storage Library server using Storage Library Control (SLC). This is described in the "Storage Library Control" chapter of the Image Services System Administrator's Handbook.

Deleting a Storage Library Server

You can delete a Storage Library server using the **del_osvr** utility. This utility removes a Storage Library server from a system and moves references to the optical disks from the deleted Storage Library server to a remaining Storage Library server.

The **del_osvr** utility does the following:

Checks the Storage Library server(s) for documents not written yet.
 If it finds any unwritten documents, it notes the problem and terminates. You must then either start the Storage Library server and let it finish the outstanding write_requests, or run WRT_clean to remove them. Refer to the Image Services System Tools Reference Manual for information about WRT_clean.

- Copies all optical disk database information from each Storage Library server to be deleted to the destination Storage Library server. It then deletes this information from the Storage Library server being deleted.
- Updates the family disk information on each deleted Storage Library server to remove all current, future, and previous write surfaces. It adds this information to the destination Storage Library server so that partially full disks will continue to be written. If a partially full disk cannot be added to the destination family's current surfaces because the current surface array is full, a message is logged to the system error log.
- Updates the surface locator and family locator tables. If only one Storage Library server remains, the entries in the surface and family locator tables are deleted. If multiple Storage Library servers remain, the pointer in the surface locator table is changed to point to the destination Storage Library server, and the pointer to the deleted Storage Library server in the family locator table is removed. Optical disks assigned to deleted Storage Library servers will be assigned to the destination Storage Library server. However, families referencing a deleted Storage Library server will have that ref-

erence removed, but will not have a reference to the destination Storage Library server explicitly added. Also, if all the servers referenced by a family are deleted, that family will be changed to reference all remaining Storage Library servers.

Run the **del_osvr** utility from the source Storage Library server (the server that you are deleting) to update the permanent and transient MKF databases on each Storage Library server with the necessary changes.

To use **del_osvr**, perform the following steps:

1 Backup the system to tape.

Note

May 2003

If you get partially through deleting a Storage Library server and have a problem, restoring the backups is the **only** way to return to the original state. There is no other program that can undo an uncompleted attempt to delete a Storage Library server.

2 Make sure there are no pending write requests for the Storage Library server(s) to be deleted. If there are, delete them.

- 3 Eject all disks to be moved from the Optical Disk Library(s) of the Storage Library server to be deleted.
- 4 Bring down the FileNet software on all Storage Library servers by entering:

initfnsw stop

5 Run the **fn_util startdb** tool on every Storage Library server to start up the permanent and transient databases by typing the following:

fn_util startdb

6 On each server, enter a command similar to the following:

del osvr <svrid1> <svrid2> ... <svridn> <dest server num>

<svrid1> <svrid2> ... <svridn> are the server ids of the Storage Library servers to be deleted, and <dest_server_num> is the destination Storage Library server to move information to from the Storage Library servers being deleted.

Note

If the Storage Library server on which optical disks are referenced is not correct, or the Storage Library server's families referenced are not the desired ones after you run the **del_osvr** utility, you may run the **move_disk** utility to move optical disks, and you may also run database maintenance to change families.

- 7 After del_osvr is completed, run fn_edit on the Root server to delete the Storage Library server. Be sure to delete the logical cache allocation before removing the station.
- In the Application Executive, use Database Maintenance to re-save all media families, and resolve any warning or error messages that appear by adding or changing the preferred library information to match the current storage library configuration.

Appendix C – IS and CS Collocation Requirements

This appendix contains Image Services setup requirements and parameters for systems that will have both Image Services (IS) and Content Services (CS) installed on the same server.

Read Release Notes

Installing IS and CS on the same server demands that certain configuration requirements be met. To be sure that you have the most recent information, read the Release Notes file. Search through the Release Notes file using the keywords **IS/CS COLLOCATION**.

Supported Platform Configurations

You can install Content Services to share a server and database engine with an existing Image Services system only with the following configuration:

Server-Based Services

- Image Services 4.0.0
- Content Services 5.2

Operating System

Microsoft Windows 2000 with Service Pack 3

RDBMS

Microsoft SQL Server 2000

Note

Running Image Services and Content Services on the same server currently requires a Microsoft SQL Server database environment. Image Services and Content Services are not certified to share Oracle Server database servers.

Installation Order

The order of installation for Image Services and Content Services is critical for this release. For Image Services release 4.0.0, the IS software must be installed first. Only after installing the Image Services can the Content Services software installation take place.

Note

The sort order set during the installation of the Microsoft SQL Server software, **must** be set to: Dictionary order, Case insensitive, Accent insensitive.

SQL Server Service Ownership

Startup and shutdown of Microsoft SQL Server 2000 is normally an automatic function of Image Services. However, depending on your customer requirements, there are two options to this setup.

 If your customer requires that the Content Services system be up and running while the Image Services side is off, then the customer must opt for a Site-controlled SQL Server RDBMS. The Database Administrator is responsible for installing the RDBMS software and the database objects. See chapter 3 of the <u>Guidelines for Install-ing and Updating RDBMS Software for Windows Server</u> document for more information.

Note

With a Site-controlled database, some features will not be supported - mainly dataset maintenance.

 If your customer does not require that the CS system be running after the Image Services is shutdown, then just ensure that the CS is shutdown first.

Microsoft SQL Server Parameters

Certain Microsoft SQL Server 2000 parameters must be set for servers where Image Services and Content Services are collocated. These parameters, which can be set after installing the Content Services software, are set in the System Configuration Editor on the Relational Databases tab, MS-SQL subtab.

CAUTION

When setting the value for SQL Server User Connections, it is important to know that the value set in System Configuration Editor will override the setting in the SQL Server Properties dialog box. This will occur after the Image Services has been stopped and restarted.

Storage Library Optical Units

When Image Services and Content Services are located on the same server, separate, dedicated optical units must be used. You can not use the same optical unit for both IS and CS.

Appendix D – Remote Access Procedures

Remote access is limited to a tty or **telnet** session. So, when FileNet dials into a site, that session is built on what appears to the remote server as only a terminal. Because Remote Access Services (RAS), provides the potential for an interconnection between the customer's network and any network that the RAS client is on, security or configuration concerns must be addressed. RAS can either be configured so that the dial-up clients have access to only the Windows Server, or to the entire network.

