IBM FileNet Image Services Version 4.2

Windows Application Server Installation for UNIX Systems



GC19-3335-00

IBM FileNet Image Services Version 4.2

Windows Application Server Installation for UNIX Systems



Note

Before using this information and the product it supports, read the information in "Notices" on page 105.

This edition applies to version 4.2 of IBM FileNet Image Services (product number 5724-R95) and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corporation 1984, 2011.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

1 Getting started 11

Document revision history 11 Required skills 11 Accessing IBM FileNet documentation 12 IBM FileNet education 12 Feedback 12 Documentation feedback 12 Product consumability feedback 13 Additional documentation 13 Release Notes for Image Services 4.2 13 Software requirements document 14 System configuration 14 Installation prerequisites 15 Install and configure remote servers 16 DB2 Database server 16 UNIX Root/Index server 16 National language support 17 Minimum hardware requirements 19 Server hardware 19 Server memory 20 Total disk space 20 Available file system space for image services software 21 Space for RDBMS software 21 Software requirements 22 Windows operating system software 22 Image services software 22 IBM DB2 Universal Database Software 22 Oracle RDBMS Software 23 SQL RDBMS software 23 Debugger 23 Server naming convention 24 Object Name 24 Domain Name 24 Organization name 25 Additional system information 26

Related documentation 28

2 Preparing for the installation 29

Installation worksheet 29

System information 29 Compatible system information 30 Storage library information 31 Printer information 31 Optical drive information 32 File system and dataset information 32 Create FileNet users and fnusr group 33 System cache information 34

System configuration issues 35

Check/Configure paging file size 35 Configure TCP/IP protocol and SNMP 36 Verify NetBIOS is Enabled 37
Verify NetBIOS Setting on Windows 2003 Servers 37
Set Server Optimization Level (Recommended) 38
Determining if Your Storage Management System Supports Synchronous Writes 38
Install relational database software 40
Oracle 10g and Oracle 11g 40
Oracle Database Information 41
Oracle Variables 41
IBM DB2 42
DB2 Database Information 43

MS SQL Server 44

SQL Database Information 44

3 Installing FileNet Image Services software 45

Check the link to the remote Oracle database 45 Check the link to the DB2 database 46 Check the link to the SQL database 47 Run the Installation program 47 Start the Image Services installation program 48 Hardware checks 52 Operating system checks 52 FileNet Users and Groups Check 53 Finishing the system check 54 Rerunning the Image Services installation program 54 Installing Image Services 4.2 55

Grant "Logon as Service" right to the fnsw user 56

Verify TCP/IP parameter settings (optional) 57 Restart the server 60 Install required pre-startup fixes 60

4 Configuring the Root and Application Servers 61

Add Application Server(s) on the Root Server 61
Select and Configure Relational Database Instance (if applicable) 63
Oracle 10g and Oracle 11g 64
Define the Tablespace Names 64
DB2 V8.1, V8.2, V9.1, 9.5 65
Verify the Database and User Tablespace Names 65
MS SQL Server Software 67

Server Configuration on the Application Server 67
Configure the Windows Server as an Application Server 67
Add Application Server Attributes 71
Add Batch Service 72
Add Cache Service 73

Add SQL Service 74 Add WorkFlo Queue Service 75 Add Print Services 77 Add VWService 77 Exit the FileNet Image Services System Configuration Editor 78 Restart the Server 78

Build and Initialize the Application Server80Build and Initialize the Application Server80Update Image Services Configuration Files81

Verify the Connection to RDBMS 82 Verify FileNet Dataset Permissions 82 Bring Up FileNet Software 83

5 Completing the Installation 85

Backup the Root Server 85 Backup the Application Server 86

Appendix A – Systems Management Server (SMS) Procedures 88

What is Microsoft Systems Management Server (SMS)? 88

Overview 89

Setting up the SMS Site Server Package 90

Copy FileNet Image Services Software to Site Server 90 Modify the Isetup.iss File 90 Create Package 92 Configure the Distribution Points for Your Site 94 Installing FileNet Image Services Software 96

Complete the SMS Install of FileNet Software 97 Restart the Server 98

Uninstalling FileNet Image Services software 99

Create Package 99 Configure the Distribution Points for Your Site 101 Uninstall FileNet Image Services Software 103

Notices 105

Trademarks 109

U.S. Patents Disclosure 109

Index 110

1 Getting started

This document explains how to install and configure IBM® 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.

In addition, <u>"Appendix A – Systems Management Server (SMS)</u> <u>Procedures</u>" on page 88 contains Microsoft® procedures that can be used for installing and de-installing FileNet software.

Document revision history

Image Services version	Date	Comment
4.2	May 2011	Initial release.

Required skills

This document assumes that 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
- DB2® Database Administration

Accessing IBM FileNet documentation

To access documentation for IBM FileNet Image Services products:

- 1 On the <u>www.ibm.com</u> website, enter "Image Services Documentation" in the search box on the menu bar.
- 2 Select **IBM Product Documentation for FileNet Image Services** from the list of search results.

IBM FileNet education

IBM provides various forms of education. Please visit the IBM Training and Certification for IBM software page at: www.ibm.com/software/sw-training.

Feedback

We value your opinion, experience, and use of our products. Please help us improve our products by providing feedback or by completing a consumability survey.

Documentation feedback

Send comments on this publication or other IBM FileNet Image Services documentation by e-mail to <u>comments@us.ibm.com</u>. Be sure to include the name of the product, the version number of the product, and the name and part number of the book (if applicable). If you are commenting on specific text, include the location of the text (for example, a help topic title, a chapter and section title, a table number, or a page number).

Product consumability feedback

Help us identify product enhancements by taking a Consumability Survey (http://www-306.ibm.com/software/data/info/consumabilitysurvey/). The results of this comprehensive survey are used by product development teams when planning future releases. Although we are especially interested in survey responses regarding the most recent product releases, we welcome your feedback on any of our products.

The survey will take approximately 30 minutes to complete and must be completed in a single session; there is no option to save a partially completed response.

Additional documentation

The following sub-sections describe various support documents and tables that give you the latest information concerning your update. To download IBM FileNet document from the IBM support page, see "Accessing IBM FileNet documentation" on page 12.

Release Notes for Image Services 4.2

The latest Release Notes file can be retrieved at any time from the IBM support page.

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

Software requirements document

Review the *IBM FileNet Image Services, Image Services Resource Adapter, and Print Hardware and Software Requirements* and review the patch recommendations and requirements. To download this document from the IBM support page, see <u>"Accessing IBM FileNet documentation" on page 12</u>.

