

# Guidelines for Installing and Updating Site-Controlled RDBMS Software for Windows Server<sup>®</sup>

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# **1** Getting Started

This document provides guidelines for installing and updating Relational Database Management Software (RDBMS) on a Windows Server.

**Note** The RDBMS software must be installed, or updated, before you install, or update, the Image Services software.

Beginning with release 4.0.0 of Image Services software, **only Sitecontrolled** database installations are supported for new installations. However, existing **FileNet-controlled** databases are still supported for updates.

The Database Administrator (DBA) will install/update the RDBMS software. Because FileNet Image Services software requires that certain RDBMS products be installed and certain table spaces be defined, the DBA needs to follow the guidelines outlined in this document.

# Supported RDBMS Software

The following RDBMS software is supported in IS Release 4.0.0.

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

# **Microsoft SQLServer 2000**

If you will be using a SQL Server relational database, only Microsoft SQLServer 2000 software is supported for this release of Image Services. Microsoft SQL Server 7.0 will **not** be supported.

# Oracle9i RDBMS Software

If you will be using an Oracle relational database, only Oracle 9i Release 2 (both Standard and Enterprise Editions) is supported for this release of Image Services.

Oracle patch set version 9.2.0.2, with Oracle 9.2.0.2.1 patch 3 (patch number 2901676) is also required.

**Note** The Oracle9*i* CD-ROM media is **not** supplied by FileNet.

### **Undo Segments and Rollback Segments**

In the past, all FileNet supported versions of Oracle used rollback segments to recreate the "before" image. Oracle9i also uses rollback segments but also introduces undo segments.

You must choose either rollback or undo segments. You cannot use both at the same time.

To use undo segments, all data is placed in an undo tablespace. Performance can be increased by using undo segments because the undo tablespace is locally managed.

The rollback data is managed via system-managed undo (SMU).

Image Services supports the undo feature only with site-controlled Oracle databases. FileNet-controlled databases will continue to use rollback segments.

Refer to Oracle documentation for further details.

# **Required Skills**

This document assumes you are familiar with these topics:

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

# **Documentation Conventions**

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

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

# **Installation Prerequisites**

The prerequisites for installing and updating RDBMS software (hardware and software requirements) are included in the following sections.

# **Hardware Requirements**

To complete the installation/update procedures in this document, your server must meet the following hardware requirements.

- Minimal Processor: 800Mhz Pentium
- 256 MB or more memory per CPU (512 MB recommended)
- Tip To check the amount of memory, logon on the server as **fnsw** or **Administrator**. From the Command Prompt window, enter the **winmsd** command, click the *Memory...* tab, and look for the entry that says *Physical Memory Total:* 
  - A tape device (e.g., DAT Cartridge, 8mm, QIC, etc.) (Record the tape device type here: \_\_\_\_\_\_\_.)
  - An NTFS file system with the required amount of disk space as described in the Total Disk Space section below.
- **Tip** To see how much disk space is available, use the *Windows Explorer*, and select the drive where you plan to install the Image Services software. The available disk (free) space appears in the message area at the bottom of the window. Refer to the *FileNet Disk Sizing Spreadsheet* for actual FileNet dataset sizes.
  - A modem installed (and configured for operation) on your server
  - An HP Optical Disk Library (optional)

### Minimum Disk Space

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

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

These sizes include a 30% growth factor.

**Note** The above disk space does not reflect the space needed for Oracle or Microsoft SQL datasets. It is the responsiblitly of the site DBA to correctly estimate the size that will be needed for the RDBMS datasets.

### **Minimum Disk Space Requirements**

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

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

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

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

# **Software Requirements**

To complete the installation/update and configuration procedures in this document, your server must meet the following software requirements:

#### Windows 2000 Operating System

Only the Windows 2000 operating system is supported in this release of Image Services.

If you are installing or updating a remote database system, both the FileNet server and the remote RDBMS server must be running the same version of the Windows 2000 operating system.

The following versions are supported:

- Windows 2000 Server with Service Pack 3
- Windows 2000 Advanced Server with Service Pack 3
- Windows 2000 Datacenter Server with Service Pack 3

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

#### **RDBMS Software Media**

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

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

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

Also required for Oracle are:

- Oracle patch set version 9.2.0.2
- Oracle 9.2.0.2.1 patch 3 (patch number 2901676)\*

\* The Oracle 9.2.0.2.1 patch 3 corrects a problem with the US7ASCII character set. If you plan to use a different character set, such as WE8ISO8859P1, this patch is not required.