TCP/IP protocol must be installed and running for Image Services remote support. The pcAnywhere telnet service which is used to access the character based tools runs over IP like any other telnet implementation. FileNet Customer Service and Support strongly suggests that RAS setup be done after the Image Services installation has been completed and tested. RAS installation will vary slightly depending on the network protocols you have installed. The following sections also assume that the Windows Server has already been setup

as a participant in the local Microsoft Network domain or work group, if that is appropriate to the site.

This appendix contains the following sections:

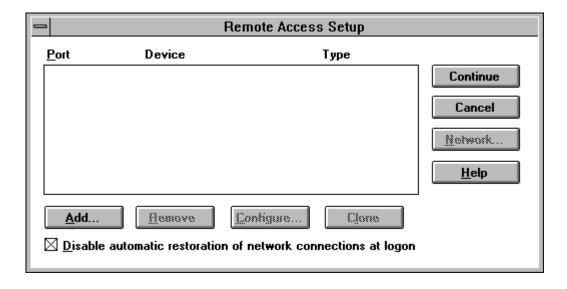
- Adding Remote Access Software
- Granting Remote Access Rights to the FNADMIN User
- pcAnywhere TCP Remote Control Services
- Granting Users Permission to Logon

Adding Remote Access Software

Remote Access Setup configures RAS, creates a Remote Access Service program group, then confirms that installation was successful.

- Log into the system as **fnsw** or Windows **Administrator**.
- 2 In Control Panel, choose the *Network* option.
- 3 In the Network Settings dialog box, choose the *Add Software* button.
- 4 From the Network Software list, select Remote Access Service and then choose the Continue button.
- 5 When prompted for the path to the distribution files, provide the path and choose the OK button.

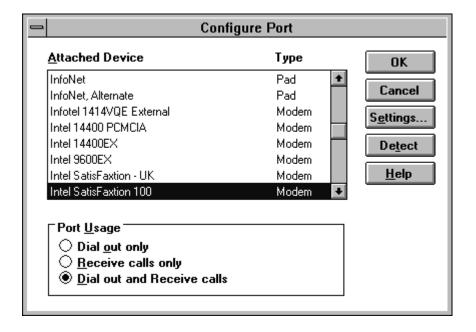
The RAS files will be copied to your computer. After the files are copied, you will see a Remote Access Setup dialog box similar to the followng.



6 Select the <u>Add...</u> button. In the Add Port dialog box, you will see a list of all ports available to Windows Server for RAS. If you have successfully installed an ISDN card, X.25 card, or other device, you should see it in this list.

- 7 Select the port you will use for remote access and choose the OK button
- 8 Remote Access Setup will offer to automatically detect the modem connected to the selected port.
 - To manually select a modem, choose *Cancel*.
 - To automatically detect the modem, choose *OK*. When a dialog box appears announcing the modem detected, click OK.

The Configure Port screen displays.



Note

Occasionally, when attempting to detect a modem, Remote Access Setup displays a dialog box requiring you to select your modem from a short list of possible modems. This occurs only when Remote Access Setup cannot distinguish between two or more modems.

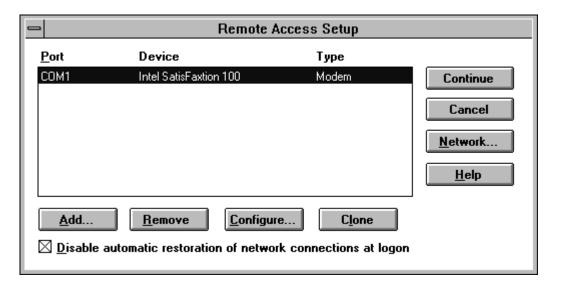
- **9** In the Configure Port dialog box, the modem detected will be highlighted.
 - a If RAS did not detect your modem, or if you chose to manually select the modem, select the device attached to the port from the list.

Note

Only supported modems are listed.

- b If you are adding a port after initial RAS installation, you can use the *Detect* button to automatically detect the modem connected to the new port.
- 10 In the Port Usage box, choose how the port is to be used. To enable remote support for Image Services, select Dial Out and Receive Calls or Receive Calls Only.

- Dial Out Only means the computer will be a RAS client only. This
 choice is NOT currently supported, but FRC is exploring a setup
 which will allow client only configuration.
- Receive Calls Only means the computer will be a RAS server only.
- Dial Out And Receive Calls means the computer can be a client or server, however, the computer cannot do both at the same time. This choice offers the greatest flexibility.
- 11 To configure information specific to the type of device attached to the port, select the device and choose the *Settings* button. The default settings are usually ideal.
- **12** Choose the *OK* button. The Remote Access Setup dialog box reappears.



13 In the Remote Access Setup dialog box, configure or reconfigure the ports by highlighting a port and using the buttons along the bottom of the dialog box.

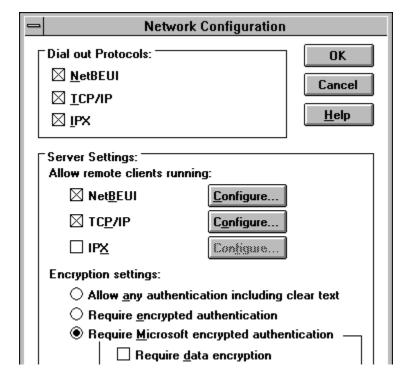
Consult the online *Help* for a description of each button's use. Default settings are usually ideal.

Note

The example in the dialog box above is meant for illustrative purposes only. The ports and devices on your system will likely be different

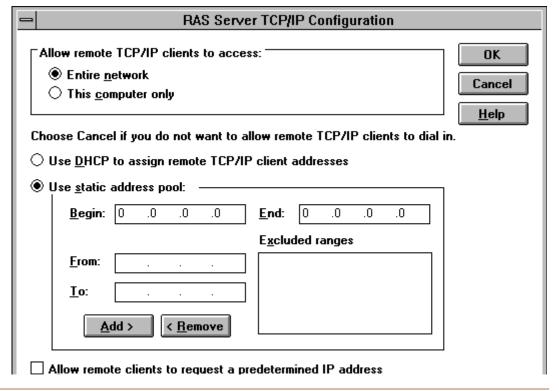
14 Choose the <u>Network</u> button to configure the network settings for the port and modem that is highlighted.

You should see a dialog box similar to the following.



15 In the Server Settings: section, make sure that TCP/IP is checked, then press the Configure button next to it.

The following dialog box appears.



- In the *Allow remote TCP/IP clients to access:* section of the dialog box, choose either: *Entire Network* or *This computer only.*
 - Entire Network allows routing between your entire network and the RAS device
 - This computer only allows routing only between the RAS device and this Windows server

The default selection is *Entire Network*. If this is not correct for your system, click the *This computer only* radio button.