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

System configuration

The following diagram shows a UNIX Image Services system using a relational database with a Windows Application server. In this diagram, the remote AIX Database Server contains the DB2 Server database software as well as both the Image Services Index Database and the Application Database.

The UNIX Image Services Root/Index server contains DB2 Client software.

The Windows Application Server also contains DB2 Client software, as well as one or more of the following application services: VW Service, SQL Service, and WorkFlo Queue Service. Using DB2 Client software the Windows Application Server can retrieve data from the Application Database on the remote AIX DB2 Database Server.

As an alternative, an optional second remote AIX Server can be used to host the Application Database. In this case, the primary AIX Server would only host the Index Database.



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 <u>"Installation work-sheet" on page 29</u>. 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.

Install and configure remote servers

Before using this document to add a Windows Application Server ensure that the following servers have been installed and configured.

DB2 Database server

The DB2 database software must be installed on a remote AIX Database Server before installing the Windows Application Server.

The DB2 database must be site-controlled and **must reside on a remote AIX 5.3 or 6.1server**.

Image Services on the Windows Application Server will access the remote DB2 database using DB2 client software installed on the Image Services Application Server.

To install DB2 software, see *Guidelines for Installing and Configuring IBM DB2 Software* for information. To download this document from the IBM support page, see <u>"Accessing IBM FileNet documentation"</u> <u>on page 12</u>.

Tip An optional second remote AIX 5.3 or 6.1 Database Server can also be used to host the database for the Windows Application Server. In this case the primary AIX 5.3 or 6.1 Database Server would only host the Index Database. If an optional second remote database server is used, be sure to also install DB2 server software on this server.

UNIX Root/Index server

Before using this document to install a Windows Application Server ensure that the UNIX Root/Index server has been installed as follows:

- 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* to install the necessary software on the Root server.
- The IBM DB2 client software has been installed and configured on the UNIX Root server. For more information, the *Guidelines for Installing and Configuring IBM DB2 Software*.

To download these documents from the IBM support page, see "Accessing IBM FileNet documentation" on page 12.

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

National language support

It's important that the character set you select for one product matches the character sets you select for all the others.

Choose the same character system when you install Image Services, the operating system and the relational database software.

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. **Tip** 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 Image Services on the Image Services server.

For systems configured with Western European character sets, valid alphanumeric characters must be in the 7-bit ASCII range. For 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.

Charae	Decima	I 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

Charao	Decima	I Values		
ISO (International Orga for Standardiza	nization tion)	Microsoft Windows Code Page	ASCII (0 to 127)	Non-ASCII (128 to 255)
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 DB2 and Image Services that has a corresponding Windows code page.

Minimum hardware requirements

Tip These requirements have changed from previous Image Services releases and from previous versions of this document.

Server hardware

- Minimal Processor: 800Mhz Pentium® 32-bit processor
- 512 MB or more memory per CPU
- **Tip** To check the amount of memory, logon on to the server as the FileNet software user such 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*:

- 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
- **Note** Oracle 10g and 11g software is compatible with 32-bit Windows servers.
 - A DVD drive installed and configured for use on your Windows server.

Server memory

• Root/Index and Application Servers with Oracle:

10g/11g - 512 MB memory for each processor in the server.

• Root/Index and Application Servers with DB2:

512 MB memory or more for each processor in the server.

• Storage Library and Application Servers without Oracle:

512 MB memory or more for each processor in the server.

Total disk space

For FileNet Image Services software, minimum datasets:

• At least 1 GB

These sizes include a 30% growth factor, but do not include space required for the Windows Operating System.

Available file system space for image services software

The FileNet Image Services software needs the minimum amounts of free disk space in the file systems shown here:

- **500 MB** total space in \fnsw.
- 500 MB total space in \fnsw_loc

The installation program needs the following amount of temporary space for decompressing files:

- 500 MB total space in temp
- **Tip** If you don't have enough space in temp, you can direct the installation program to use another directory that has enough space.

Space for RDBMS software

The amount of disk space required for RDBMS software depends on whether Server or Client software is installed and the products selected.

Refer to the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server* or the *Guidelines for Installing and Configuring IBM DB2 Software* for additional information about space requirements for RDBMS software products. To download these documents from the IBM support page, see <u>"Accessing IBM</u> **FileNet documentation" on page 12**. FileNet's SCouT system configuration and output tool can help estimate the actual amount of disk space needed for FileNet and RDBMS datasets on this Image Services system.

Software requirements

Your system must meet the following requirements to complete this Image Services software installation.

Windows operating system software

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

- Windows 2003 SP1
- Windows 2003 Release 2
- Windows 2008
- Note You can download the service pack from: <u>http://www.microsoft.com/</u> downloads/search.asp?

Image services software

Image Services 4.2 for Windows Server (eSD image or software CD). This media contains the Image Services 4.2 software including COLD 4.2 software.

IBM DB2 Universal Database Software

Refer to the *Guidelines for Installing and Configuring IBM DB2 Software* for more information. To download this document from the IBM

support page, see <u>"Accessing IBM FileNet documentation" on</u> page 12.

Oracle RDBMS Software

Note Oracle 10g and 11g software media are not supplied by IBM.

Refer to the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server* for more information. To download this document from the IBM support page, see "Accessing IBM FileNet documentation" on page 12.

SQL RDBMS software

Note SQL software media are not supplied by IBM.

Refer to the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server* for more information. To download IBM FileNet documentation from the IBM support page, see <u>"Accessing IBM FileNet documentation" on page 12</u>.

Debugger

The debugger program is recommended for Image Services 4.2. The debugger enables your service representative to troubleshoot both FileNet and Windows-related problems and must be installed on each Image Services server.

Server naming convention

Properly naming Image Services servers is an important step when setting up your Image Services system. Server names can have a maximum of **128 characters** and should only contain ASCII alphanumeric characters and underscores.

Tip Non-alphanumeric characters and hyphens should not be used.

Every system resource is identified by a three-part name stored in the NCH database. The three parts of the resource name identify an object, a domain (system name), and an organization, in this format:

object:domain:organization

The maximum length of a three-part name is **82 characters**—40 for the object, 20 for the domain, 20 for the organization, two for the colons separating the parts.

Object Name

An **object** is a resource like a tape, printer, database, software service, logon name, etc. Some objects have names predefined by the system. For example, DefaultIMS is the name used to access the index database.

Domain Name

The **domain** (or system) name is set up at FileNet system configuration time using the **fn_setup** tool. In a multi-server system, each server has a different server name, so the domain name is usually the server name of the Root/Index server.

