



Image Services

Windows® Application Server Install Procedures for UNIX Systems

Release 4.0.0

9844078-001

May 2003

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FileNet Corporation
3565 Harbor Boulevard
Costa Mesa, California 92626
800.FILENET (345.3638)
Outside the U.S., call:
1.714.327.3400
www.filenet.com

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1

Getting Started

This document explains how to install and configure FileNet Image Services Software on a Windows Server used as an application server in a UNIX system.

Image Services and configuration procedures are described in the main body of this document.

Note installation guidelines for installing Oracle software are no longer contained in this document. A new document, ***Guidelines for Installing and Updating RDBMS Software for Windows Server***, has been created for this purpose.

In addition, an appendix contains Microsoft System Management Server (SMS) Procedures (**page 127**) that can be used for installing and de-installing only FileNet software.

Required Skills

This document assumes that the you have the following knowledge and experience:

- Knowledge of the Windows Server operating environment
- Knowledge of Windows Server network models
- Experience with Windows Server Administrative Tools
- Oracle Database Administration

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 [**Doc_Conventions**](#) 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, [***Multi-Committal and Cross-Committal Configuration Handbook***](#), 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 [***Multi-Committal and Cross-Committal Configuration Handbook***](#) 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.

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.

Oracle9i RDBMS Software

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 Web site at <http://www.css.filenet.com>.

Since the latest Release Notes are located on the FileNet Web site, 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, 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 an installation (software and system requirements) are included in the following sections. In addition, this section details specific file system and dataset information that you must gather (or determine) to complete the Image Services installation successfully.

For your convenience, this chapter contains an **[“Installation Worksheet” on page 37.](#)** 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 your application server will be in one easy-to-find place.

Configure Root/Index Server

Before using this document to add an application server ensure that:

- FileNet Image Services Release 4.0.0 and Oracle RDBMS software has already been installed and configured on a combined UNIX server.
- The Combined server will be the Root server for the application server. If a Root server has not already been established, see the *Image Services Installation and Configuration Procedures* for whichever UNIX platform you are going to be using to install the necessary software on the Root server.

Note Reconfiguring an old server should be handled the same as installing and configuring a new application server, except where Notes specifically state otherwise.

Install Oracle Software

The Oracle software must be installed on the application server before installing Image Services software.

However, beginning with this release of Image Services, the guidelines for installing Oracle 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 Oracle software **before** installing Image Services. After Oracle 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

Character Sets			Decimal Values	
ISO (International Organization for Standardization)		Microsoft Windows Code Page	ASCII (0 to 127)	Non-ASCII (128 to 255)
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 in 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.
- 256 MB or more memory per CPU (512 MB recommended)

Tip To check the amount of memory, logon on the server as **fnsf** 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 Spreadsheet* 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 software:

- At least 6.5 GB with Oracle

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, Oracle software, and temporary working storage, the following minimum disk space for Combined Root/Index servers and Storage Library servers is required.

Software	Oracle Combined or Root/Index Server	Storage Library Server
Windows Operating System	3 GB	3 GB
FileNet datasets	1 GB	1 GB
Oracle 9i Software	2 GB	-
Free space on drive c: for Oracle installation software*	500 MB*	-
Total disk space	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 Oracle software, and choose Properties.

Software Requirements

To complete the installation and configuration procedures in 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.)

Oracle Software Media

You must have the following CD-ROM:

Oracle9i Enterprise Edition or Oracle9i Server Release 2 (9.2.0.2) CD-ROM's

Note The Oracle media CD-ROM is 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 user (e.g., default=**oracle**) and database administration group (default=**dba*** and default=**ora_db***), make sure that both the FileNet Image Services user

(default=**fns**) and the Oracle user belong to the existing database administration group.

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

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.

Additional System Information

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

Once you have gathered the information requested in this section, transfer the information to the [“Installation Worksheet” on page 37](#).

- 1 Determine the password for the user **Administrator**. Record the password in the [“Installation Worksheet” on page 37](#).
- 2 Verify that the PC server name and Internet Protocol (IP) address are in the **hosts** file (which is where the server 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 server 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 31](#).

- Each IP address should contain four numbers separated by decimals [e.g., 10.20.0.52].

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 [“Compatible System Information” on page 38](#).

For information on naming servers, see [“**Server Naming Convention**” on page 31](#).

- 5 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 [“**Printer Information**” on page 40](#). For information on naming servers, see [“**Server Naming Convention**” on page 31](#).

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.

On the Image Services 4.0.0 Documentation CD-ROM:

- [***Guidelines for Installing and Updating RDBMS Software for Windows Server***](#)
- [***Enterprise Backup/Restore User’s Guide***](#)

- [*System Administrator's Handbook*](#)
- [*System Administrator's Companion for UNIX*](#)
- [*System Administrator's Companion for Windows Server*](#)

Other documentation:

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.

2

Preparing for the Installation

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

Note The sections in this chapter need to be performed on the application server.

Installation Worksheet

The following sections contain tables that are intended to allow you to organize the information you have gathered in a single place for easy reference during the installation process.

Server Information

Password for the user **Administrator**: _____

Record the appropriate information in the table below.

Installation Information	System Information
Server Static IP Address	
Network Address	
System Serial Number	
Domain Name	
Organization Name	

Compatible System Information

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

Domain Name	Static IP Address	SSN

Storage Library Information

Record the appropriate Storage Library device information for each Storage Library device on your application server 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 path for the Storage Library Device Driver here: _____

Printer Information

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

Optical Drive Information	Drive 1	Drive 2	Drive 3	Drive 4
Drive Type (e.g., Hitachi_I, 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 Oracle 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	Required Minimum Size	Actual System Size (Mb)
cache0	100 Mb	
permanent_db0	100 Mb	
permanent_rl0	40 Mb	
transient_db0	20 Mb	
transient_rl0	40 Mb	
oracle_db0	200 Mb	
oracle_rl0	20 Mb	
oracle_rl1	20 Mb	
oracle_udb0	200 Mb	

Dataset Name	Required Minimum Size	Actual System Size (Mb)
oracle_url0	20 Mb	
oracle_tr0	400 Mb	
oracle_sys0	200 Mb	

Note The FileNet Image Services software, 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 analysis report and record the cache information for your system in the table below.

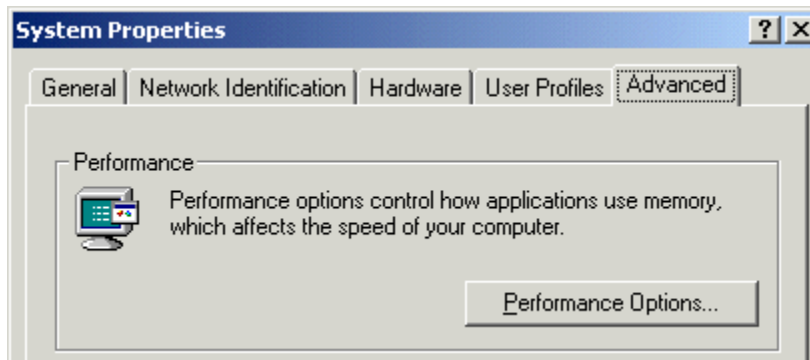
Cache Type	Min./Max. Default Size (%)	Min. Size (%)	Max. Size (%)
Retrieval	20% / 20%		
Fill-in	1% / 10%		
System Print	10% / 20%		
application Print	10% / 30%		
Batch	10% / 60%		
Folder View	10% / 20%		
Revise	10% / 20%		

System Configuration Issues

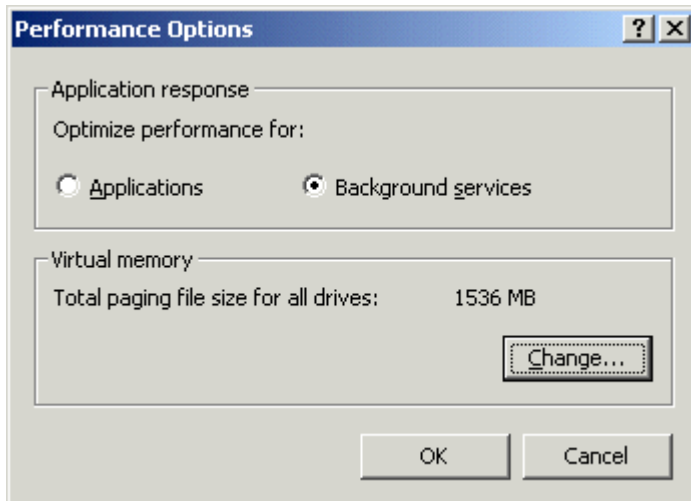
This section contains procedures that must be followed to ensure that your system is properly configured before installing Image Services and Oracle software.