- 17 In the next section of this dialog, choose either:
 - Use <u>D</u>HCP to assign remote TCP/IP client addresses, or
 - Use <u>s</u>tatic address pool

Note

DHCP is Microsoft's scheme for assigning IP addresses to clients on the LAN or connected through RAS. Consult with the local administrators to determine if DHCP is implemented at a given site. DHCP offers significant benefits if implemented correctly.

18 Skip this step if you have not selected *Use static address pool.*

Enter a range of at least two IP addresses into the static address pool.

FileNet recommends that the IP address range start right after the last IP address assigned to the Windows Server itself.

For example, if you have a Windows Server with two network interfaces in it, assign the first card 135.0.73.98, the second card 135.0.73.99, and the RAS static pool from 135.0.73.100 to 135.0.73.101.

Note

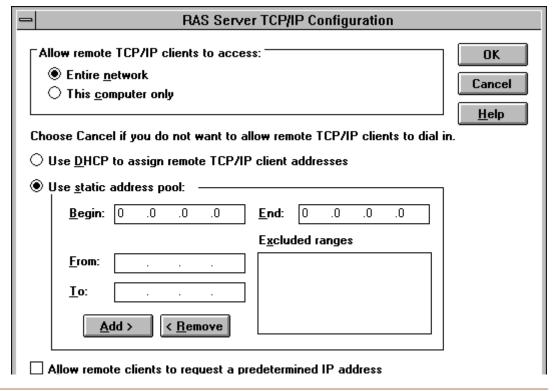
The IP addresses of the network cards should have already been installed and configured. In addition, the pool of addresses must not

Appendix D - Remote Access Procedures

Adding Remote Access Software

conflict with any other devices which might be configured for your network.

Below is an example of a static addresss pool configuration.



When you are finished choosing RAS Server TCP/IP Configuration Settings, click the *OK* button.

Note More RAS Server Configuration dialog boxes may appear for other non TCP/IP protocols installed on your computer. If this happens, see RAS online *Help* for information about configuring these other LAN protocols for RAS use.

- When you are finished setting up the port and network configurations, click the *Continue* button on the Remote Access Setup dialog box.
- The RAS service will then copy any more needed files from your distribution and pop up a dialog for granting permissions to remote users. Click the *OK* button in the Confirmation dialog box.
- Click the *OK* button in the Network Settings dialog box. The protocols will be bound to the RAS Service. If your site requires further information to complete the binding, choose the defaults that the system offers during the analysis.

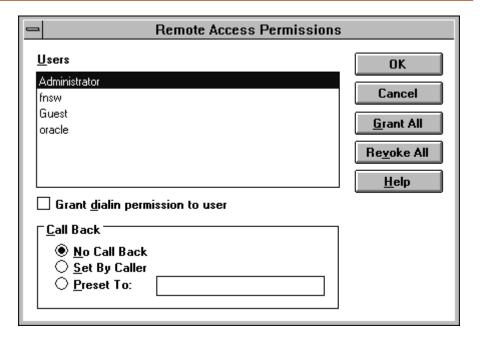
23 Restart your computer for the Remote Access installation to take effect. A new program called Remote Access Service will be created.

For more information on configuring RAS, see RAS online *Help*.

Granting Remote Access Rights to the FNADMIN User

After installing Remote Access software, you must grant Remote Access rights to certain users before they try to connect through Remote Access client software. Without permission users cannot successfully connect to the Remote Access computer, even if the Remote Access client software has been installed on their computers.

- 1 If you aren't already, log into the system as **fnsw** or Windows **Administrator**.
- **2** From the *Taskbar*, click the *Start* button, and point to *Programs*, Administrative Tools (common), and click the *Remote Access Admin* icon. The *Remote Access Permissions* dialog box opens.
- **3** From the *Users* menu, choose *Permissions*. The Remote Access Permissions dialog box displays.



4 Make sure that when the name **fnadmin** is highlighted, the *Grant dialin* permission to user box is checked. You might also want to ensure that the Administrator also has dialin permission. When finished, press **OK**.

For further instructions, choose the **Help** button in the dialog box.

Note

Microsoft and FileNet do not recommend granting guest accounts dialin permission. If you do, be sure to assign a password to the guest account.

pcAnywhere TCP Remote Control Service

Before completing the steps in this section, TCP/IP support must be setup on all Image Services servers where remote accessibility is required.

Complete the steps in this section to install pcAnywhere TCP remote control services.

Note

FileNet has licensed pcAnywhere from Symantec Corporation for use in FileNet products but this license does not extend to FileNet customers. In order to use pcAnywhere, customers must obtain a license for this product from Symantec Corporation.

Why Use pcAnywhere?

The FileNet Customer Service and Support division has determined that there is a need for a reliable and robust tool that will enable FileNet engineers to remotely manage products that are installed on servers running a Windows Server operating system. The speeds afforded by

current dial-up connections are simply too slow to allow for efficient response.

Although several remote control packages are available on the market, FileNet Customer Service and Support recommends pcAnywhere which provides more timely support and problem resolution.

Installing pcAnywhere will allow field personal and the FileNet Response Center (FRC) to dial into your system, manipulate the controls, and view the display as if they were seated at the computer.

Note

In some cases, the Image Services server may not be the most appropriate server to run Remote Access Services. Your particular system requirements may require that the RAS be installed on different server.

Installing pcAnywhere

The pcAnywhere software (Host Version) is contained on the CSS Technical Information CDROM.

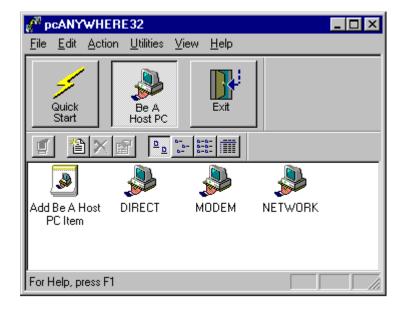
- 1 Refer to the Norton pcAnywhere User's Guide (Chapter 2), and install pcAnywhere on the Windows server(s) that will require remote control capabilities.
- 2 Accept the installation program defaults for the modem and direct cable connections.

Note

Although the installation program defaults may not be used directly on the server you are configuring, accept them anyway. Accepting these defaults should not affect the outcome of the configuration.

3 When the installation is complete, start the pcAnywhere application.

The pcAnywhere window opens.