Organization name

The third part of the NCH resource name is the **organization** name. This can be your company or department name, such as ABCDEnterprises.

Important When you specify an object from a PC workstation, the maximum length of a three-part name is 79 characters—39 for the object, 19 for the domain, 19 for the organization, two for the colons.

The reason for this convention is that when NCH (Network Clearing House) has to cross 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 and underscore characters are eliminated.

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 <u>"Installation worksheet" on page 29</u>.

- 1 Determine the password for the user **Administrator**. Record the password in the <u>"Installation worksheet"</u>.
- 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.)
- **Tip** The location of the **hosts** file can change, depending on where the server software is installed.
 - 3 Determine the Domain name, IP address and System Serial Number (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 24.
 - **IPv4** Each IP address should contain four numbers separated by decimals (for example, 10.20.0.52).
 - **IPv6** Each IP address should contain up to eight groups of hexadecimal numbers separated by colons (for example, FE80::2C0:FE35:9FFF:D28).

- **Tip** 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 a maximum of 10 digits between 1000 and 2147483646.
- **Tip** 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 <u>"Compatible system information" on page 30</u>. For information on naming servers, see <u>"Server naming convention"</u> on page 24.
 - 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 <u>"Printer information" on page 31</u>. For information on naming servers, see <u>"Server naming convention" on</u> page 24.

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. To download IBM FileNet documentation from the IBM support page, see <u>"Accessing IBM FileNet documentation" on</u> <u>page 12</u>.

- Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server
- Guidelines for Installing and Configuring IBM DB2 Software
- Enterprise Backup/Restore User's Guide
- System Administrator's Handbook
- System Administrator's Companion for UNIX
- System Administrator's Companion for Windows Server
- System Configuration Editor Overview
- **Tip** For information on relational database 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.

Tip 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.

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	
System Serial Number (ssn)	
(Valid range: 1000 - 2147483646)	
Domain Name	
Organization Name	

Important The ssn 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 Image Services system to another.

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 (for example, ODU, OSAR 96, OSAR 125)				
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 (for example, Hitachi_II)				
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 DB2 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/DB2	100 Mb	
permanent_db0	Oracle/SQL/DB2	100 Mb	
permanent_rl0	Oracle/SQL/DB2	64 Mb	
transient_db0	Oracle/SQL/DB2	320 Mb	
transient_rl0	Oracle/SQL/DB2	256 Mb	

Installation worksheet

sec_db0	Oracle/SQL/DB2	64 Mb	
sec_rl0	Oracle/SQL/DB2	64 Mb	

Tip 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.

Create FileNet users and fnusr group

To add the following users and groups, click Start > Control Panel > Users and Groups.

Group Name	Required Members	Group Description
fnusr	<fnsw>, root, <dba user=""></dba></fnsw>	Members can operate any FileNet software (including COLD). All operators and admin- istrators must belong to this group.
fnadmin	<fnsw>, root</fnsw>	Members can perform administrative func- tions. Administrators must belong to this group to change configuration, perform diagnostics, or restore backups.
fnop	<fnsw></fnsw>	Members can start and stop all FileNet soft- ware (including COLD). Administrators must also belong to this group.

Tip If you want to log in as a specific user and want to run the FileNet tools and software, add the user into the **fnadmin** and **fnop** groups.

If Oracle software is installed on the local server, you also need to create a <dba group>, such as **oragrp**.

Group Name	Members	Group Description
<dba group=""></dba>	<dba user="">, fnsw</dba>	The Database Administration group <dba group=""> and user <dba user> are created by the Database Administrator. The FileNet user, fnsw, needs to be a member of the <dba group="">.</dba></dba </dba>

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 to ensure that your system is properly configured before you install Image Services and DB2 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".
- 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 restart the server at this time.)

Configure TCP/IP protocol and SNMP

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.

Verify NetBIOS is Enabled

This procedure is necessary to prevent a SLAC Entry License error, error tuple <232,0,1068>.

Verify NetBiOS Setting on Windows 2003 Servers

- 1 From the Taskbar, click the *Start* button, point to Control Panel, point to Network Connections, and right-click the *Ethernet Adapter* that you want to configure, and choose *Properties*.
- **Tip** In our example, we have an Intel® Pro 1000 MT Gigabit Ethernet Adapter installed.

The Ethernet Adapter dialog box opens.

2 On the General tab, select Internet Protocol (TCP/IP) and click *Properties.*

The Internet Protocol (TCP/IP) Properties window appears.

- **3** Click the *Advanced* button to open the Advanced TCP/IP Settings dialog box, and select the WINS tab.
- 4 Verify that the Enable NetBIOS over TCP/IP option is selected, or select it if necessary, and click *OK*.
- 5 Click *OK* to close the Internet Protocol (TCP/IP) Properties window.
- 6 Close any other remaining windows.

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.

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 Image Services software.

Tip 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 *Image Services System Tools Reference Manual*. To download this document from the IBM support page, see **"Accessing IBM FileNet documentation" on page 12**.

Install relational database software

Root/Index server during a Dual server installation.

Root/Index/Storage Library server during a Combined server or Entry server installation.

Application server with WorkFlo Queue services or SQL services.

The Database Administrator is responsible for installing the appropriate version of the Relational Database Management software.

Image Services on Windows Server supports three Relational Database Management Systems. Skip to the section for the one that is going to be installed on this FileNet Image Services system:

- "Oracle 10g and Oracle 11g" on page 40
- <u>"IBM DB2" on page 42.</u>
- <u>"MS SQL Server" on page 44</u>

Oracle 10g and Oracle 11g

If the Oracle software and datasets are going to reside on the local FileNet Image Services server, refer to Chapter 2 of the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server.*

The Database Administrator also has the option of installing Oracle software and datasets on a dedicated remote Oracle server. Refer to Chapter 3 of the *Guidelines for Installing and Updating Site-Controlled*

Oracle and MS SQL Software for Windows Server for further information.

To download this document from the IBM support page, see "Accessing IBM FileNet documentation" on page 12.

Give the Oracle guidelines document to the Database Administrator.

Oracle Database Information

After Oracle 10g or Oracle 11g has been successfully installed, the Database Administrator must provide the following Oracle variables and tablespace names and sizes to the System Administrator and your service representative.