Check/Configure Paging File Size

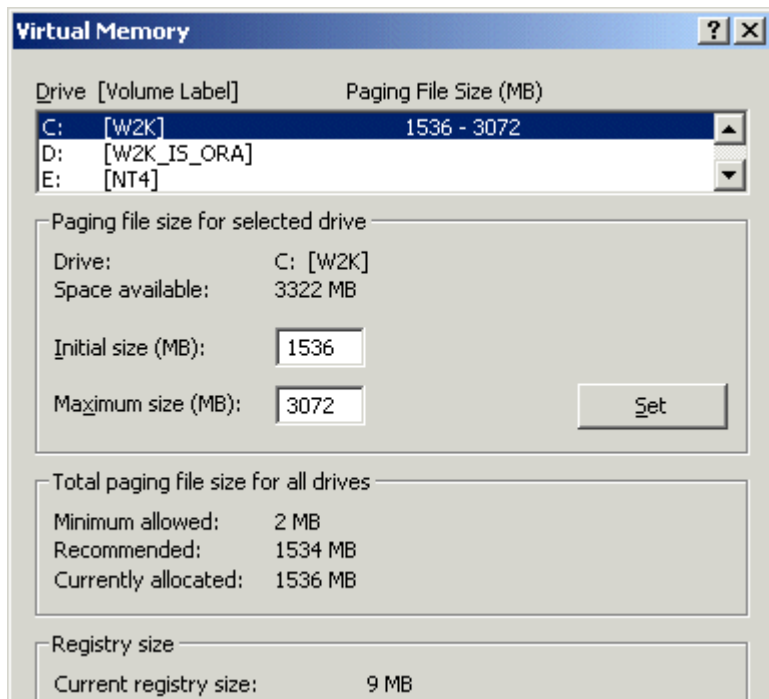
- 1 Open the Administrative Tools, and double-click the *System* icon. The System Properties window opens.



- 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 *OK* in the System Properties dialog box.
- Close the Control Panel, and skip to the next section, **“Configure TCP/IP Protocol and SNMP (Required For All Systems)”**.

- 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.
- 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 Protocol and SNMP (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.

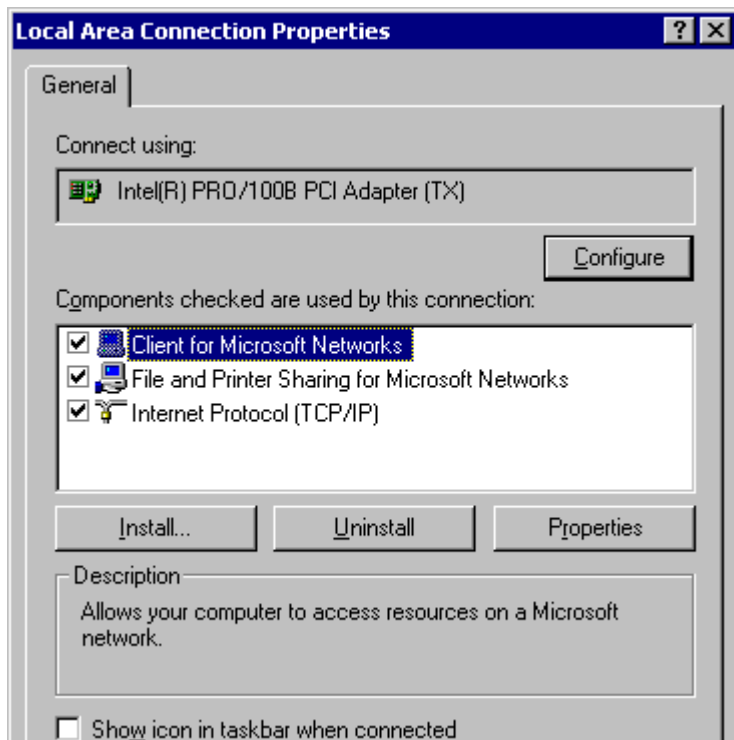
You must also install the SNMP (Simple Network Management Protocol) service. Refer to your Windows Server documentation for further details on installing both these components.

Set Server Optimization Level (Recommended)

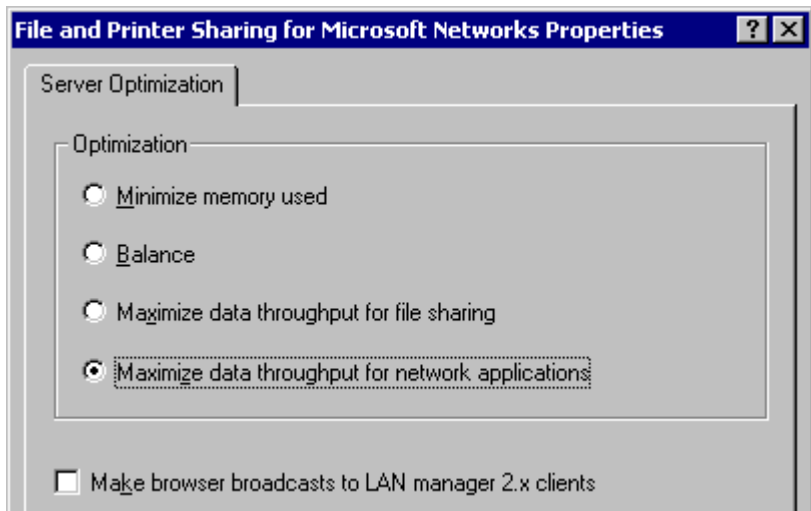
While the steps in this section are optional, FileNet Image Services software operates much better when the system is optimized for network applications.

- 1 From the Taskbar, click the *Start* button and 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.

Reboot the Server

After you finish modifying your server environment, you must reboot the server so that your changes can take effect.

- 1 Reboot the server.
- 2 Logon as as Windows **Administrator**.

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

3

Installing FileNet Image Services Software

This chapter contains instructions for installing Image Services software on your application server.

CAUTION

If you are installing an application server that will have either WorkFlo Queue Services, VWServices, or SQL Services, you **must** install Oracle software **before** installing the FileNet Image Services software. If you have not yet installed the Oracle software you must do that first. Refer to the [***Guidelines for Installing and Updating RDBMS Software for Windows Server***](#) to install Oracle software.

Note

FileNet strongly recommends that you **do not** install the IS and Oracle 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 **“Appendix A – Microsoft Systems Management Server (SMS) Procedures”** on page 127.

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.)