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

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

> If you intend to set up your own Oracle RDBMS user (e.g., default=**oracle**) and database administration group (default=**dba**\* and default=**ora\_dba**\*), make sure that both the

FileNet Image Services user (default=**fnsw**) and the RDBMS user belong to the existing database administration group.

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

# Additional Information (Microsoft SQL Server ONLY)

When you install the Microsoft SQL Server server software, you'll be asked to provide certain information for the SQL Server Database, as shown in the following table. Write this information in the spaces provided in the table below so you'll have it handy when you need it.

Information	SQL Server Database
Server Name	
Instance Name	
License Mode (per seat or per number of processors)	
* Number of processor licenses	
Location (path) for Image Services Datasets	

\* If licensed by number of processors.

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# **Preparing for the Installation/Update**

This chapter contains information that is necessary to prepare your system environment. Perform the steps in these sections before beginning your relational dababase installation or update.

Note These procedures are necessary to prepare your server for an installation/update of RDBMS software only. Before installing or updating the FileNet software, you still need to complete the preparation steps in chapter 2 of the install or update document.

To prepare for an **installation** of RDBMS software, continue to the section <u>"Preparing to Install RDBMS Software" on page 16</u>.

To prepare for an **update** of RDBMS software, continue to the section "Preparing to Update RDBMS Software" on page 18.

# Preparing to Install RDBMS Software

This section contains required steps to prepare your server for a successful installation of RDBMS software.

# File System and Dataset Information (SQL Only)

You must determine the expected size of the SQL 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	Recommended Minimum Size	Actual System Size (Mb)
ms_db0.mdf	SQL	200 Mb	
ms_pri0.mdf	SQL	20 Mb	
ms_tl0.ldf	SQL	20 Mb	
ms_udb0.dat	SQL	200 Mb	
ms_tmp0.mdf	SQL	80 Mb	
master.mdf	SQL	52 Mb	

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

# **Verify Disk Space Requirements**

Before you install the RDBMS software, you must ensure that you have adequate space for the new Image Services and RDBMS software.

Refer to the table in the section, <u>"Minimum Disk Space Require-</u> ments" on page 12 of chapter one of this document to make sure you have the required space.

# **Local Server Installations**

If you are installing RDBMS software on a Local server, continue to Chapter 3, "Installing RDBMS Software on a Local Server," on page 23.

# **Remote Server Installations**

If you will be configuring a dedicated remote database Server with the FileNet server as the client, continue to <u>Chapter 4, "Installing</u> <u>RDBMS Software on a Remote Server," on page 36</u>.

# Preparing to Update RDBMS Software

This section contains required steps to prepare your server for a successful update of RDBMS software.

# FileNet Technical Consultant/ValueNET Partner Tasks

At least four weeks prior to the update, the FileNet Technical Consultant or the ValueNET Partner **must** do these tasks:

- Schedule the update with the FileNet Upgrade/Install Assurance Team and access the team's latest list of current scheduling procedures.
- Copy the Image Services CDB file. Send this file to the Upgrade/ Install Assurance Team at upgrade@filenet.com.
- Run spacerpt. Send the results to the Upgrade/Install Assurance Team, and keep a printed copy for comparison after the update is complete.

When you send a file or output to the FileNet Upgrade/Install Assurance Team, you can either:

- a FTP the file from the server to a client PC so you can easily copy the file to a floppy disk, or...
- b Send the file to the FileNet Upgrade/Install Assurance Team via e-mail at upgrade@filenet.com.

# **Check Current Software Release**

Before updating your software, check the current versions of the software you are currently running.

### Windows Operating System

You must be running Windows 2000 to run this release of Image Services software. If you are running Windows NT 4.0, you must upgrade to the Windows 2000 Operating System **BEFORE** you update your RDBMS and IS software.

## **Run Readiness Analyzer**

Prior to updating the Windows operating system you must run the Readiness Analyzer to ensure that the existing NT 4.0 operating system is ready to be upgraded. The Readiness Analyzer will check the hardware, software, and installed applications to make sure they are all Windows 2000 compliant.

From a command prompt enter the following command:

### <drive>:\l386\winnt32\checkupgradeonly

**Note** If any problems are found, they must be resolved before you continue with the update.

#### FileNet and RDBMS Software

Check your current version of FileNet and RDBMS software to see if it can be updated with this document. To see what versions of software can be updated with this document, see the section, "Update Paths" in the *IS Update Procedure for Windows*.