Oracle Variables

\$ORACLE_HOME:	
\$ORACLE_SID:	
<oracle name="" user="">: _</oracle>	
<dba group="">:</dba>	
<oracle name="" user="">: _</oracle>	
<dba group="">:</dba>	
f_sw password:	
f_sqi password:	
f_maint password:	
f open password:	

Recommended Tablespace Names	Tablespace Names You Actually Assign	Minimum Tablespace Size (MB)	Tablespace Size You Actually Create
fnsys_ts		200	
fntmp_ts		400	
fninx_ts		200	
fnusr_ts (optional for WorkFlo Queue Services)		200	

Tablespace Names and Sizes

After you have this information, you're ready to install the FileNet Image Services software. Continue with <u>Chapter 3, "Installing</u> <u>FileNet Image Services software," on page 45</u>.

IBM DB2

The **Database Administrator** is responsible for installing the DB2 software and creating the DB2 database for Image Services.

- The **DB2 server** software must be installed on a dedicated remote AIX server. Refer to **Chapter 2** of the *Guidelines for Installing and Configuring DB2 Software* for further information.
- The *DB2 client* software needs to be installed on the AIX Image Services server and linked to the remote DB2 database. Refer to *Chapter 3* of the FileNet *Guidelines for Installing and Configuring IBM DB2 Software* for details.

To download this document from the IBM support page, see **"Accessing IBM FileNet documentation" on page 12**. The Guidelines document can be given to the Database Administrator.

DB2 Database Information

After DB2 has been successfully installed, the Database Administrator must provide the following information to the System Administrator and your service representative.

	Default User Name	User Name You Chose	Default Group Name	Group Name You Chose
Instance Owner	db2inst1		db2iadm1	
Fenced User	db2fenc1		db2fadm1	
DB2 Administra- tion Server User	db2as		db2asgrp	

Recommended	Tablespace Name	Minimum Size	Tablespace Size
Tablespace	Actually Assigned	(MB)	Actually Created
userspace1		200	

f_sw password: _____

f_sqi password: _____

f_maint password: _____

f_open password: _____

DB2 Database Alias Name: _____

(indexdb, for example)

User Tablespace Location:

(userspace1, for example)

After you have this information, you are ready to install the FileNet Image Services software. Continue with <u>Chapter 3, "Installing</u> <u>FileNet Image Services software," on page 45</u>.

MS SQL Server

SQL Database Information

Refer to the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server* for more information on acquiring and installing MS SQL Server software.

To download the guidelines from the IBM support page, see "Accessing IBM FileNet documentation" on page 12.

After SQL has been successfully installed, the Database Administrator must provide the following information to the System Administrator and your service representative.

f_sw password:	
f_sqi password:	
f_maint password:	
f_open password:	

Tip MS SQL 2005 users: To avoid shared memory errors when you install Image Services, shut down any MS SQL 2005 applications before continuing the installation.

After you have this information, you're ready to install the FileNet Image Services software. Continue with <u>Chapter 3, "Installing</u> FileNet Image Services software," on page 45.

3

Installing FileNet Image Services software

This chapter explains how to Install the Image Services software. It covers software installation issues that include:

- Verifying links to the database
- Installing FileNet Image Services software
- Verifying TCP/IP parameter settings
- Tip If you want to log in as a specific user to run the FileNet tools and software, you must add this user to the **fnadmin** and **fnop** groups.

Check the link to the remote Oracle database

Server Types	Perform the steps in this section only on servers with Oracle Client software .
	If the Oracle database is located on a remote server, check the con- nection between the Oracle Client and the remote Oracle database.
	Verify that the internal Oracle networking is active and functional, by entering an sqlplus command in this format:
	sqlplus <user>/<password>@<global_dbname></global_dbname></password></user>
	For example, you might enter:
	sqlplus sys/ <sys_password>@Michigan_IDB.world</sys_password>

If there are no errors, Oracle networking is working successfully. Exit from sqlplus.

Tip As a double-check, you can enter:

tnsping Michigan_IDB.world

Check the link to the DB2 database

Server Types Perform the steps in this section only on servers with DB2 Client software.

Since the DB2 database is located on a remote AIX server, use the Command Line Processor (CLP) to check the connection between the DB2 Client and the remote DB2 database.

Log onto the Image Services server as the DB2 Client instance owner (such as **fnsw**), and enter:

db2

DB2> connect to <db_alias_name> user f_sw using <f_sw password>

where <db_alias_name> is the database alias name of the DB2 database on the remote server, and <f_sw password> is the f_sw user's password set up by the Database Administrator.

Check the link to the SQL database

Server Types	Perform the steps in this section only on servers with SQL Client	
	software.	

If the SQL database is located on a remote server, check the connection between the SQL Client and the remote SQL database.

Verify that the internal SQL networking is active and functional, by entering an sql command in this format:

osql -E -S ServerName/InstanceName -d DBName

If there are no errors, SQL networking is working successfully. Exit from osql.

Run the Installation program

Server Types	Perform the steps in this chapter on all servers .		
	If you're installing a multi-server system, verify the Root server is installed and running first.		
	 The Image Services installation program performs two tasks. It runs a System Check to verify configuration prerequisites. It installs the Image Services software. 		

You can choose to run both, or just the System Check only.

Tip The Image Services software can be running when performing only the System Check. To run both the System Check and the installation proigram, the FileNet Image Services software must not be running.

The installation program System Check inspects the server for prerequisites and lists any warning and error conditions in two locations:

- Pop-up windows on your screen.
- Report and log files in the \fnsw_loc\logs\install\ directory.
- **Tip** COLD software is included on the Image Services eSD image or software CD. However, you must be licensed to use the COLD application.

Start the Image Services installation program

You can run the Image Services installation program in graphical or silent mode.

- Graphical mode is the default graphical interface and is described later in this section.
- Silent mode displays nothing on the screen while the installation program is running. The user should review the Silent install log file for access to the progress and results of the installation.
- 1 Log on as the local Windows Administrator.
- 2 If appropriate, load the **Image Services 4.2 for Windows Server** CD-ROM into the CD-ROM drive.
- **3** For Silent Installation only, locate the appropriate option.txt file on the eSD image or the software CD. The option file contains the standard responses to the installation program's prompts. Copy the file to a

local directory on your server. (You can rename it to something shorter, like **opt.txt**.) Use your preferred text editor to make any appropriate changes and save the file. The options and their default values are fully described in the file.

- 4 Locate the installation program executable file.
 - In graphical mode run:

is_4.2.0_win.exe

• In silent mode run:

is_4.2.0_win.exe -i silent

If you copied and modified the option.txt file, the command might look like this:

is_4.2.0_win.exe -i silent -f drive:\tmp\opt.txt

where \tmp\opt.txt is the location of the text file you modified. Specify its full path on the command line. For example, "... -f \fnsw_ loc\tmp\opt.txt".