Install the Image Services 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:

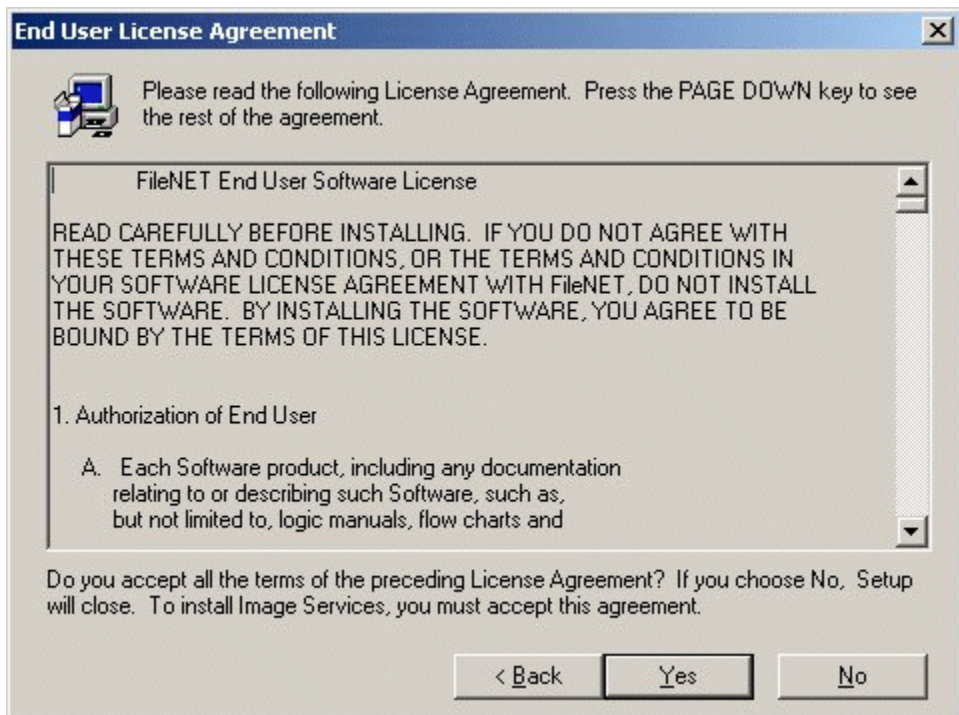
- Verify and create the basic operating environment required to install FileNet Image Services on a Windows server (for example, verifying resource requirements and the presence of required FileNet security group accounts)
- Verify the Windows Operating System version required for this release
- Create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

- Assign advanced user rights to fnswh 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

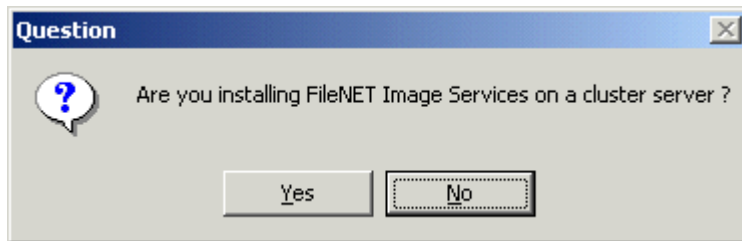
If you are licensed for COLD, you will see the COLD icon in the *FileNet Image Services Server Application* Program Group once the Setup program completes the installation process.

- 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 ***Microsoft Cluster Server Installation Procedures for Windows Server document.***

- 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.

- 13** 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.

Installation Options



IS Version

Installed	This version
	4.0.0.63

Install to:

Please specify drives and directory paths to install the following IS components:

	DISK SPACE (KBytes)	
	Required	Available
IS Executables		
C:\FNSW	30937	1749589
IS Local Files		
C:\FNSW_LOC	30937	1749589
WINDRIVE Information		
C	30937	1749589

- 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.

- 15 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.

- 16 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

- 18** 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.

Edit Installation parameters

Installation Paths

Executables: D:\FNSW

Shared Files: D:\FNSW_LOC

IS VERSION: 4.0.0.63

Setup requires the following information about your FileNET IS installation:

SYSTEM SERIAL NUMBER: 5740
FileNET Numeric System Serial Number, per IS license documentation

NCH DOMAIN NAME: walrus:FileNet
Two part Network Clearinghouse Domain Name, e.g. Imaging:FileNet

NT EVENT LOGGING: Enabled
Indicates if FileNET IS will use NT Event Logging.

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.
 - 22** 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*

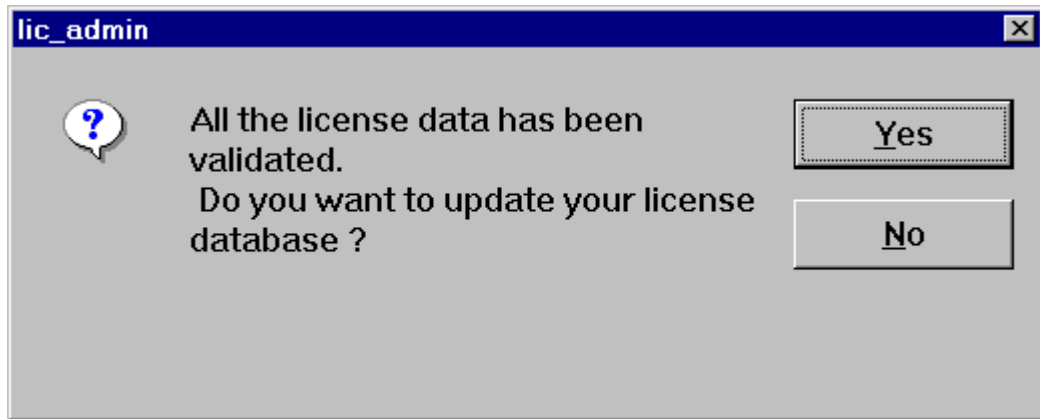
If you are installing an Application Server, click *Exit* and proceed to Appendix A, section **“Configure the Root Server” on page 174**. Otherwise, continue below.

24 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*.

- c 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.

- 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.
- 26 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.

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

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

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 to 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.

4

Configuring the Root and Application Servers

This chapter describes how to configure the application server. Before using these instructions, verify that the Image Services software has been installed (and is running) on both the Root and application servers as described in [Chapter 3, “Installing FileNet Image Services Software,” on page 55](#).

Add Application Server(s) on the Root Server

This section and its sub-sections need to be performed on the Root/Index server.

To create the new application server complete the following steps:

- 1 On an HP Root server, go to an X-station, a PC that supports X Windows, or a PC with an X Windows emulator and logon to your server as

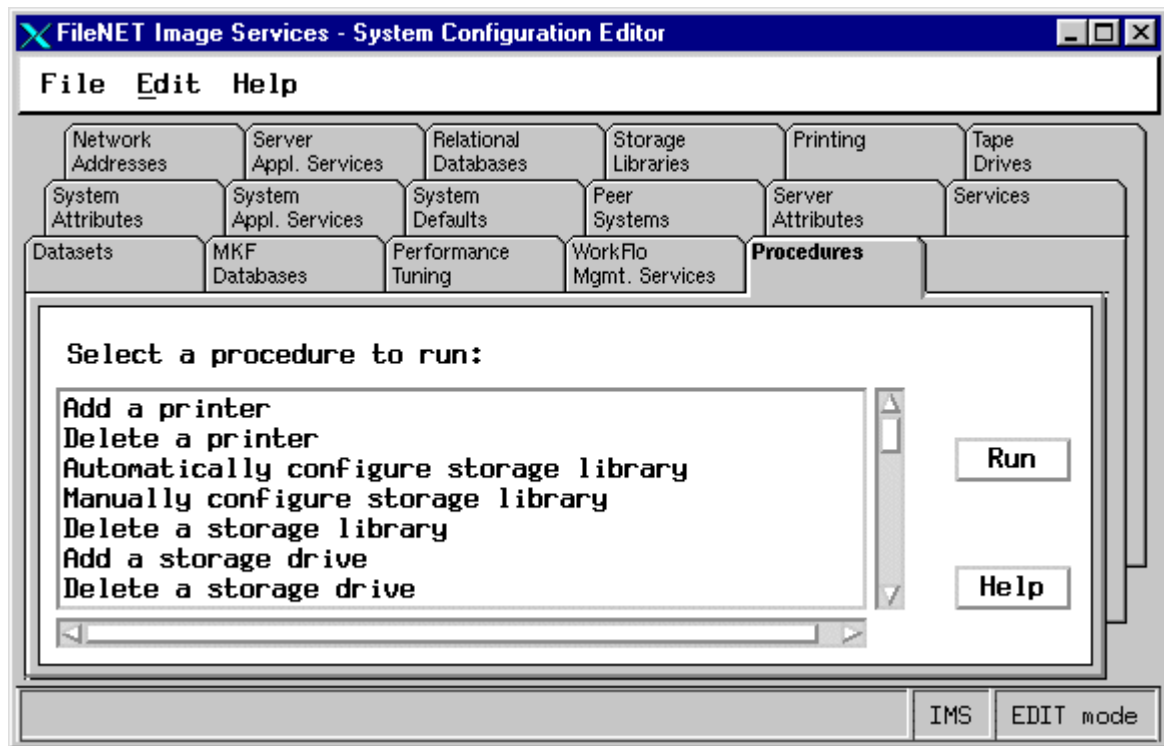
fnsw with Windows running; on an AIX/6000 or Sun server, go to your server console on logon as **fns**w.