To find out which FileNet Image Services software release is currently running on your system, open the FileNet System Configuration Editor and check the System Attributes tab.

To find out which RDBMS software release is currently running on your system, do the following:

- For Oracle, use the FileNet System Configuration Editor and check the Relational Databases tab, Oracle sub tab.
- For Microsoft SQL Server, click Start on the task bar and then click Programs. Microsoft SQL Server is in the Programs list and the SQL Server version number is in the title.

## Verify the System Serial Number

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

ssn

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

# **Exit WAL Applications**

If you are running any WAL applications, you must exit these applications before you continue with this update procedure. Later in this chapter you will need to stop the FileNet IS software, which clears WAL shared memory.

After you have exited all WAL applications, continue to the next section.

# **Perform System Backup**

If you do not have a recent full backup of the FileNet system, especially the \fnsw and \fnsw\_loc file systems, you need to backup the system datasets onto cartridge tapes. Refer to your <u>Systems Administrator's</u> <u>Companion for Windows Server</u>, for complete information on performing a system backup.

# Shutdown the FileNet Software

- 1 If you aren't already, logon as **fnsw**.
- 2 Open the FileNet Task Manager and Stop the FileNet software by clicking *STOP* in the Task Manager window.
- 3 Close the FileNet Task Manager.

# Update to Windows 2000 (If Necessary)

Only the Windows 2000 Operating System is supported in this release of Image Services software. If you are not running Windows 2000, you must update your operating system before you install the Relational Database software and FileNet Image Services software. In addition to updating the OS to Windows 2000, you must also install Windows 2000 Service Pack 3.

Important! If you have not yet run the Readiness Analyzer, go back to <u>"Run</u> <u>Readiness Analyzer" on page 19</u> to perform this check before continuing. This step is crucial to ensure that the existing Windows NT Operating System is ready to be upgraded.

> Refer to the Microsoft documentation and installation procedures to upgrade your operating system and install the required service pack.

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

# Local or Remote Updates

To update an existing Image Services system with a local or remote database server, skip to the appropriate section listed below.

- <u>"Guidelines for Updating a Site-Controlled Microsoft SQL</u> Server RDBMS" on page 61
- <u>"Guidelines for Updating a Site-Controlled Oracle RDBMS" on</u> page 55
- **Note** If you are updating an Image services system that accesses a remote Oracle database server, you **do not** need to update the Oracle software or datasets on the remote server. Just update the Oracle client software on the Image Services server to Oracle9i.

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# Installing RDBMS Software on a Local Server

This chapter contains guidelines for installing the following versions of RDBMS software on a **local** server.

- Oracle9*i* Release 2 Enterprise/Standard Edition
- Microsoft SQL Server, Version 2000

To configure an Oracle RDBMS on the local server continue to, <u>"Local</u> Oracle RDBMS Guidelines" on page 24.

To configure an Microsoft SQL Server RDBMS on the local server continue to, <u>"Local Microsoft SQL Server RDBMS Guidelines" on</u> page 34.

# Local Oracle RDBMS Guidelines

If you have a Local Oracle database, the Database Administrator needs to perform the following steps.

# Install Oracle9i Products

Ensure that, at a minimum, the following Oracle9i products, with checkmarks, are installed.

**Tip** Each listed item has an associated icon and checkbox. An icon with a plus sign indicates if there are additional subordinate items. You can list those additional items by clicking on the icon.

Placing a **check** in the checkbox indicates that you have selected the item. Be sure to **uncheck** any products that you do not want to install.

✓ Oracle 9i Database 9.2.0.1.0
 ✓ Oracle 9i 9.2.0.1.0

Enterprise Edition Options 9.2.0.1.0 Oracle Advanced Security 9.2.0.0.0 Oracle Partitioning 9.2.0.1.0 Oracle Spatial 9.2.0.1.0 Oracle Label Security 9.2.0.1.0 Oracle OLAP 9.2.0.1.0 Oracle Data Mining 9.2.0.1.0 Oracle COM Automation Feature 9.2.0.1.0

- ✔ Oracle Net Services 9.2.0.1.0
  - ✓ Oracle Net Listener 9.2.0.1.0 Oracle Connection Manager 9.2.0.1.0 Oracle Names 9.2.0.1.0