If you do not specify the -f option and the file path, the installation program uses the standard defaults from the option.txt file.

Tip If you run the System Check in silent mode, check the log file in \fnsw_ loc\logs\install\4.2.0\ to determine the results. The name of the log file is IS_4.2.0.log.

> If you determined earlier that the \tmp directory does not have enough space, specify an alternate directory. Add -is:tempdir *directory* to the command line to override the default

directory, as long as the *directory* you specify already exists. This optional temporary directory must be outside the fnsw directory structure. For example, you might enter:

is_4.2.0_win.exe -is:tempdir <drive>:\othertmp

where othertmp is the specific temporary directory you want to use.

- **5** In graphical mode, you'll see a series of screens. It might take a few minutes to display.
- 6 Run either the **System Check only** or the **System Check and Install Image Services**. Select the appropriate radio button and click **Next**.
 - If you select System Check only, skip to Step 9 on page 51.
 - If you select **System Check and Install Image Services**, continue with the following steps.
- 7 On the Select database type screen, select the type of relational database installed on this server. If this is a Storage Library server or an Application server without an RDBMS, select None.

```
DB2
MS_SQL (Windows Only)
Oracle
None
```

8 Configure the FileNet software user account name. Enter the name of the user account you created earlier for the FileNet software user, such as **fnsw**.

The installation program checks for the existence of this user and the default Image Services groups later in the installation. If the user or the

groups do not exist, the installation program will not install the Image Services software.

- **9** During the System Check, the installation program verifies the status of server characteristics in these categories:
 - Hardware checks
 - Operating System checks
 - FileNet users and groups

The same checks are performed for both the **System Check only** and the **System Check and Install Image Services** options. Items in the status column are color coded to indicate:

- Green indicates the check has passed.
- Yellow indicates that the item has failed but the installation program can continue
- **Red** indicates that a check has failed and the installation program cannot continue

Some installation program System Checks produce only warnings while others

prevent the installation of the Image Services software:

Condition	Severity
Not logged on as superuser	Will prevent install
Insufficient file system space	Will prevent install
Insufficient swap space	Warning only
Incompatible host name	Will prevent install
Incompatible O/S	Will prevent install
Missing debugger	Warning only

Condition	Severity
Kernel parameter out of range	Warning only
Missing FileNet user/group	Will prevent install
Incorrect FileNet user/group membership	Will prevent install
Image Services running	Will prevent install

Hardware checks

The first System Check screen displays:

- Free disk space
- Memory
- Swap Space

The installation program lists the resource, how much you need, how much you have, and either Pass or Fail.

If a configuration item, such as "insufficient file system space" or "kernel parameter out of range" does not pass the System Check, you can correct it while the installation program is still running.

- a In a separate window, make the necessary change.
- b Then, click the **Back** button on the installation program display to return to the previous screen, and click **Next** again to rerun the check.

Operating system checks

The Operating System Checks screen displays:

• Host name

- O/S version
- Debugger
- Registry entries

As you scroll down the display you see the minimum and current kernel parameter settings.

Tip If any registries values (kernel parameters) fail the system check, click the **Back** button to return to the previous screen.

Enter the correct values.

Click **Next** on the installation program screen to run the hardware check again.

FileNet Users and Groups Check

The FileNet Users and Groups Check screen displays the required user and group memberships for FileNet Image Services.

- FileNet groups
- FileNet users
- Database user and group (Oracle only)

The Status column indicates whether the group in the Name column exists and contains the appropriate users listed in the Required Members column.

- + green indicates the group and member users are present;
- red indicates the group or member users are missing.

- **Tip** Click the **Back** button, create the missing users and add the users to the appropriate groups. After creating the missing users and adding them to the groups, exit the installation program, log out, and log back in for the new users and groups to take affect. Then, restart the installation program. Then click **Next** again to rerun this check.
- **Tip** Oracle requires an additional user and group (DB2 does not). Since the installation program doesn't know whether Image Services will be configured to use Oracle or DB2, it shows a place holder for the Oracle user and group. This is for informational purposes only, and does not prevent the System Check from completing successfully.

Finishing the system check

When the System Check is complete it has either passed or failed.

If the System Check failed with errors, you must fix all the error conditions reported. You can then run the System Check again.

If the System Check passed all its tests, but generated warnings for the swap space, debugger, or kernel parameter tests the final screen will indicate this. Check the log file for additional items you might want to correct.

If the installation program System Check completed successfully and you selected the option to install Image Services software, the installation program continues with the section, <u>"Installing Image Services</u> <u>4.2" on page 55</u>.

Rerunning the Image Services installation program

If the installation program System Check does not pass, review the log file in the

\fnsw_loc\logs\install\4.2.0\ directory. The most recent information is appended to the end of this file.

After you have made the changes required by the installation program System Check, return to <u>"Start the Image Services installation program" on page 48</u> and run the System Check again.

Installing Image Services 4.2

- **1** As the Image Services installation program continues, the Summary screen displays. Verify that the information is correct for your system.
- **2** As the Image Services software installs, a progress bar displays.

Depending on your server's processor speed, expect the installation to take approximately **20 minutes**. (If you're installing image Services on several servers simultaneously from the same location, it might take a while longer.)

- **3** When the software installation is finished, the installation program creates an uninstaller (\fnsw\etc\uninstaller\uninstaller\uninstall_is.exe) and verifies the version information.
- 4 The final screen indicates success.

Grant "Logon as Service" right to the fnsw user

"Logon as Service" right will automatically be granted when the user manually re-enters the password in the Service properties panel for the IS ControlService. A '1069 logon failure' error will occur if the IS ControlService user does not have that right. This should be done whether the user is local or a domain level user.

To guard against this error, the System Administrator, must reset the password for the user with fnsw privileges in the Service Control Panel for the IS service (ISControlService).

- 1 Logon as the FileNet software user, such as **fnsw**, if you aren't already.
- 2 From the Control Panel, open the Administrative Tools folder, and double-click the *Services* icon.
- **3** Right-click *IS ControlS*ervice and the IS ControlService Properties dialog opens.
- 4 In the IS ControlService Properties window, complete the following:
 - a Select the Logon tab.
 - b Re-enter the password and confirm the password.
 - c Click **OK** to exit the IS ControlService Properties window.
- 5 Close the Services window.

Verify TCP/IP parameter settings (optional)

In this section you will verify the maximum number of available temporary ports and the length of time the server waits before reusing a closed socket ID. If either of these parameters do not yet exist, this section provides steps to define them.