- 2 Open a new window, and enter the following command:

fn_edit &

- 3 Verify that the database and domain names are correct, and click *Next*. (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.



- 4 Select the Add an Application Server option from the Procedure List Box, and then click *Run*.

Note If necessary, use online help when completing the following steps.

- 5 Enter the name of the application server. This can be user defined. Click *Next*.
- 6 At the prompt, “Is this a Windows Application Server?” select Yes and then click *Next*.
- 7 Enter the network address of the application server (refer to the **“Installation Worksheet” on page 37**). Click *Next*.
- 8 If you want to add another application server, click on the Procedures tab in the FileNet Image Services System Configuration Editor window and repeat Steps 4 through 7.
- 9 After completing the Add an Application Server procedure, verify that you entered the information correctly.

To verify, click on the Network addresses tab in the FileNet Image Services System Configuration Editor window. You should see the application server(s) listed.

- 10** From the FileNet Image Services System Configuration Editor window, click on the File pull down menu and click on the *Exit* option.
- 11** You will then be asked if you want to save the changes you have just made to the current configuration database before you exit. Click the Yes button to save the configuration and exit the System Configuration Editor.

Configure Oracle Instance

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

Note This procedure assumes that the 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. See the Tablespace table in Chapter 3 of the ***Guidelines for Installing and Updating RDBMS Software for Windows Server.***

Define RDB Object Locations for Oracle

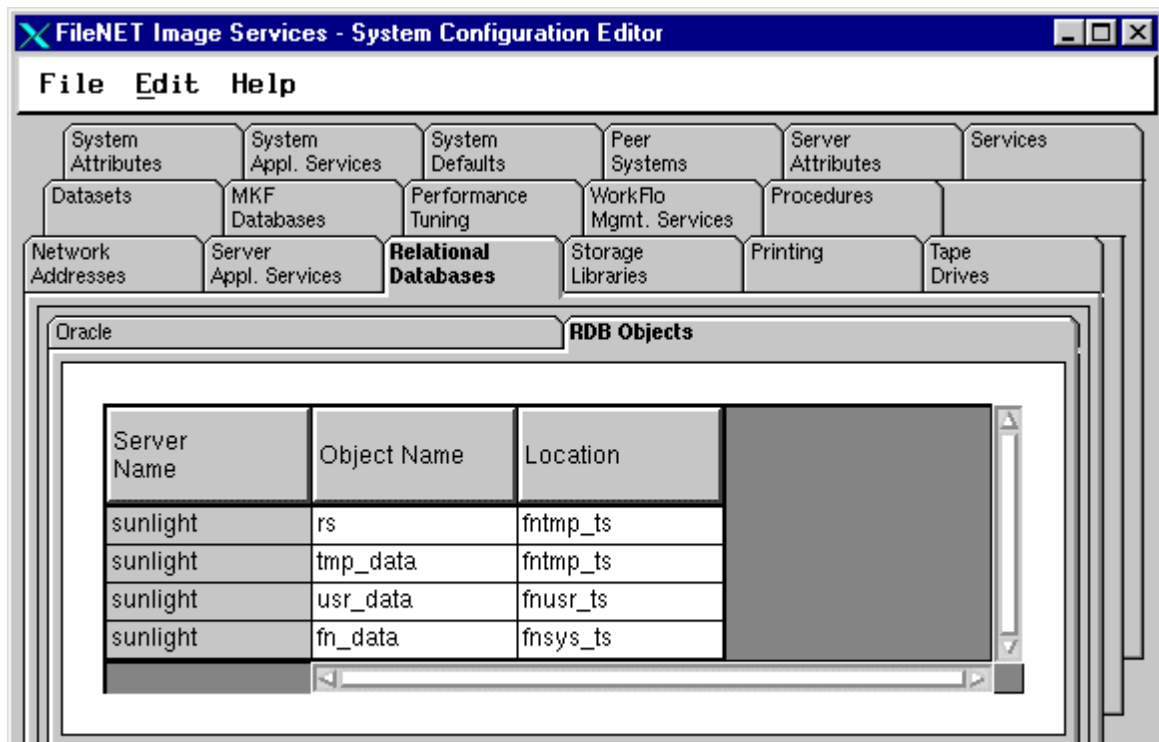
Use the procedure in this section to define RDB Object locations for your Oracle RDBMS.

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.

- 1 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 table names with the site-specific table names. While replacing the table names, use the following criteria:
- Change all occurrences of **fnsys_ts** to the name of your dedicated FileNet default Oracle table space name.
 - Change all occurrences of **fntmp_ts** to the name of your dedicated FileNet temporary Oracle table space name.
 - Change all occurrences of **fnusr_ts** to the name of your user Oracle table space name.

The Image Services software will use the Oracle table space names you entered in the RDB Objects subtab above.

Note The Oracle table space names specified in the RDB Objects list must exist before you initialize the FileNet Image Services databases.

Update Oracle Version

- 1 On the Relational Databases tab, click the Oracle subtab.
- 2 You should see the Windows application server listed. Using the horizontal scroll bar, go to the far right and click on the Version Number field of the application server.
- 3 Change the version number to match the Oracle version installed on your Windows application server: **9.2.0**.

Server Configuration on the Application Server

This section and its sub-sections need to be performed on all Windows application server(s).

Configure the Windows Server as an Application Server

Note This section only needs to be performed on a Windows application server(s) that is being converted from a Combined server.

As the **fns** user, perform the following steps.

- 1 From the Taskbar, click Start and point to Programs, FileNet Image Services, System Configuration, and click Setup.
- 2 Click on the Edit Parameters option.
- 3 Change the NCH Domain server name to the Root/Index server name and change the System Serial Number to the serial number of the Root/Index server.

- 4 From the FileNet Image Services System Configuration Editor window, click on the File menu and click the *Exit* option.
- 5 When the Exit dialog box appears, click the Yes button to save the configuration and exit the System Configuration Editor.
- 6 Shutdown the NCH database by entering the following command where **d** is the drive where you have installed your FileNet software:

```
MKF_shutdown "::" d:\fnsw_loc\sd\nch_db0
```

- 7 Flush the NCH database by entering the following command:

```
nch_flush
```

- 8 Next, check the registry. From the Taskbar, click the Start button, select *Run*.
- 9 Enter the following command:

```
regedt32
```

The Registry Editor displays containing several windows.

- 10 Select the HKEY_LOCAL_MACHINE on Local Machine window.
- 11 Double click on the FILENET folder.
- 12 Inside the FILENET folder, double click on Image Services folder.
- 13 Inside the Image Services folder, click on CurrentVersion selection.
- 14 Check the RootStation field. If it reads **0x1** it is set incorrectly. Click in the field and change the setting to **0**.
- 15 Click *OK* to accept this new value.
- 16 Close the Registry Editor.

Verify Rollback Segments on the Windows Server

This procedure only needs to be performed on a Windows application server(s) that is being converted from a Combined server.

- 1 Start the Server Manager program by entering the following command:

```
svrmgrl
```

- 2 At the SVRMGR prompt, enter:

```
connect internal
```

- 3 Again at the SVRMGR prompt, enter:

```
select * from dba_rollback_segs;
```

- 4 The output should show one SEGMENT_NAME as **system** and others as **RS0,...**,

- 5 Count how many RSx segments you have and if they are online. Then, record the number of rollback segments.