Oracle Enterprise Manager Products 9.2.0.1.0

- ✓ Oracle9i Development Kit 9.2.0.1.0 Oracle C++ Call Interface 9.2.0.1.0
  - ✓ Oracle Call Interface (OCI) 9.2.0.1.0 Oracle Objects for OLE 9.2.0.4.4 Oracle ODBC Driver 9.2.0.1.0 Oracle Provider for OLE DB 9.2.0.1.0 Oracle Programmer 9.2.0.1.0 Oracle XML Developer's Kit 9.2.0.0.0

Oracle9i Windows Documentation 9.2.0.1.0

Oracle HTTP Server 9.2.0.1.0

Oracle Windows Interfaces 9.2.0.1.0

Oracle Transparent Gateways 9.2.0.1.0

iSQL\*Plus 9.2.0.1.0

Oracle JDBC/OCI Interfaces 9.2.0.1.0

# Install Oracle 9.2.0.2 Patch Set

After the Oracle9i products have been installed, you must install Oracle patch set version 9.2.0.2. You can find the patch set on the Oracle Web site at: <u>http://www.oracle.com/support/metalink/index.html</u>

## Apply Oracle Patch 2901676 (9.2.0.2.1 Patch 3)

After the 9.2.0.2 patch set has been installed, install Oracle 9.2.0.2.1 patch 3 with (patch number 2901676).

# Create the ORACLE\_SID

1 Open the Registry window by entering the following command at a Command Prompt:

## REGEDT32

- Tip You can also enter this command in the taskbar Run dialog box.
  - 2 In the HKEY\_Local\_Machine on Local Machine window, open the Software folder.
  - **3** Locate and open the Oracle folder.
  - 4 Locate and open the Home*n* folder, where *n* is the sequence number assigned when Oracle was installed. Numbering starts with 0 (zero), so choose the highest (most recent) number.
  - 5 From the Registry Editor Edit menu, select Add Value.
  - **6** Type ORACLE\_SID in the Value Name box.
  - 7 In the Data Type box, select REG\_SZ and click OK.

The String Editor screen opens.

- 8 Enter the value you wish to assign ORACLE\_SID (such as IDB), and click *OK*.
- **9** Verify that the NLS\_LANG parameter is set to the appropriate value (AMERICAN\_AMERICA.WE8ISO8859P1, for example) for your locale. If not, double-click the entry to open the String Editor dialog box.

- 10 Also check the values of the NLS\_TERRITORY and NLS\_CHARAC-TERSET parameters. (AMERICAN\_AMERICA.WE8ISO8859P1, for example).
- 11 In the Edit String dialog box, change the value to the appropriate character set.
- **12** Close the Registry Editor Window.

# Edit the sqlnet.ora File

Before the Oracle installation is complete, you must create an sqlnet.ora file with the proper settings.

1 Open a Command Prompt window (or use your favorite text editor) and make the following entries in a new file:

AUTOMATIC\_IPC=OFF TRACE\_LEVEL\_CLIENT=OFF names.directory\_path=(TNSNAMES) names.default\_domain=world names.default\_zone=world sqlnet.authentication\_services=(NTS)

2 Save the file as sqlnet.ora and put it in the following location:

<drive>:\<oracle home directory>\network\admin

**Note** Verify that the editor you used did not add a .txt file extension to the sqlnet.ora file. (Notepad or Wordpad may add a .txt extension.) If necessary, rename the file with a **.ora** extension.

# **Create Oracle Service**

**1** To create the Oracle Service enter the following command at a Command Prompt.

#### oradim -new -sid IDB

- Note In the command above, IDB is your assigned ORACLE\_SID from <u>Step</u> <u>8 on page 26</u>. If your ORACLE\_SID is different, substitute yours in the command above.
  - 2 In the Control Panel, open Services and verify that the Oracle service is Started with Startup Type set to Automatic.

# **Reboot the Server**

After you finish installing the Oracle software, you must reboot the server so the newly installed device drivers can take effect.

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

# **Report to Sys Admin and FileNet TC**

Please provide the following information to the System Administrator and the FileNet Technical Consultant.

FileNet Default Tablespace Names*	Tablespace Names You Assigned	Minimum Tablespace Size (MB)	Tablespace Size (MB) You Created
fnsys_ts		200	
fntmp_ts		400	
fnusr_ts (optional for eProcess)		200	

FileNet Guidelines for FileNet-Used Tablespaces

\* fnsys\_ts is the name of the dedicated FileNet default tablespace. fntmp\_ts is the name of the dedicated FileNet temporary tablespace.