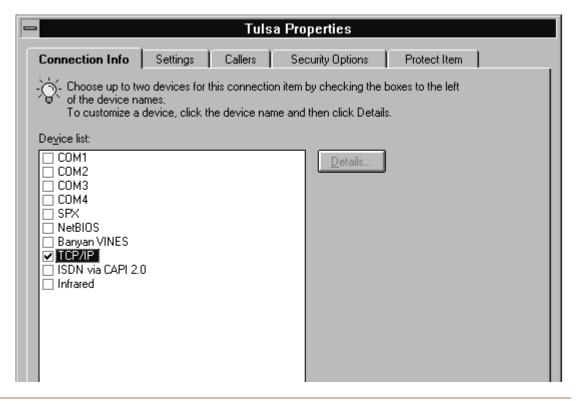
4 At the top of the pcAnywhere window, click the Be A Host PC button.

Note

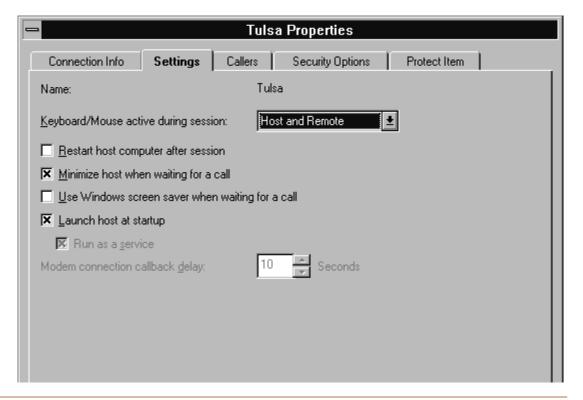
Since this server will be controlled by a remote PC, it is considered a host.

- 5 In the pcAnywhere window, right click the *NETWORK* icon.
- 6 A popup window appears. Click the *Properties* option in this window.

The Properties dialog box appears with the *Connection Info* tab opened by default.



- 7 From the Device list on the Connection Info tab, select TCP/IP.
- 8 Click the Settings tab in the Properties dialog box. The Settings tab appears as shown below.



- **9** If you want to have the pcAnywhere host start when Windows starts up, check the *Launch host at startup* check box.
- **10** Click *Apply* to have your changes accepted, and then the click the *OK button*.
- 11 Reboot the server so the changes you made can take effect.

Note

By default, the pcAnywhere service is set to startup *Manual* in Administrative Tools/Services after you install it. If you change this setting to startup *Automatic*, it may increase the time required to shutdown the Windows operating system by approximately 2 minutes.

Granting Users Permission to Logon

You now need to give proper permissions to those users you want to be able to perform remote logons.

- If you aren't already, log into the system as **fnsw** or Windows Administrator.
- 2 Run the *User Manager for Domains* program located in the *Administra*tive Tools program group.
- 3 If you want to allow users to logon remotely to the system on which you are running Advanced Server, make sure the tile bar on the User Manager for Domains window reads "User Manager -_Your_Domain_ name". If it does not, select the domain name of your system's Domain Controller by selecting the Select Domain item in the User menu.
- Select the User Rights item in the Policies menu. 4
- 5 Click the Show Advanced User Rights check box, and then scroll the Right: pull down list until you get to the Log on as a service item.

- **6** Add the users and/or groups that you want to have remote logon capability.
- Vser rights are assigned on a per system basis. On every system you want to allow remote logons, you must edit the user rights for that system. Editing the user rights for the domain affects only the user rights on the domain controllers for that domain. If the server that you have set up to install Image Services is not a domain controller, reference the pcAnywhere documentation for clarification, or contact the FileNet Response Center for specific instructions.

Appendix E – De-Installation Procedures

This appendix contains instructions for de-installing both FileNet Image Services Release 4.0.0 and Oracle software. If, for any reason, you must reinstall the FileNet Image Services or Oracle software on your system, you must first de-install the appropriate software.

Note

To de-install FileNet Image Services software using SMS, proceed to "Appendix F – Microsoft Systems Management Server (SMS) Procedures" on page 281.

To de-install an earlier version of FileNet IDMIS or IMS software, refer to the IDMIS or IMS Installation and Configuration Procedures for Windows Server document for the release you want to de-install.

This appendix contains the following de-installation procedures:

De-install FileNet Image Services Release 4.0.0 Software (page 265)

De-install Oracle RDBMS Software (page 272)

Note

To de-install Microsoft SQL Server RDBMS Software refer to Microsoft Books Online (if you've installed it), or go the <u>Microsoft web</u> <u>site</u> for the latest Books Online procedures.

CAUTION

Perform the procedures in this appendix in the order that they appear. Skipping a procedure, or performing the steps of a procedure in a different order, might result in an incomplete de-installation of the FileNet Image Services or RDBMS software.

Note

After performing the procedures in this appendix, it is recommended that you restart your computer to ensure that all FileNet, Oracle, and SQL services have been successfully removed.

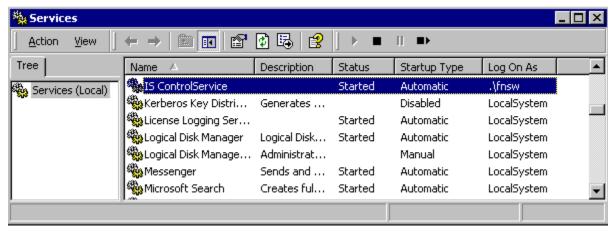
De-Install FileNet Image Services Release 4.0.0 Software

Use this procedure to de-install FileNet software.

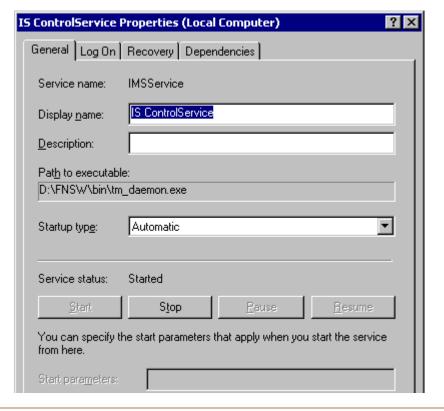
Important

Before de-installing FileNet software, FileNet recommends that you make a complete **backup** to tape.

- Log into the system as **fnsw** or Windows **Administrator**. 1
- 2 Shutdown the FileNet software by clicking STOP within the FileNet Task Manager.
- 3 Open Administrative Tools and double-click the Services icon. (The Services dialog box displays.