- 6 Finally, at the SVGMGR prompt enter:

```
exit
```


Change Rollback Segments on the Windows Server

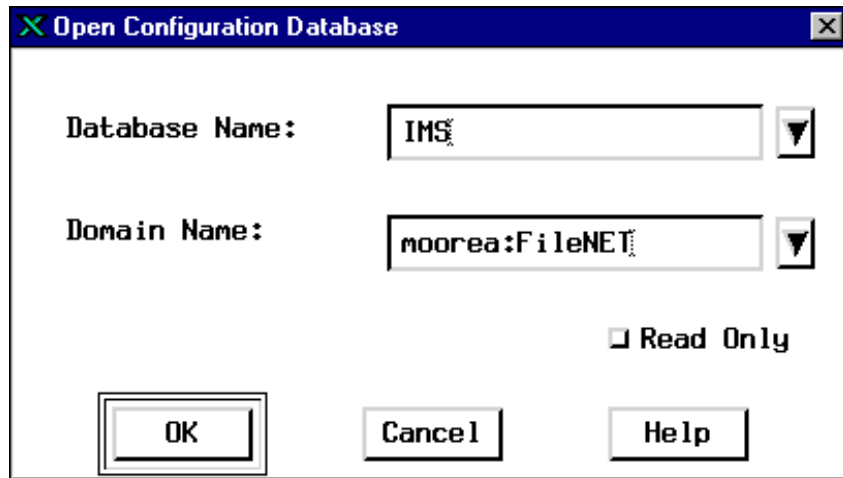
This section needs to be performed on all Windows application server(s).

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.

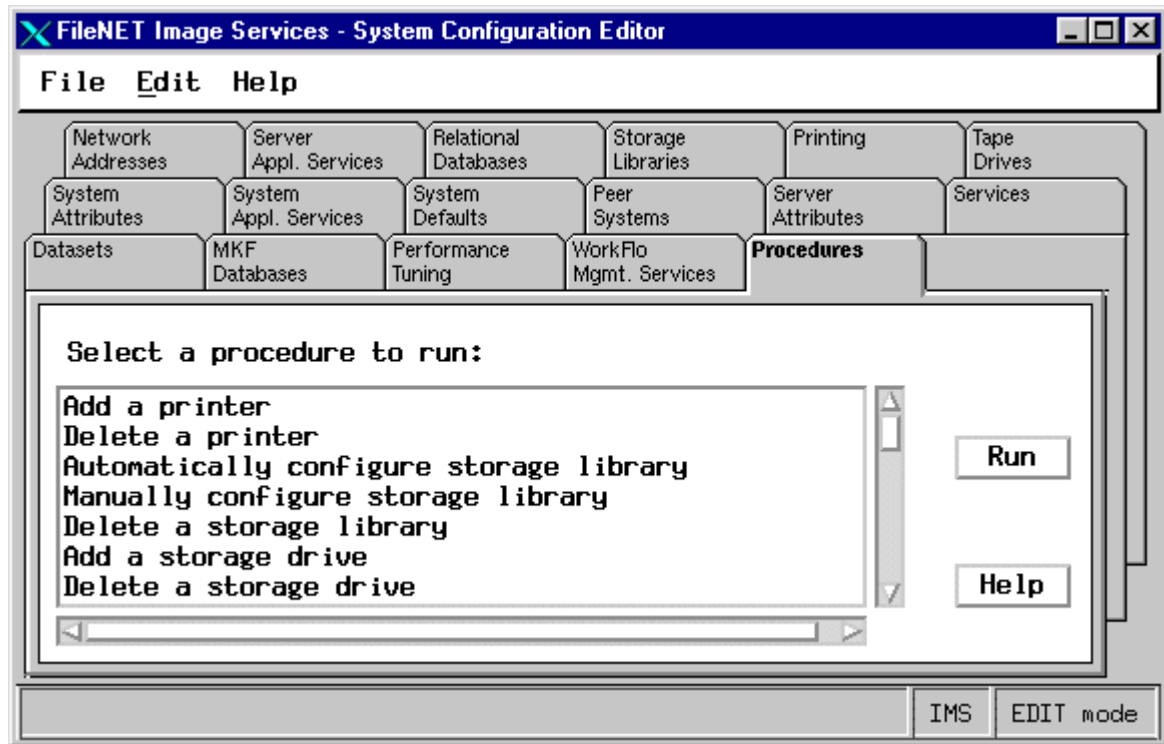
- 1 Logon as **fns**w, if you aren't already.
- 2 Open the Configuration Editor.

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.



- 3** 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.



- 4 Click on the Datasets tab in the FileNet Image Services System Configuration Editor window. You should see the application server name listed with its dataset. Look for the presence of the oracle_tr0 dataset.
- 5 Click on the Relational Database tab in the FileNet Image Services System Configuration Editor window. You should see the application server listed.
 - a Verify that the value in the Number of Rollback Segments column is set one of the following ways:
 - If your Windows application server is being converted from a Combined server, You need to set the number of rollback segments to the same number you previously recorded in Step 5 of **“Verify Rollback Segments on the Windows Server” on page 87**. The default is usually 0, so modify the field if necessary.
 - If your Windows application server is a fresh install, you need to set the number of rollback segments to 4.

- b Verify that the correct Oracle version is displayed in the Version Number field. Enter the correct version if necessary.

Note

If your Windows application server was converted from a Combined server, at this time you need to initialize the relational database to have the correct setup for the new database on the Windows application server. Enter the following command at the command prompt: **fn_util initrdb**

- 6 Return to the FileNet Image Services System Configuration Editor window.
- 7 From the FileNet Image Services System Configuration Editor window, Click on the File pull down menu and click on the *Exit* option.
- 8 You will then be asked if you want to save the changes you have just made to the current configuration database before you exit. Click on the Yes button to save the configuration and exit the System Configuration Editor.

Add Application Server Services Via the UNIX Root Server

This section and its sub-sections need to be performed on the Root/Index server.

Use the steps in this section to add services to your application server. You can add one or more of the following 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

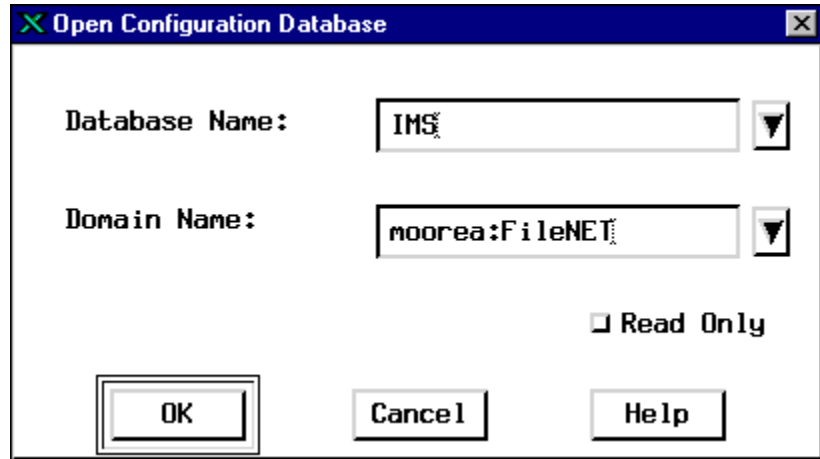
application server. After completing those procedures, see the *WorkFlo Services for UNIX Installation Handbook* instructions for adding a VWSservice to the server.