**fnusr\_ts** is the name of the optional user tablespace for eProcess. If your IS system will not be using these FileNet products, you do not need to create this tablespace.

# ORACLE\_SID

### ORACLE\_SID:

(instance identifier)

(e.g., IDB)

## **Oracle Database Administration Group**

The FileNet user **fnsw** must be made a member of this group.

### Name of DBA Group: \_\_\_\_

(for database administration)

(e.g., dba)

# **Defining Additional RDB Objects (Optional)**

A brand new Image Services system has a basic set of default objects. Defining additional RDB objects allows you to customize the data layout of your relational database. The object name, in conjunction with the location, tells the Image Services software where in the database that object (or group of objects) is to be created.

An object can be a table like doctaba, a retrieval key (rdb index) like f\_docnumber, or a whole group of objects like everything created from WFL, queues, workspaces, etc. The scope of the RDB object depends on how the RDB object name is formatted or built.

It's very important to build the object name string correctly. When the Image Services software is directed to create an RDB object (WFL queue, table, etc.), it dynamically builds a string that must exactly match the one that is defined in the object name column. The Image Services software searches the configuration database for a matching RDB\_Object to find the location of the object. If it's not found, the search continues for the location of the parent object.

## **RDB Object Name Basic Syntax**

The object name is a multi-part character string, separated by periods. Its maximum length is 255 characters plus a null terminator. The object name is built in a hierarchy where all names begin with fn\_data. For example:

Object name format:

fn\_data[.services\_name[.subname1[.subname2[.subname3]]]]

fn\_data.services\_name.subname1.subname2 is the parent of .subname3

fn\_data.services\_name.subname1 is the parent of .subname2 fn\_data.services\_name is the parent of .subname1

**Note** Not all services support all the subnames. See the following examples.

### Index Services Example

To have the Image Services software create all index services tables and indexes in a specific location in your database, define an RDB Object using the following name:

## fn\_data.INXdb

To have the Image Services software create doctaba in its own location, define the object name as one of the following examples:

# fn\_data.INXdb.doctaba

To have the Image Services software create a specific index (retrieval key) in its own location, define the object name as one of the following examples:

fn\_data.INXdb.doctaba.f\_docnumber

fn\_data.INXdb.table\_name.index\_name

## WFL Services Example

To have the Image Services software create all WQS Database Objects in one location, you would define an RDB Object with the following object name:

## fn\_data.WFLdb

Then, to create an index (retrieval key) of a queue in its own location, you would enter:

fn\_data.WFLdb.Workspace\_name.queue\_name.index\_name

#### **VW Services Example**

The object name is composed of the following values:

### VW queues

For indexes:

fn\_data.vw.region<region#>.server<server#>. queue.<logical\_queue\_table\_name>.<logical\_index\_name>

For base data sets:

fn\_data.vw.region<region#>.server<server#>. queue.<logical\_queue\_table\_name>

### VW rosters (indexes and base data set)

For indexes:

fn\_data.vw.region<region#>.server<server#>. roster.DefaultWCTable.<logical\_index\_name>

For base data sets:

fn\_data.vw.region<region#>.server<server#>. roster.DefaultWCTable

### All other VW tables

For indexes:

fn\_data.vw.region<region#>.server<server#>.
table.<table\_name>.<index\_name>

For base data sets:

fn\_data.vw.region<region#>.server<server#>.
table.<table\_name>

**Key** In the previous examples:

<region#> is the isolated region number> <server#> is the VW server number.

- logical\_queue\_table\_name> is the name of the table for the
  - queue as specified in Composer.

<table\_name> is the actual table name.

<index\_name> is the actual index name.

# **Install Image Services**

After the Oracle software has been successfully installed, the FileNet Technical Consultant or ValueNet Partner can continue with the Image Services installation in chapter 3 of the <u>IS Installation and Configura-</u> *tion Procedures for Windows Server, Release 4.0.0*.

# Local Microsoft SQL Server RDBMS Guidelines

If you have a Local Microsoft SQL Server database, the Database Administrator needs to perform the following steps.