- **Tip** These modifications are not required, but they have been found to be favorable for optimal FileNet performance. Unless you have set these parameters differently for other system reasons, we suggest you use these parameter settings.
 - The MaxUserPort parameter determines the number of temporary ports that can be assigned on the server. These temporary ports are assigned by a server's IP stack from a designated range of ports for this purpose. When network traffic is extremely heavy, it's possible to run out of temporary ports unless you increase the MaxUserPort setting.
 - The **TcpTimedWaitDelay** parameter determines the length of time the server waits before reusing a closed socket ID. Although the default value is typically around 240 seconds (four minutes), this parameter can safely be reduced to as little as 30 seconds on highspeed networks.
 - 1 From a Command Prompt window, enter the following command to open the Registry editor:

REGEDT32

- **Note** You can also enter the above command in the taskbar Run dialog box.
 - 2 In the HKEY_Local_Machine on Local Machine window, open the *System* folder and navigate to the Tcpip Parameters folder using this path:

SYSTEM>CurrentControlSet>Services>Tcpip>Parameters

- **3** Locate the MaxUserPort Parameter.
 - If this parameter is already set to 65534 (decimal) or FFFE (hex), skip to <u>Step 4 on page 58</u>.
 - If this parameter is less than 65534 (decimal) or FFFE (hex), you need to increase it.
 - a Double-click on the entry to open the DWORD Editor dialog box.
 - b In the DWORD Editor dialog box, set the Radix to decimal or hex, and change the value to 65534 (decimal) or FFFE (hex).
 - c Click OK, and skip to Step 4 on page 58.
 - If this parameter does not exist, you need to define it.
 - a From the Registry Editor Edit menu, select Add Value.

The Add Value dialog box opens.

b Enter MaxUserPort in the Value Name box, and select REG_ DWORD from the Data Type box drop-down list; then click OK.

The DWORD Editor dialog box opens.

c Set the Radix to decimal or hex, enter 65534 (decimal) or FFFE (hex) in the Data box, and click *OK*.

The Registry Editor now shows the new MaxUserPort in hex.

4 Locate the TcpTimedWaitDelay parameter.

- If this parameter is already set to 30 seconds (decimal) or 1E (hex), skip to <u>Step 5 on page 59</u>.
- If this parameter is more than 30 seconds (decimal) or 1E (hex), you need to reduce it.
 - a Double-click on the entry to open the DWORD Editor dialog box.
 - b In the DWORD Editor dialog box, set the Radix to decimal or hex, and change the value to 30 (decimal) or 1E (hex).
 - c Click OK, and skip to Step 5 on page 59.
- If this parameter does not exist, you need to define it.
 - a From the Registry Editor Edit menu, select Add Value.

The Add Value dialog box opens.

b Enter TcpTimedWaitDelay in the Value Name box, and select REG_DWORD from the Data Type box drop-down list; then click *OK*.

The DWORD Editor dialog box opens.

c Set the Radix to decimal or hex, enter 30 (decimal) or 1E (hex) in the Data box, and click *OK*.

The Registry Editor now shows the new TcpTimedWaitDelay entry in hex.

5 Close the Registry Editor window.

Restart the server

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

- **1** Restart the server.
- 2 After the server restarts, logon as the FileNet software user, such as **fnsw**, with password **fnsw**.

Install required pre-startup fixes

Server Types	Perform the steps in this section on all servers .	
	At this time, install only the fixes that directly relate to Image Services 4.2 initial configuration issues. (You will install any general Image Services 4.2 fix packs in a later section.)	
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.	
	To retrieve these fixes for IBM FileNet Image Services products	
1	Navigate to the Information Management support page (www.ibm.com/software/data/support).	
2	Select the appropriate IBM FileNet product from the "Select a cate- gory" list.	
3	From the Product Support page, click the appropriate link under Down- loads.	

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 <u>Chapter 3</u>, "Installing FileNet Image Services software," on page 45.

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 the AIX/6000 server, go to your server console and log on as the FileNet software user such as **fnsw**.
- 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 Configuring the Root and Application Servers

Add Application Server(s) on the Root Server

🗙 FileNET Ima	ge Services - Sys	tem Configurat	tion Editor		_ 🗆 ×		
File <u>E</u> dit	Help						
Network Addresses System Attributes	Server Appl. Services System Appl. Services	Relational Databases System Defaults	Storage Libraries Peer Systems	Printing Server Attributes	Tape Drives Services		
Attributes Appl. Services Defaults Systems Attributes Datasets MKF Performance WorkFlo Mgmt. Services Procedures Select a procedure to run: Add a printer Delete a printer Automatically configure storage library Manually configure storage library Delete a storage drive Delete a storage drive Delete a storage drive							
					IMS EDIT mode		

- 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 <u>"Installation worksheet" on page 29</u>). 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.

Select and Configure Relational Database Instance (if applicable)

Important This procedure assumes that the tablespaces and databases that you specify in the System Configuration Editor either already exist or that you will create them before you initialize the FileNet databases. For more information, see the *Guidelines for Installing and Updating Site-Controlled Oracle and MS SQL Software for Windows Server.* To download this document from the IBM support page, see <u>"Accessing IBM FileNet documentation" on page 12</u>.

Continue with the appropriate sub-section:

- "Oracle 10g and Oracle 11g" on page 64
- "DB2 V8.1, V8.2, V9.1, 9.5" on page 65
- <u>"MS SQL Server Software" on page 67</u>

Oracle 10g and Oracle 11g

Define the Tablespace Names

- 1 Click the Relational Databases tab, then click the RDB Objects subtab.
- 2 In the Location column of the RDB Objects window, click on a cell and replace the default FileNet tablespace names with the site-specific table names. While replacing the tablespace names, use the following criteria:
 - Change all occurrences of **fnsys_ts** to the name of your dedicated FileNet default tablespace.
 - Change all occurrences of **fntmp_ts** to the name of your dedicated FileNet temporary tablespace.
 - If an optional fnusr_ts was created for WorkFlo Queue Services, change all occurrences of the name to your dedicated FileNet user tablespace.
 - If an optional **fnidx_ts** was created for indexes, change all occurrences of the name of your dedicated FileNet index tablespace.

The Image Services software will use the tablespace names entered in the RDB Objects subtab.

. . . .

- **Note** The tablespace names specified in the RDB Objects list must exist before you initialize the FileNet Image Services databases.
 - 3 Skip to the section, <u>"Server Configuration on the Application</u> Server" on page 67.