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

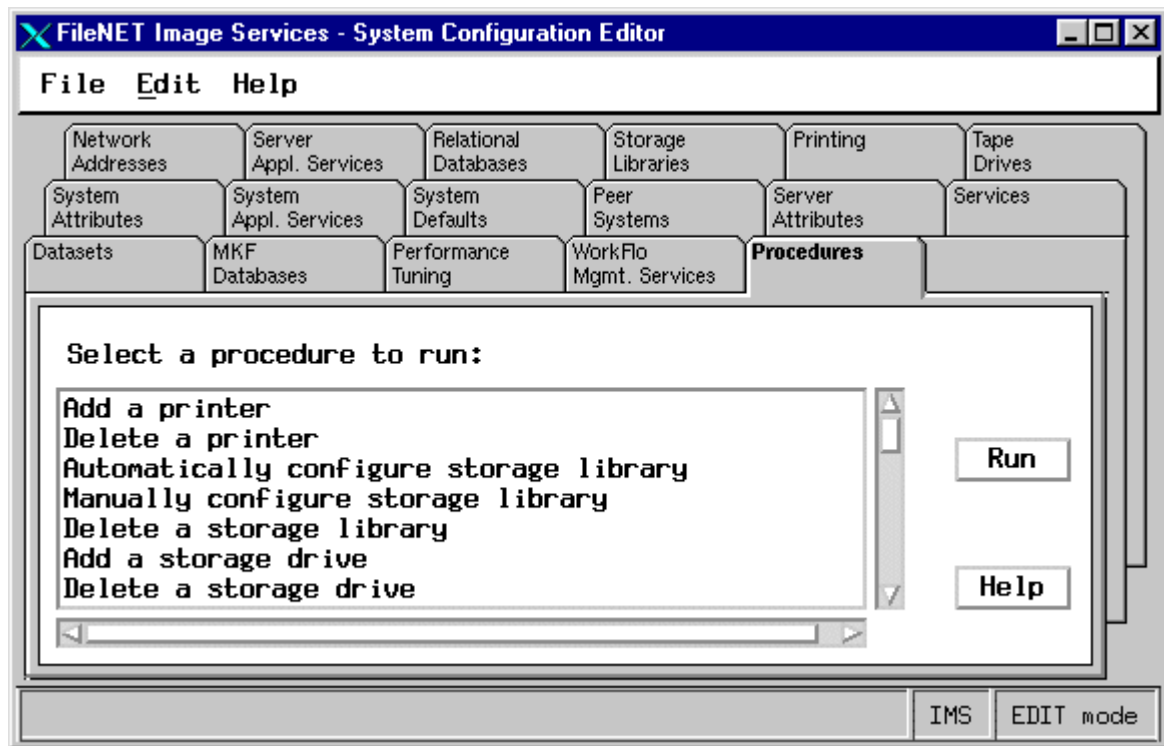
- 1 On an HP Root server, go to an X-station, a PC that supports X Windows, or a PC with an X Windows emulator and logon to your server as **fns**w with Windows running; on an AIX/6000 or Sun server, go to your server console on logon as **fns**w.
- 2 Open a new window, and enter the following command:

fn_edit &

A dialog box similar to the following displays.



- 3 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 displays with the procedures tab opened by default.



Note The online help contains information on all of the tabs. You can access the online template information by selecting the Help menu option in the FileNet Image Services System Configuration Editor window.

Change Application Server Attributes

- 1 From the FileNet Image Services System Configuration Editor window, click on the Server Attributes tab.
- 2 Find the server that is going to be used as your application server and go to the far right side of the window. Click on the platform pulldown and select **Windows Server**.
- 3 Continue to the next appropriate procedure to add the services you want.

Add Batch Service

- 1 From the 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 and click *Next*.
- 4 Choose Batch Service and click *Next*.
- 5 You are prompted for dataset path for the Cache database on your application server. You will see a UNIX path and you need to change the slashes to backslashes. The default is D:\fns\dev\1\cache0. Enter the path and click *Next*.

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

- 6 You are prompted for the size of the Cache database. The default is 100. Enter the size, in MB, and click *Next*.

- 7** You are prompted for dataset path for the transient database on your application server. You will see a UNIX path and you need to change the slashes (/) to back-slashes (\). The default is D:\fns\dev\1\transient_db0. Enter the path and click *Next*.
- 8** You are prompted for the size of the transient database. The default is 20. Enter the size, in MB, and click *Next*.
- 9** Enter the dataset path for the transient redo log (for example, d:\fns\dev\1\transient_rl0).
- 10** Enter the dataset size in MB (for example, 40) and click *Next*.
- 11** 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.
- 12** You are prompted for the number of BES commitment processes. Choose 2 (the default) or 4.

Note When you configure a Batch Service, a Cache Service is automatically configured.

- 13** If you want to add another service, continue to the next appropriate procedure below. If you don't want to add any more services, skip to **[“Exit the FileNet Image Services System Configuration Editor” on page 110.](#)**

Add Cache Service

If you have added a Batch Entry Service, you do not need to perform this procedure.

- 1** From the 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 Cache Service and click *Next*.
- 5 If you want to add another service, continue to the next appropriate procedure below. If you don't want to add any more services, skip to **[“Exit the FileNet Image Services System Configuration Editor” on page 110.](#)**

Add SQL Service

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

- 1 From the 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 Service.

- 5 You may receive a warning that any existing Oracle datasets will be deleted from the configuration. Click *Next*.
- 6 You are prompted for dataset path for Oracle on your application server. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_db0. Enter the path and click *Next*.

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

- 7 You are prompted for the size of the Oracle database. The default is 200. Enter the size and click *Next*.
- 8 You are prompted for the dataset path for the first redo log. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_r10. Enter the path and click *Next*.
- 9 You are prompted for the size in MB of the redo log. The default is 20. Enter the size and click *Next*.

- 10** You are prompted for the dataset path for the second redo log. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_r10. Enter the path and click *Next*.
- 11** You are prompted for the size in MB of the redo log. The default is 20. Enter the size and click *Next*.
- 12** You are prompted for the dataset path for the Oracle System dataset. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_sys. Enter the path and click *Next*.
- 13** You are prompted for the size in MB of the Oracle System dataset. The default is 200. Enter the size and click *Next*.
- 14** You are prompted for the dataset path for Oracle Temporary and Roll-back datasets. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_tr0. Enter the path and click *Next*.

- 15 You are prompted for the size in MB of the Oracle Temporary and Roll-back dataset. You will see a UNIX path and you need to change the slashes to back-slashes. The default is 40. Enter the size and click *Next*.
- 16 If you want to add more services, continue to the next appropriate procedure below. If you don't want to add any more services, skip to **[“Exit the FileNet Image Services System Configuration Editor” on page 110.](#)**

Add WorkFlo Queue Service

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

- 1 From the 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 WorkFlo Queue Service and click *Next*.
- 5 A message appears stating that Oracle datasets will now be configured. Click *Next*.
- 6 You are prompted for dataset path for Oracle on your application server. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_db0. Enter the path and click *Next*.

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

- 7 You are prompted for the size of the Oracle database. The default is 200. Enter the size and click *Next*.
- 8 You are prompted for the dataset path for the first redo log. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_r10. Enter the path and click *Next*.

- 9 You are prompted for the size in MB of the redo log. The default is 20. Enter the size and click *Next*.
- 10 You are prompted for the dataset path for the second redo log. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_r1. Enter the path and click *Next*.
- 11 You are prompted for the size in MB of the redo log. The default is 20. Enter the size and click *Next*.
- 12 You are prompted for the dataset path for the Oracle System dataset. You will see a UNIX path and you need to change the slashes to back-slashes. The default is D:\fns\dev\1\oracle_sys0. Enter the path and click *Next*.
- 13 You are prompted for the size in MB of the Oracle System dataset. The default is 200. Enter the size and click *Next*.
- 14 You are prompted for the dataset path for Oracle Temporary and Roll-back dataset. You will see a UNIX path and you need to change the

slashes to back-slashes. The default is D:\fns\dev\1\oracle_tr0. Enter the path and click *Next*.

- 15 You are prompted for the size in MB of the Oracle Temporary and Roll-back dataset. The default is 40. Enter the size and click *Next*.
- 16 If you want to add more services, continue to the next appropriate procedure below. If you don't want to add any more services, skip to **“Exit the FileNet Image Services System Configuration Editor” on page 110.**

Add Print Services

- 1 From the 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 Select the server to add a service to and click *Next*.

- 4 Choose Print Services and click *Next*.
- 5 If you want to add more services, continue to the next appropriate procedure below. If you don't want to add any more services, skip to **“Exit the FileNet Image Services System Configuration Editor” on page 110.**

Add VWService

For instructions on adding a VWService, see the *WorkFlo Services for UNIX Installation Handbook*.