- 4 In the Services dialog box, select the IS ControlService and the SNMP (if present) Services options from the list of available services and stop both services.
- 5 Set the IS ControlService status to Disabled.
 - Right-click the IS ControlService and select *Properties*. The IS ControlService Properties dialog box displays.



- Select the Log On tab, click the *Disable* button and then click the *OK* button to close the IS ControlService Properties dialog box.
- 6 Close the Services dialog box.
- 7 Open a Command Prompt window, and type the following command:

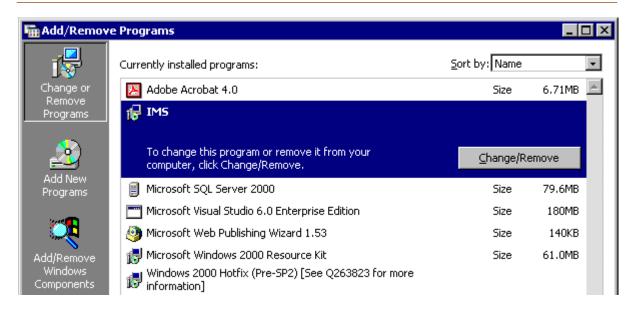
killfnsw -D -y

CAUTION

Do not run **whatsup** after entering the **killfnsw** command. The **whatsup** command will start some communication daemons that will prevent you from removing certain directories.

8 In the Control Panel, locate and double-click the *Add/Remove Programs* icon.

The Add/Remove Programs Properties dialog box displays.



9 From the *Add/Remove Programs* window, select *IMS* from the list of software that can be automatically removed.

CAUTION

Be sure that you select the correct software to de-install.

- **10** Click the *Change/Remove* button.
- 11 A confirmation message appears in a Command Prompt window which allows you to decide if you want to completely remove all the software and related components.

Type Y and press Return to confirm.

The list of software being removed scrolls through the window.

- Remove any short cuts from the Desktop that point to FileNet Image Services software.
- 13 In the Control Panel, double click the System icon.
- 14 When the System Properties window opens, click the Advanced tab.

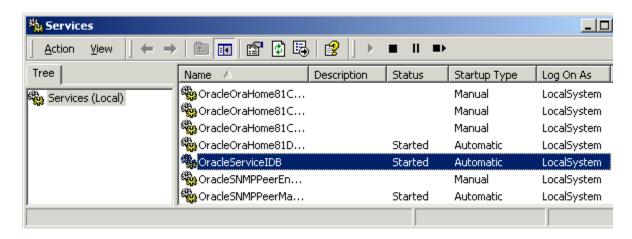


- 15 On the Advanced tab click the Environment Variables button. The System Variables window opens.
- 16 Double-click the Path variable in the System Variables window and edit the path by removing any information in the path value field that relates to fnsw software.
- 17 Click the *OK* Button in the Edit System Variable window and then click OK in the Environment Variables window to exit.
- 18 Close the System Properties, Control Panel, and all other related windows.
- 19 If you want to de-install Oracle software, continue to the next section below. Otherwise, continue to the section, "Reboot Server" so that the changes you made will take effect.

De-Install Oracle RDBMS Software

This procedure can be used to de-install Oracle9 software.

1 Log into the system as Windows **Administrator**. 2 From Administrative Tools, locate and double-click the Services icon. The Services dialog box appears.



- 3 Stop all Oracle related services.
 - Locate and double-click OracleServiceIDB service.

The OracleServiceIDB Properties window opens.

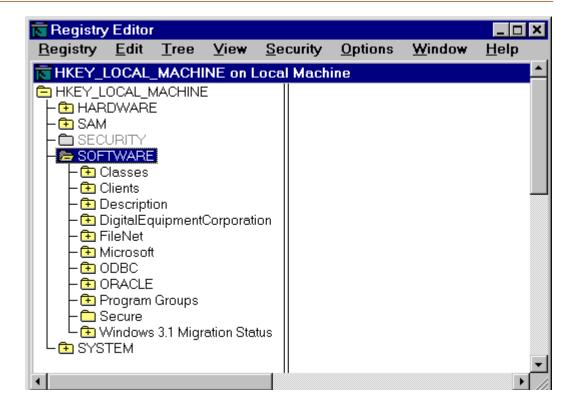
- Click the Stop button to stop the OracleServiceIDB service and then click OK.
- Repeat steps a and b to stop all other Oracle related services.
- 4 After all Oracle services have been stopped, close the Services window.
- 5 Open the Windows Registry window by entering the following at the Command Prompt:

REGEDT32

Note

You can also enter the above command in the taskbar Run dialog box.

The Registry Editor window displays.



- 6 In the HKEY_Local_Machine on Local Machine window, open the Software directory.
- 7 Highlight the *Oracle* directory and delete it.
- 8 Using the path: System\CurrentControlSet\Services, select and delete all Oracle related services.
- 9 Close the Registry window.
- 10 Reboot the server and log back on as Windows **Administrator**.

Note

It necessary to reboot in order for the registry changes you just made to take effect.

- 11 From Administrative Tools, locate and double-click the Services icon.
- 12 In the Services dialog box, locate the Distributed Transaction Coordinator service and Stop the service.
- 13 Close the Services dialog box.

- 14 Open Windows Explorer.
- 15 In the "Document and Settings" directory, open the Programs folder using the path: All Users\Start Menu\Programs
- 16 Inside the Programs folder, locate and delete any Oracle related folder.
- 17 In the <drive>:\Program Files directory, delete the Oracle folder.
- 18 Select the disk where the Oracle software is located and delete the ORANT directory (or the directory where Oracle was installed).
- 19 Close the Windows Explorer.
- 20 Remove any additional short cuts from the Desktop that point to Oracle RDBMS software.
- 21 In the Control Panel, double click the System icon.
- 22 When the System Properties window opens, click the Advanced tab.



- 23 On the Advanced tab click the Environment Variables button. The System Variables window opens.
- 24 Double-click the Path variable in the System Variables window and edit the Path variable by removing any information in the path value field that relates to FileNet or Oracle software.
- 25 Verify and delete any Oracle related variables that exist in the System Variables window. (i.e. ORACLE_SID, ORACLE_HOME, Local, etc.)
- 26 Click the *OK* Button in the Edit System Variable window and then click OK in the Environment Variables window to exit.
- 27 Close the System Properties, Control Panel, and all other related windows.
- 28 After de-installing software you must reboot the server so that the changes you made can take effect. Continue to the section, "Reboot Server".