DB2 V8.1, V8.2, V9.1, 9.5

Verify the Database and User Tablespace Names

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

ſ)racle	DB2	MS-9	SQL	RDB Objects	ון		
	r		-					
	Server Name	Object Name	Location					
Ш	nttaos	db_name	indexdb					
	nttaos	user_tbl_space	e userspace1			11		

- **2** On the RDB Objects subtab, verify the database name and the tablespace name in the Location column:
 - Database name, such as indexdb.
 - User Tablespace name, such as userspace1.
- **3** On the DB2 subtab, verify the following fields:

Add Application Server(s) on the Root Server

Ora	acle	DB2		MS-S	GQL	RDB Objects		
		_		_				
	Server Name	Version Number		Password Expiration Policy	Notify Administrator			
	nttaos	8.1.7	ŧ	60	14		- 11	
	tonga	8.1.7	ŧ	60	14	-		μ

- Version must be 8.1.16 or later (DB2 version 8.1.0 plus FixPak 16 or later), or 8.2.9 or later (DB2 version 8.2.0 plus FixPak 9 or later), or 9.1.4a or later (DB2 version 9.1.0 plus FixPak 4a or later), or 9.5 (DB2 version 9.5.0), or 9.5.1 or later (DB2 version 9.5.0 plus FixPak 1 or later).
- **Password Expiration Policy** This field lists the number of days that the f_sw, f_maint, f_sqi, and f_open passwords remain in effect before they expire. The default value is **60 days**. To change the default, enter a new value in this field.
- Note A blank field is not permitted, and a value of 0 is equivalent to "Never Expires."
 - Notify Administrator This field lists the number of days prior to password expiration that the administrator will be reminded to update the password. The default value is 14 days before the password expires. To change the default, enter a new value in this field.

Note This value must always be less than or equal to the password expiration value. A blank field is not permitted, and a value of 0 would mean notification the day the password expires.

MS SQL Server Software

Follow the procedures in this section to configure the MS SQL Server software on your server.

1 On the server, click Start --> MicroSoft SQL Server and

Client Network Utility OR

Server Network Utility

The SQL Server Client Network Utility dialog box appears.

2 On the DB-Library Options tab, verify that the Automatic ANSI to OEM conversion option is NOT checked.

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 FileNet software user such as **fnsw**, 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.

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 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

To add a VWService to the server, see the installation handbook for your Process Engine platform for instructions.

- **Note** Although ICR Service appears in the list of services to add, ICR is NOT SUPPORTED in this release.
 - 1 On an AIX/6000 server, go to your server console on logon as the FileNet software user such as **fnsw**.
 - 2 Open a new window, and enter the following command:

fn_edit &

A dialog box similar to the following displays.

imesOpen Configuration Data	base	×
Database Name:	IMS	¥
Domain Name:	moorea:Fil	leNET
		🗆 Read Only
ОК	Cancel	Help

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.

4 Configuring the Root and Application Servers

Add Application Server Services Via the UNIX Root Server

X FileNET Image Services - System Configuration Editor									
File <u>E</u> dit	Help								
Network Addresses System Attributes	Server Appl. Services System Appl. Services	Relational Databases System Defaults	Storage Libraries Peer Systems	Printing Server Attributes	Tape Drives Services				
Datasets Select a Add a pri Delete a Automatic Manually Delete a Add a sto	Datasets MKF Performance WorkFlo Datasets MKF Performance WorkFlo Mgmt. Services Procedures Select a procedure to run: Add a printer Delete a printer Automatically configure storage library Manually configure storage library Delete a storage library Outomatically configure storage library Delete a storage library								
Delete a	storage driv	ie			Help IMS EDIT mode				

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:\fnsw\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:\fnsw\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:\fnsw\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 <u>"Exit the FileNet Image Services System Configuration Editor" on page 78</u>.

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 <u>"Exit the FileNet Image Services System Configuration Editor" on page 78</u>.

Add SQL Service

Before beginning this procedure, make sure that the DB2 software has been installed on the Application server.

Note If you add an SQL Service to this Application server, DB2 client software is required. Before beginning this procedure, make sure that the DB2 client software has been installed on the Application server.

- 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 Select the server to add the SQL Service to, and click *Next*.
- 4 Select *SQL Services* from the list of services that appear, and click *Next.*
- **Note** If DB2 passwords have already been set using the "Add WorkFlo Queue Service" procedure, prompts for <u>Step 5</u> <u>Step 14</u> will not appear. In this case, skip to <u>Step 15 on page 75</u>.

- 5 Enter the DB2 password for user f_sw, and click *Next*.
- 6 Enter the password for user f_sw again, and click *Next*.
- 7 Enter the DB2 password for user f_maint, and click *Next*.
- 8 Enter the password for user f_maint again, and click *Next*.
- 9 Enter the DB2 password for user f_sqi, and click *Next*.
- **10** Enter the password for user f_sqi again, and click *Next*.
- 11 Enter the DB2 password for user f_open, and click *Next*.
- 12 Enter the password for user f_open again, and click *Next*.
- **13** Enter the DB2 database name. This name is user defined. It can be whatever you want up to 8 characters in length.
- 14 Enter the location of the DB2 user table space, or accept the default, and click *Next*.
- 15 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 <u>"Exit</u> the FileNet Image Services System Configuration Editor" on page 78.

Add WorkFlo Queue Service

Before beginning this procedure, make sure that the DB2 software has been installed on the Application server.

Note If you add a WorkFlo Queue Service to this Application server, DB2 client software is required. Before beginning this procedure, make sure

that the DB2 client software has been installed on the Application server.

- 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*.
- Note If DB2 passwords have already been set using the "Add SQL Service" procedure, prompts for <u>Step 5</u> <u>Step 14</u> will not appear. In this case, skip to <u>Step 15 on page 77</u>.
 - 5 Enter the DB2 password for user f_sw, and click *Next*.
 - 6 Enter the password for user f_sw again, and click *Next*.
 - 7 Enter the DB2 password for user f_maint, and click *Next*.
 - 8 Enter the password for user f_maint again, and click *Next*.
 - **9** Enter the DB2 password for user f_sqi, and click *Next*.
 - **10** Enter the password for user f_sqi again, and click *Next*.
 - **11** Enter the DB2 password for user f_open, and click *Next*.
 - 12 Enter the password for user f_open again, and click *Next*.

- **13** Enter the DB2 database name. This name is user defined. It can be whatever you want up to 8 characters in length.
- 14 Enter the location of the DB2 user table space, or accept the default, and click *Next*.
- 15 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 <u>"Exit</u> the FileNet Image Services System Configuration Editor" on page 78.

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 <u>"Exit</u> the FileNet Image Services System Configuration Editor" on page 78.