Continue to the next section to **“Exit the FileNet Image Services System Configuration Editor”.**

Exit the FileNet Image Services System Configuration Editor

When you exit the System Configuration Editor, be sure to save your changes.

- 1 Select the *Exit* option from the File pull-down menu in the System Configuration Editor window.
- 2 When prompted to save your changes, click the Yes button to save the configuration and exit the System Configuration Editor.

Reboot the Server

In order for the configuration changes you made in the preceding procedures to take effect, you must restart the Image Services on the root server.

Note The time needed for the restart process varies for each system.

On the HP-UX Root Server

- 1 As **fnsw user**, enter the following command to bring up the FileNet software

initfnsw restart

- 2 Verify that the FileNet software is up, and run the **dupip** script by entering the following:

```
nohup /fnsw/etc/dupip
```

On the AIX/6000 or Sun Root Server

- 1 Logon as **fnsw** (if you aren't already), and start X Windows (if you have not already done so)
- 2 Stop all FileNet processes by entering the following command:

```
killfnsw -A -D -y
```

- 3 Start the updated FileNet application software by entering:

```
Xtaskman &
```

The FileNet Task Manager interface displays.

CAUTION **Site-controlled Oracle Instance Only:** You must start the Oracle software before attempting to start the FileNet Image Services software for the first time. If the Site-controlled Oracle software is not available when the Image Services software starts, the Image Services software will fail and will display error messages. If you receive Image Services error messages, start the Oracle software and restart the Image Services software.

- 4 Once the **TM_daemon.exe** message displays in the Process table, select the Monitor menu.
- 5 From the Monitor menu, select the Event Logs option. (The FileNet Event Logs window displays.)
- 6 From the Event Logs window, select the DISPLAY menu, and select Dynamic. (The Dynamic option enables screen refreshes each time the messages are logged.) Return to the FileNet Task Manager window, but do not close the Event Logs window.
- 7 From the FileNet Task Manager window, select START.

You will receive system messages in the Current Status window as the FileNet software starts. Once the FileNet software startup process finishes, the CLOSE button is highlighted.

- 8 Select the CLOSE button. (The Current Status window closes.)
- 9 Review the contents of the Event Log window to make sure that there are no error messages from the software startup.

Build and Initialize the Application Server

Perform the procedures in this section and its sub-sections on the Windows application server.

Use these procedures 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. There must be no RDBMS or NCH database already existing on the application server.

Note Make sure FileNet Software is running on the Root server, and not on the application server. (You can do a **whatsup** on the Root server.) If FileNet is running on the application server, run a **killfns** **-A -D -y**.

Build and Initialize the Application Server

- 1 On the application server, logon as **fns**.
- 2 Open a 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.)

- 3 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_lo\lsd
echo <domain:Organization> nch_<domain>
killfnsw -D -A -y
```

Initialize FileNet Databases on the Application Server

- 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 -y init > \fnsw_lo\ctmpl\init.log
```

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.

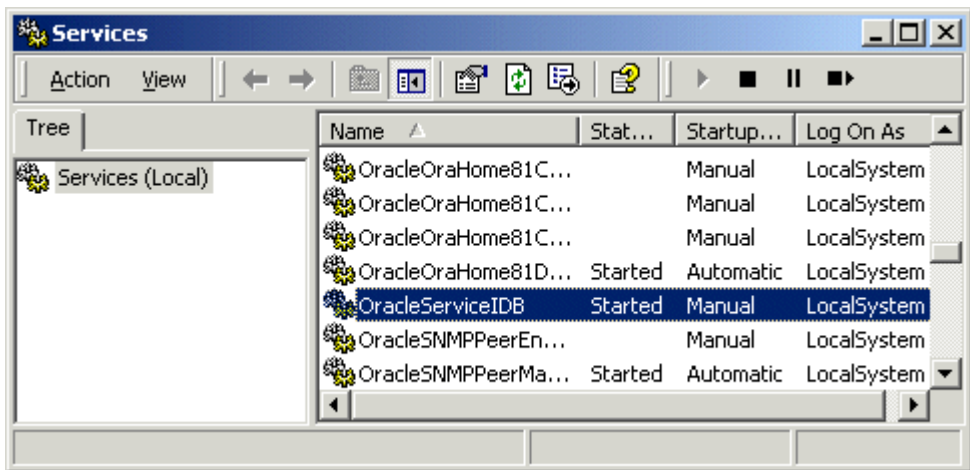
Note View the **init.log** file afterward to make sure that there were no errors in the database initialization process.

Verify that the Oracle Service is Started

Use this procedure to verify that the Oracle service is started and the startup mode is set to Automatic.

- 1 In Administrative Tools, double-click the Services icon.

The Services window displays.



In the Services dialog box, you should see that the `OracleServiceIDB` has been started and the startup mode is set to Manual.

- 2 Right-click `OracleServiceIDB` and select *Properties*.
- 3 In the `OracleServiceIDB Properties` window, set the Startup type to *Automatic* and click *OK*.

- 4 Close the Services window.

Verify FileNet Dataset Permissions

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 group permissions.

- 1 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 (ALL) (ALL)
Everyone	Special Access (R) (R)

Group	Permissions
fnadmin	Full Control (ALL) (ALL)
fnop	Special Access (RX) (RX)
fnusr	Special Access (RX) (RX)

- 3 Repeat steps 2 and 3 for all datasets affected.

Bring Up FileNet Software

- 1 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.
- 7 When the FileNet software is up and the Close button is highlighted, 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.

5**Completing the Installation**

This chapter explains steps that need to be followed to complete the backing up of both the Root server and the Windows application server installation. Backups should be made of your system configuration in case something unforeseen occurs. You should do this for both the root and application servers.

Backup the Root Server

Make a complete system backups for the root/index server and the application server. To make complete backups of your system configuration, refer to the following documents depending upon the operating system on your UNIX server:

Enterprise Backup and Restore User's Guide

System Administrator's Handbook

System Administrator's Companion for UNIX

Once you have backed up the system configuration on the appropriate server, you will have successfully added an application server to your system.

Backup the Application Server

- 1 If you aren't already, logon as **fns** or Windows **Administrator**.
- 2 Shutdown the FileNet software by entering the following command:

initfns 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 log file and record the location here: _____.

- 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.
- 12 To exit the backup tool, click the Operations pull down menu and select the *Exit* option.
- 13 Unload and label the backup tape.

Appendix A – Microsoft Systems Management Server (SMS) Procedures

This appendix contains instructions for using the Microsoft Systems Management Server (SMS) product for installing or uninstalling software on your FileNet Image Services server(s).

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 130](#))
- Installing FileNet Image Services Software ([page 140](#))
- Uninstalling FileNet Image Services Software ([page 144](#))

What is Microsoft Systems Management Server (SMS)?

Microsoft Systems Management (SMS) is 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.

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 Image Services Software, or something meaningful.
- 3 Load the **Image Services 4.0.0 for Windows Server** CD-ROM into the CD-ROM drive.