Reboot Server

Reboot your computer to ensure that all FileNet and RDBMS services have been successfully removed.

- 1 Make sure that all applications and windows have been closed.
- 2 Reboot the server.

Appendix F – Microsoft Systems Management Server (SMS) Procedures

This appendix contains instructions for using the Microsoft Systems Management Server (SMS) Version 2.0 product for installing or uninstalling software on your FileNet Image Services server(s). SMS Version 1.2 is *not* supported in this Image Services release.

Note

Only a brief description of SMS is provided in this appendix. For detailed information or instructions, refer to the *Microsoft SMS documentation* and the *Readme* file that is contained on the FileNet *Image Services 4.0.0 for Windows Server* CD-ROM media.

This appendix provides instructions for the following procedures:

- Setting up the SMS Site Server Package (page 284)
- Installing FileNet Image Services Software (page 294)

What is Microsoft Systems Management Server (SMS)?

Uninstalling FileNet Image Services Software (page 301)

What is Microsoft Systems Management Server (SMS)?

Microsoft Systems Management (SMS) is a Windows Server product designed to make it easier for you to centrally manage, support, and maintain a distributed network of computers. SMS is an integrated system that is part of the Microsoft BackOffice™ family of business products.

This appendix will only use the Software Distribution portion of the SMS product to install, or uninstall, FileNet Image Services software. With SMS, you will be able to install software from a single, central location.

Note

SMS does not support installations on servers in a Cluster Server environment.

The basic structure of SMS utilizes a site server, which controls and distributes software to client servers that are part of the SMS system. The software contained on the FileNet Image Services release media

is loaded onto the SMS site server and distributed to client servers from there.

Overview

To use SMS to distribute and install software, a few basic steps must be performed.

Note

For detailed information, refer to the *Microsoft SMS documentation* and the *Readme* file that is contained on the FileNet *Image Services* 4.0.0 for *Windows Server* CD-ROM media.

- Microsoft SMS software must be installed and setup on a server you designate as the SMS Site Server. This process enables you to create workstation packages which are necessary to distribute the software to individual Image Services (client) servers. Refer to your SMS documentation for information on setting up your SMS site server.
- FileNet Image Services provides a template Package Definition
 File (or PDF file) called IS.pdf. This file, which is located in the root

directory of the CD-ROM release media, must also be installed on the SMS site server. Workstation packages for software distribution are created using the IS.pdf file.

 On the SMS site server, an advertisement must be created for each Image Services (client) server. Advertisements can be created for new installations, updates, or to uninstall software.

Setting up the SMS Site Server Package

This section contains procedures to setup packages on your SMS Site Server. It is from the SMS Site Server that you will execute jobs to install the software on your client servers.

Copy FileNet Image Services Software to Site Server

- 1 At the Site Server, logon as Windows Administrator
- 2 Create a directory folder on the Site Server drive where you want the Image Services software to reside. Name the folder IS Software, or something meaningful.

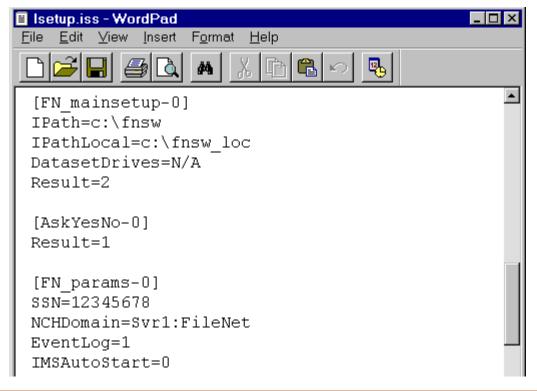
- 3 Load the Image Services 4.0.0 for Windows Server CD-ROM into the CD-ROM drive.
- 4 Copy the Image Services software from the CD to the directory location that you setup in step 2 above.

Modify the Isetup.iss File

The Isetup.iss file must be edited for your system setup.

- 1 Open the directory where you copied the Image Services software and locate the Isetup.iss file.
- **2** Open the Isetup.iss file in Wordpad or Notepad.

A portion of this file is shown in the example below.



- 3 Locate the IPath= and IPathLocal= entries and change the drive letter (c:) to the drive letter on your Client Server where you want to install the FileNet software.
- 4 Locate the SSN entry and change the number to the SSN number of the Client Server where the software will be installed.
- 5 Locate the NCHDomain= entry and change **FileNet** to the domain name for your Client Server.
- 6 Rename the Isetup.iss file, setup.iss and save it.

Create Package

This procedure will create a new package to install your software.

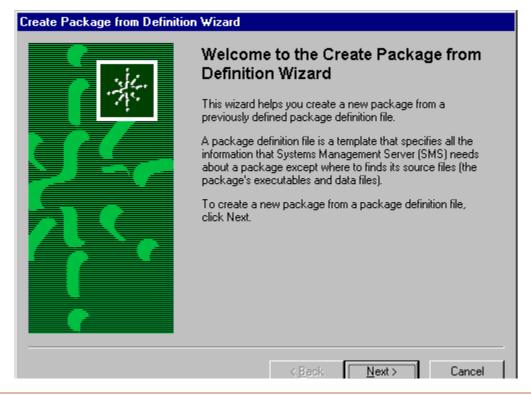
Note To uninstall software, see "Uninstalling FileNet Image Services software" on page 301.

At the SMS Site Server, click the *Start* button, point to *Programs*, point to the Systems Management Server, and click SMS Administrator

Console. The Systems Management Server\Site Database window opens.

- 2 Double click on Site Database to expand it.
- **3** Select Packages, and click the Action button. A drop-down list appears.
- 4 Click New and select Package From Definition.

The Create Package from Definition Wizard opens.



- 5 Click Next.
- 6 In the next window, click on the Publisher drop-down list and select SMS 1.x PDF.
- 7 Click *Browse* and navigate to the location where you copied the Image Services 4.0.0 software to your local hard drive.
- 8 Select IMS.PDF and click Open.
- 9 Click Next.
- 10 In the Source Files window, choose the *Always obtain files from a source directory* radio button, and click *Next.*
- 11 In the Source Directory window, select the appropriate Source directory location radio button and enter the Source directory where the Image Services 4.0.0 media was copied. Then click *Next*.
- When the Completing the Create Package from Definition Wizard window appears, click *Finish*.