Add VWService

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

Note If you add a VWService to this Application server, DB2 client software is required. Before beginning this procedure, make sure that the DB2 client software has been installed on the Application server.

Continue to the next section to <u>**"Exit the FileNet Image Services</u></u> System Configuration Editor".</u>**

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.

Restart 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.
 - 1 Logon as the FileNet software user such 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.

- 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 killfnsw -A -D -y.

Build and Initialize the Application Server

- 1 On the application server, logon as the FileNet software user such as **fnsw**.
- **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.

- Important This step is extremely important because it generates a special file that fn_util init needs when it's run in the next section.
 - **3** Make sure fn_build ran successfully by checking that no errors have occurred.

Update Image Services Configuration Files

- **Note** If the Image Services system is configured with a Site-controlled relational database (on a local or on a remote database server), make sure that the relational database is up before running fn_setup_rdb.
 - 1 As the FileNet software user such as **fnsw**, enter the following command to update the Image Services configuration files and RDBMS related files:

fn_setup_rdb -f

Follow the prompts to enter the requested information for your relational database.

2 Initialize all datasets configured on your server by entering

fn_util init

This process may take a while (sometimes up to 30 minutes without any feedback to the user); the larger the datasets, the longer the wait. After the initialization process finishes, the prompt returns.

Note View the **\fnsw_loc\logs\fn_util\fn_util.log** file after initializing to verify that there were no errors in the database initialization process.

Verify the Connection to RDBMS

Since the relational database is located on a remote AIX server, make sure that TCP/IP communications have been configured successfully on both server and client computers.

- To verify the connection to the DB2 database, see <u>"Check the link</u> to the DB2 database" on page 46.
- To verify the connection to the Oracle database, see <u>"Check the</u> link to the remote Oracle database" on page 45.
- To verify the connection to the SQL database, see <u>"Check the link</u> to the SQL database" on page 47.

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)
fnadmin	Full Control (ALL) (ALL)

Build and Initialize the Application Server

Group	Permissions
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** Restart the server.
- **Note** The time needed for the shutdown/restart process varies for each system.
 - 2 Logon to the application server as the FileNet software user such 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

To download IBM FileNet documentation from the IBM support page, see <u>"Accessing IBM FileNet documentation" on page 12</u>.

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 the FileNet software user such as **fnsw** or Windows **Administrator**.
- 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 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 – 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.

This appendix provides instructions for the following procedures:

- "Setting up the SMS Site Server Package" on page 90
- "Installing FileNet Image Services Software" on page 96
- "Uninstalling FileNet Image Services software" on page 99

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.
 - 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 eSD image or software CD, 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 If appropriate, load the **Image Services 4.2 for Windows Server** CD-ROM into the CD-ROM drive.
- 4 Copy the Image Services software from the eSD image or the software CD to the directory location that you set up 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.

Setting up the SMS Site Server Package

🗉 Isetup.iss - WordPad		
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>I</u> nsert F <u>o</u> rmat <u>H</u> elp		
[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 lett (c:) to the drive letter on your Client Server where you want to instal the FileNet software. 	:er II	

- 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 <u>"Uninstalling FileNet Image Services soft-</u> ware" on page 99.
 - 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.

Create Package from Definition Wizard	
	Welcome to the Create Package from Definition Wizard This wizard helps you create a new package from a previously defined package definition file. A package definition file is a template that specifies all the information that Systems Management Server (SMS) needs about a package except where to finds its source files (the package's executables and data files). To create a new package from a package definition file, click Next.
E Click Novt	< <u>B</u> ack <u>Next</u> > Cancel
J UIICK IVEXI.	

- 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 4.2 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 4.2 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 4.2\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 4.2 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.*

Important 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 restart 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.

Restart the Server

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

- **1** Restart the server.
- **Note** The time needed for the shutdown/restart process varies for each system.
 - 2 When the system restarts, logon as the FileNet software user such as **fnsw**.
 - 3 After logging on to the server, proceed to, <u>Chapter 4, "Configuring</u> <u>the Root and Application Servers," on page 61</u> 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 Server*∖*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.

Uninstalling FileNet Image Services software

Create Package from Definition	n Wizard
	Welcome to the Create Package from Definition Wizard This wizard helps you create a new package from a previously defined package definition file. A package definition file is a template that specifies all the information that Systems Management Server (SMS) needs about a package except where to finds its source files (the package's executables and data files). To create a new package from a package definition file, click Next.
	< Back. Next > Cancel

- 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 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 4.2 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 4.2\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 4.2 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.*

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Corporation J74/G4 555 Bailey Avenue San Jose, CA 95141 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to: Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan, Ltd. 1623-14, Shimotsuruma, Yamato-shi Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGE-MENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation J46A/G4 555 Bailey Avenue San Jose, CA 95141-1003 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.
Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <u>www.ibm.com/legal/copytrade.shtml</u>.

Microsoft, BackOffice, and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, and service names might be trademarks of IBM or other companies.

U.S. Patents Disclosure

This product incorporates technology covered by one or more of the following patents: U.S. Patent Numbers: 6,094,505; 5,768,416; 5,625,465; 5,369,508; 5,258,855.

Index

Α

application server, configuration 61–84 add application server 61 add batch services 72 add cache services 73 add print services 77 add services 69 add SQL services 74 add WorkFlo Queue services 75 build and initialize server 80 configure server 80 start FileNet software 83 verify FileNet dataset permissions 82

С

commands fn_build -a 80 initfnsw stop 86 REGEDT32 57 regedt32 68 winmsd 19

D

de-installing using SMS 99 Domain name 26 domain name 24

F

file system and dataset information Installation Worksheet 32 FileNet groups, creating 33 FileNet users, creating 33

Image Services software requirements 22 software installation 47 installation prerequisites 15-29 software requirements 22 system information 26-29 Installation Worksheet 29–34 compatible system information 30 file system and dataset information 32 optical drive information 32 server information 29 storage library information 31 system cache information 34 installing software, using SMS 96-98 Internet Protocol (IP) address 26

Μ

Microsoft Systems Management Server de-installing Image Services software 99 installing Image Services software 96–98 preparing to use 90

Ν

naming servers 24

0

object name 24

organization name 25

Ρ

paging file size 35 prerequisites installation 15–29 server memory 20

R

RDBMS groups, creating 33 RDBMS users, creating 33

S

server naming convention 24 SMS procedures de-installing Image Services software 99 installing Image Services software 96–98 software requirements Image Services 22 software requirements document 14 system configuration issues 35 system serial number 26

IBW ®

Product Number: 5724-R95

Printed in USA

GC19-3335-00