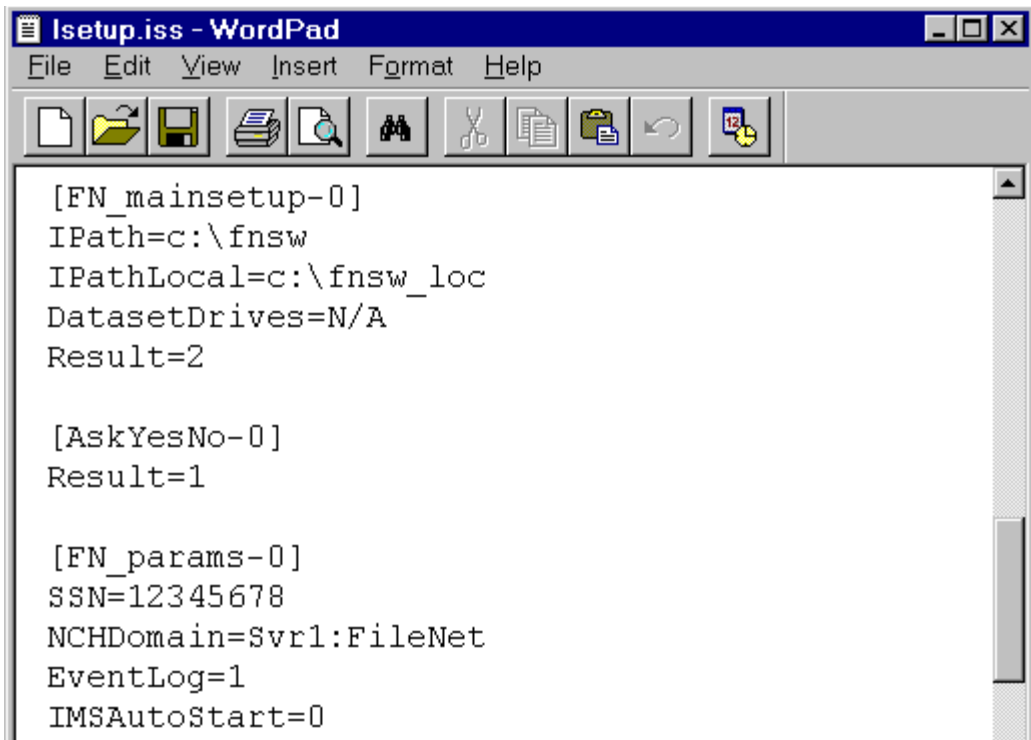
- 4 Copy the Image Services software from the CD to the directory location that you setup in step 2 above.

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.



```
[FN_mainsetup-0]
IPath=c:\fnsw
IPathLocal=c:\fnsw_loc
DatasetDrives=N/A
Result=2

[AskYesNo-0]
Result=1

[FN_params-0]
SSN=12345678
NCHDomain=Svr1:FileNet
EventLog=1
IMSAutoStart=0
```

- 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.

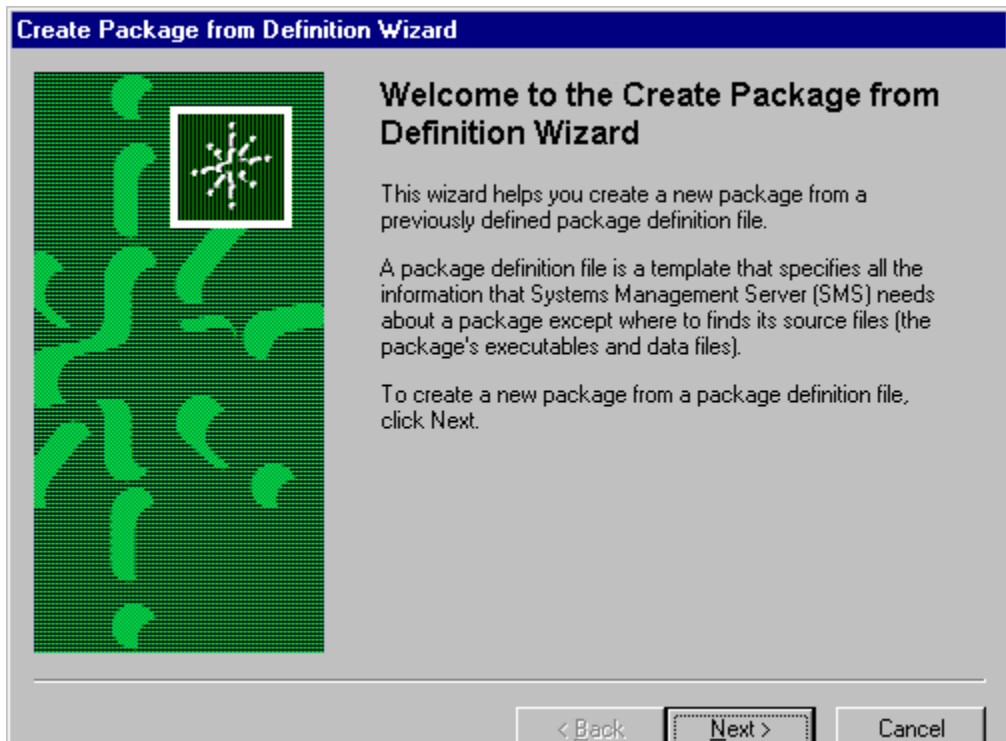
Note To uninstall software, see [**“Uninstalling FileNet Image Services software” on page 144.**](#)

- 1 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*.
- 12 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\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*.
- 12 In the Advertisement Target window, select *Advertise the program - - -* 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*.
- 14 In the Advertise to Subcollections window, select the appropriate radio button for your site and click *Next*.

- 15** In the Advertisement Schedule window, enter the schedule information as needed for your site, and click *Next*.
- 16** In the Assign Program window, enter the information appropriate for your site, and click *Next*.
- 17** 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.

Note 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.


- 3 After creating the fnadmin local group, logoff and log back onto the system. This is necessary for the above changes to take effect.
- 4 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 Task bar 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 and click *OK*.
- 5 At the Confirm Save window, click *Yes*.
- 6 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 **fns** user.

- 3 After logging on to the server, proceed to, [Chapter 4, “Configuring the Root and Application Servers,” on page 75](#) to continue.

Uninstalling FileNet Image Services software

This section contains procedures to Uninstall FileNet Image Services software.

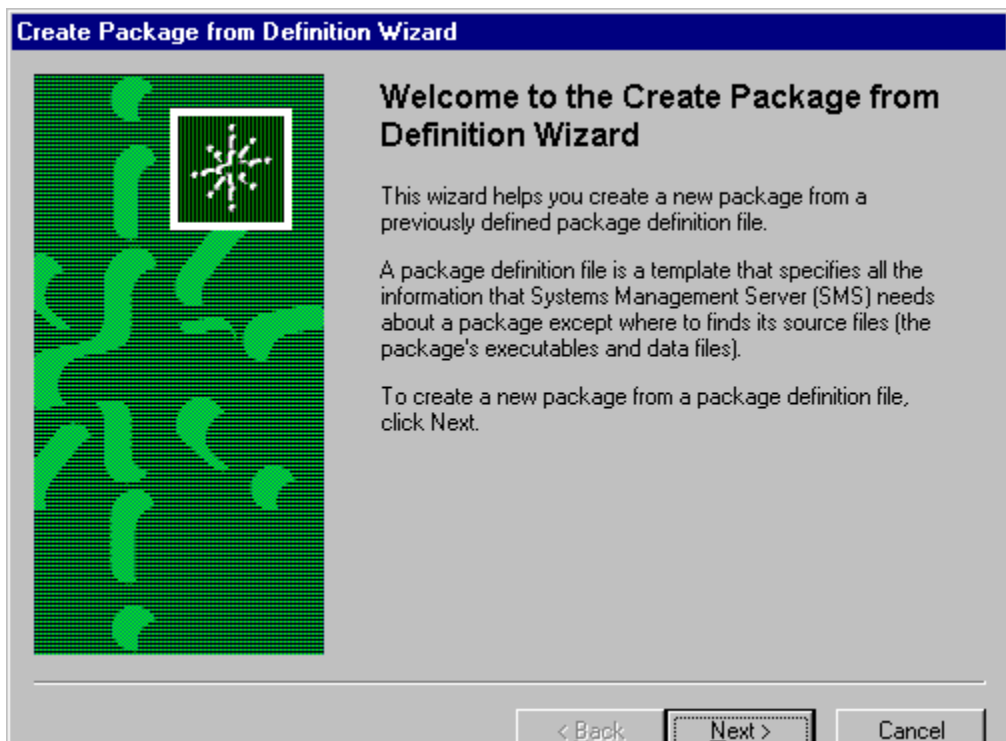
Create Package

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

- 1 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*.

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*.
- 11** 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*.
- 13** 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\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*.

- 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 *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*.
- 13 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*.

- 15 In the Advertisement Schedule window, enter the schedule information as needed for your site, and click *Next*.
- 16 In the Assign Program window, enter the information appropriate for your site, and click *Next*.
- 17 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*.

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