Configure the Distribution Points for Your Site

- 1 In the Systems Management Server\Site Database window, select Packages\FileNet Image Services 4.0.0\Distribution Points, and then click the Action button.
- 2 In the drop-down list that appears, select *New*.
- 3 Select *Distribution Points*. The New Distribution Points Wizard opens.
- **4** Check the box next to the name of the Distribution points, and click *Finish*.
- 5 In the Systems Management Server\Site Database window, open the Programs for the FileNet Image Services 4.0.0 package.
- **6** Right-click on *Fresh Installation* and click *All Tasks*. The Distribute Software Wizard opens.
- 7 Click Next.

- 8 In the Package window, choose the Distribute an existing package radio button, select the package that you wish to distribute, and click Next.
- 9 In the Distribution Points window, confirm the name of the distribution points you selected earlier, and click Next.
- 10 In the Advertise a Program window, select the Yes radio button to advertise a program to a collection.
- 11 Select Fresh Installation in - - - and click Next.
- In the Advertisement Target window, select Advertise the program - -12 or Create a new collection - - - as appropriate for your site. Then click Next.
- 13 In the Advertisement Name window, use the default name or enter an advertisement name and comment, and click Next.
- In the Advertise to Subcollections window, select the appropriate radio 14 button for your site and click Next.

- In the Advertisement Schedule window, enter the schedule information as needed for your site, and click *Next*.
- In the Assign Program window, enter the information appropriate for your site, and click *Next*.
- When the Completing the Distribute Software Wizard window appears, click *Finish*.
- 18 Close the Systems Management Server\Site Database window.

Installing FileNet Image Services Software

When the New Advertised Manager alerts you that a new Advertisement has arrived, follow this procedure to install the FileNet Image Services software.

Note

The FileNet Image Services Setup Program will not allow the installation of FileNet Image Services on a FAT file system. Only Fixed, Local, and NTFS formatted target drives are supported in this release.

Tip

You can use the Windows Explorer to determine the file system of a particular drive before installing the Image Services software.

- 1 At the client server, logon as Windows **Administrator**.
- **2** Create a local group called **fnadmin** and add the Administrator user to this group.

You must create a local group called fnadmin and add the Administrator user to the fnadmin group to install Image Services via SMS. This group is not created automatically as it is during a normal interactive install. After creating the fnadmin local group, logoff and log back onto the system. This is necessary for the above changes to take effect. Exit the Performance Monitor tool if it is currently running.

- Note Stopping the Performance Monitor now will prevent you from having to cancel the installation process to stop it later.
 - **5** Open the Control Panel and double-click the Advertised Programs icon. The Advertised Programs Wizard opens.
 - **6** Check the box next to the advertised program that you want to run, and click *Next*.
 - 7 In the next window, enter the appropriate schedule information for when you want to run the program and click *Next*.

8 When the Completing the Advertised Programs Wizard window appears, click *Finish*.

CAUTION

The Advertisement Wizard icon, shown here , will appear at the far right side of the taskbar while the Advertisement Wizard is running. Do Not reboot your computer until this icon disappears. This may take approximately 15 minutes.

Complete the SMS Install of FileNet Software

- 1 From the Taskbar, click *Start*, point to *FileNet Image Services*, *System Configuration*, and click *Setup*.
- 2 A Question window appears asking if you are logged on to a domain using a domain user account.
 - Select Yes or No as appropriate. The FileNet Image Services Installation Maintenance window appears.
- 3 Click *Edit Parameters*. The Edit Installation Parameters window opens.

- 4 Verify that System Serial Number and NCH Domain Name are correct.
- 5 If your server is a Combined/Index server, check the box in the Image Services Server Type field, and click *OK*.
- 6 At the Confirm Save window, click Yes.
- 7 At the Edit Installation Parameters window, click *Exit* and then click *Yes* at the next screen to confirm your exit.

Reboot the Server

After you finish installing the Image Services, you must reboot the server so that newly installed device drivers can take effect.

1 Reboot the server.

Note The time needed for the shutdown/reboot process varies for each system.

2 When the system restarts, logon as **fnsw** user.

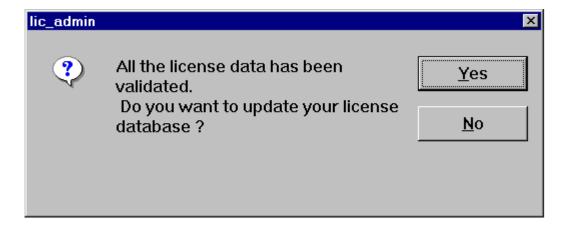
Install your SLAC Key

The Universal SLAC Key for the FileNet Image Services system you're installing is now located on the Images Services CD-ROM. Only four Universal SLAC Keys exist. They include the following:

- **uisora.key** Image Services with eProcess for Oracle
- uissql.key Image Services with eProcess for MS SQL
- uvwora.key eProcess only (no Imaging) for Oracle
- uvwsql.key eProcess only (no Imaging) for MS SQL
- 1 From the Taskbar, click *Start*, point to *FileNet Image* Services, System Configuration, and click SLAC License Entry.
- 2 From the "Please select the file to import license data from" window, using the Look in list box, select the cd-rom drive and browse to where your SLAC Key resides. Highlight your system SLAC Key file and click Open.

The FileNet Software License (SLAC) Manager window appears.

- 3 Click the *OK* button if you want to proceed with the SLAC Key installation on your system. Otherwise, select *Cancel* to exit this window.
- 4 If you selected *OK*, a message window similar to the following appears.



5 Click Yes to have your SLAC Key updated. Your system SLAC Key is now installed.

- Tip The SLAC Key is stored only in the NCH database. Therefore, if you ever need to re-initialize the NCH database, you must also reinstall the SLAC Key.
 - After installing your SLAC key, proceed to, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4, Chapter 4,

Uninstalling FileNet Image Services software

This section contains procedures to Uninstall FileNet Image Services software.

Create Package

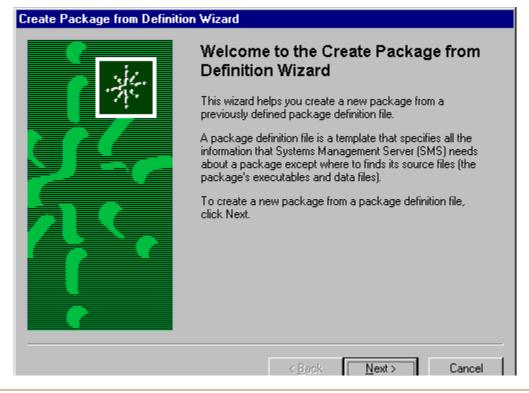
This procedure will create a new package to uninstall your software.

- If you are not already, logon to the SMS Site Server as Windows Administrator.
- 2 Click the Start button, point to Programs, point to the Systems Management Server, and click SMS Administrator Console. The Systems Management Serve\Site Database window opens.
- 3 Double click on Site Database to expand it.
- 4 Select Packages, and click the Action button. A drop-down list appears.
- 5 Click New and select Package From Definition.

Appendix F - Microsoft Systems Management Server (SMS) Procedures

Uninstalling FileNet Image Services software

The Create Package from Definition Wizard opens.



- 6 Click Next.
- 7 In the next window, click on the Publisher drop-down list and select SMS 1.x PDF.
- 8 Click *Browse* and navigate to the location where you copied the Image Services 4.0.0 software to your local hard drive.
- 9 Select IMS.PDF and click Open.
- 10 Click Next.
- In the Source Files window, choose the *This package does not contain* any files radio button, and click *Next*.
- 12 In the Source Directory window, select the appropriate Source directory location radio button and enter the Source directory where the Image Services 4.0.0 media was copied. Then click *Next*.
- When the Completing the Create Package from Definition Wizard window appears, click *Finish*.

Configure the Distribution Points for Your Site

- 1 In the Systems Management Server\Site Database window, select Packages\FileNet Image Services 4.0.0\Distribution Points, and then click the Action button.
- 2 In the drop-down list that appears, select *New*.
- 3 Select *Distribution Points*. The New Distribution Points Wizard opens.
- **4** Check the box next to the name of the Distribution points, and click *Finish*.
- 5 In the Systems Management Server\Site Database window, open the Programs for the FileNet Image Services 4.0.0 package.
- **6** Right-click on *Uninstallation* and click *All Tasks*. The Distribute Software Wizard opens.
- 7 Click Next.

- In the Package window, choose the *Distribute an existing package* radio button, select the package that you wish to distribute, and click *Next*.
- **9** In the Distribution Points window, confirm the name of the distribution points you selected earlier, and click *Next*.
- 10 In the Advertise a Program window, select the Yes radio button to advertise a program to a collection.
- 11 Select *Uninstallation in - -* and click *Next*.
- 12 In the Advertisement Target window, select *Advertise the program* - or *Create a new collection* - as appropriate for your site. Then click *Next*.
- In the Advertisement Name window, use the default name or enter an advertisement name and comment, and click *Next*.
- 14 In the Advertise to Subcollections window, select the appropriate radio button for your site and click *Next*.

- In the Advertisement Schedule window, enter the schedule information as needed for your site, and click *Next*.
- In the Assign Program window, enter the information appropriate for your site, and click *Next*.
- When the Completing the Distribute Software Wizard window appears, click *Finish*.
- 18 Close the Systems Management Server\Site Database window.

Uninstall FileNet Image Services Software

When the New Advertised Manager alerts you that a new Advertisement has arrived, follow this procedure to uninstall the FileNet Image Services software.

- 1 At the client server, logon as Windows **Administrator**.
- **2** Open the Control Panel and double-click the Advertised Programs icon. The Advertised Programs Wizard opens.

- **3** Check the box next to the advertised program that you want to run to uninstall the FileNet software, and click *Next*.
- 4 In the next window, enter the appropriate schedule information for when you want to run the program and click *Next*.
- **5** When the Completing the Advertised Programs Wizard window appears, click *Finish*.

Index

A	C
application server, adding	commands
install prerequisites 171–173	fn_build -a 146, 189, 211
install RDBMS/Image Services 173	fn_util init 148, 191, 211
application server, configuration	fnddcfg 122, 139, 207
add application server 174	fndev 123, 139, 208
add batch services 180	initfnsw stop 146, 165, 211
add cache services 182	killfnsw -A -D -y 190, 268
add print services 183	REGEDT32 274
add services 179	set_f_maint_pw 162
add SQL services 184	whatsup 268
add WorkFlo Queue services 187	winmsd 27
build and initialize server 189	Configuration Editor
initialize FileNet databases 190	configure logical cache 111, 114, 120
start FileNet software 192	configure system document
verify FileNet dataset permissions 191	services 116
application server,configure server 189	create optional datasets 99
autostart	database parameters 117
Image Services processes 168	database templates 94
В	modify dataset file sizes 111
	online Help 91
oackup, make backups 165, 216	storage library settings 120

configure	G
RES, multi-committal systems 152	groups
storage library devices 122	permissions 136, 192
storage library server devices 150	
TCP/IP 64	
verify FileNet dataset permissions 136	Image Services
· ·	3.5.0 release notes 20
D	Image Services processes
database parameters, configure 117	autostarting 168
De-Install Procedure for Oracle on	initialize server software 129-136
Windows 272	all installations 130, 132
de-installing	installation prerequisites
FileNet software 265	additional system information 44
Oracle software 272	software requirements 31
using SMS 301	Installation Worksheet 49–57
Domain name 45	compatible system information 51
_	file system and dataset information 55
	optical drive information 54
_maint password, setting 162	storage library information 52
ile system and dataset information	system cache information 57
Installation Worksheet 55	system information 50
FileNet software	installation, parameters 82
starting 154, 210	installing
FileNet website 20	niotaining

Image Services on storage library server 138 Image Services software 72 Oracle9 software 19 pcANYWHERE32 254–260 installing software, using SMS 294 Internet Protocol (IP) address 44 M Microsoft Systems Management Server de-installing Image Services software 301 installing Image Service software 294 preparing to use 284 move_disk 219 MSSQL Server transaction logs 163	Oracle9 installing software 19 P paging file size 58 patches 21 pcANYWHERE32 installing 254–260 prerequisites installation 23 R release dependency spreadsheet 21 release notes 20 Release Notes file 20 remote access adding software 232–248 granting access rights 249
N naming servers 37	granting permissions 261 installing pcANYWHERE32 254–260
Oracle update Oracle version 104	S scripts fn_util initperm 151

fn util inittrans 151 server naming convention 37 SMS procedures de-installing Image Services software 301 installing Image Services software 294 software requirements Image Services media 32 RDBMS media 32 users and groups 33 storage library devices configure 150 connect/configure 122 storage library server automatically configure 140, 150, 209 build configuration files 145, 210 configure storage devices 150 connecting 138, 207 installing 138 Storage Library Servers, multiple 195 system configuration issues 58 system serial number 45

Т

TCP/IP, configure 64 transaction logs, MSSQL Server 163

W

website FileNet 20