Refer to the Microsoft installation instructions to install the SQL software and create the Site DB for your system. You can find these instructions at the Microsoft web site at:

http://msdn.microsoft.com/library/default.asp?Show-Pane=false&URL=/library/psdk/sql/getstart\_4fht.htm

**Important** You must choose Custom setup type for the installation of SQL Server and enter the following information:

- In the Authentication Mode dialog box, choose Mixed Mode.
- In the Collation Settings dialog box, choose **Latin1\_General** as the Collation designator and choose **Binary** Sort order.

# **Reboot the Server**

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

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

# Verify the File Names and Filegroups

Ensure the File Names and Filegroups have been setup properly. Refer to the SQL installation documentation to create the Site Database. You can find these instructions at the Microsoft web site at: <u>http://msdn.microsoft.com/library/default.asp?Show-</u> Pane=false&URL=/library/psdk/sql/getstart\_4fht.htm

abase Properties	- Site D	В			
eneral Data Files	Transac	tion Log			
) atabase files					
File Name	Loca	tion	Initial si	Filegroup	
Site DB_Data		S:\mssql8\MSSQL\data\	200	PRIMARY	
fn_data		S:\mssql8\MSSQL\data\	200	fnsys_fg	



# **Install Image Services**

After the Microsoft SQL Server software has been successfully installed, the FileNet Technical Consultant or ValueNet Partner can continue with the Image Services installation in chapter 3 of the <u>IS</u> <u>Installation and Configuration Procedures for Windows Server,</u> <u>Release 4.0.0</u>.

4

# Installing RDBMS Software on a Remote Server

Typically, Image Services and RDBMS software run on the same server; however, there are advantages to running these software products on separate servers. This chapter provides guidelines on how to configure a remote database server and configure the FileNet server as the database client.

# **Important!** The procedures in this document must be performed by an experienced Database Administrator.

# **Strategy**

The RDBMS software will be installed on the remote database server, and the RDBMS Client Software will be installed on the FileNet Image Services server.

The first step is to get the new remote database server up and running. This involves the following:

- Installing the same version of the operating system that's installed on the FileNet Image Services server.
- Installing the same version of RDBMS software that you plan to install on the FileNet IS server.

After installing the RDBMS software on the new remote database server, install the RDBMS Client software on the FileNet server.

- To configure a remote Oracle server system continue to the section, <u>"Remote Oracle RDBMS Guidelines" on page 37</u>.
- To configure a remote Microsoft SQL Server system continue to the section, <u>"Remote Microsoft SQL Server RDBMS Guide-</u> lines" on page 49.

# **Remote Oracle RDBMS Guidelines**

If you have a Remote Oracle database, the Database Administrator needs to perform the procedures in the following sections.

# **Configure the Remote Oracle Server**

After the new server has been set up with the appropriate version of the Windows operating system and has been connected to the network, you can begin the Oracle configuration.

### **Create Oracle Users and Group**

Create a Database Administrator group identical to the Database Administrator group on the FileNet Image Services server.

# Start > Programs > Administrative Tools > Computer Management > Local Users and Groups

For example, if the name of the Oracle user on the FileNet server is **oracle**, and the name of the Database Administration Group is **dba**, they should be the same on the Oracle server.

Also create an **fnusr** group containing an **fnsw** user.

## Create a Directory for FileNet Use

To facilitate the installation of FileNet-specific patches and test scripts, create a directory named \fnsw\oracle.

Use the Windows Explorer to create the new folders:

### <drive>:\fnsw\oracle

### Prepare a Location for the Oracle Server Software

Make sure the server has enough free disk space. The Oracle Server software requires a minimum of: 2.0 GB.

#### Install Oracle 9.2 Server Software

- 1 As the Oracle user, make sure the first Oracle9i Enterprise 9.2 CD-ROM is loaded and launch the Oracle Universal Installer.
- 2 Ensure that, at a minimum, the following Oracle9i products, with checkmarks, are installed.
  - ✔ Oracle 9i Database 9.2.0.1.0
    - ✔ Oracle 9i 9.2.0.1.0

Enterprise Edition Options 9.2.0.1.0 Oracle Advanced Security 9.2.0.0.0 Oracle Partitioning 9.2.0.1.0 Oracle Spatial 9.2.0.1.0 Oracle Label Security 9.2.0.1.0 Oracle OLAP 9.2.0.1.0 Oracle Data Mining 9.2.0.1.0 Oracle COM Automation Feature 9.02.0.1.0

	<ul> <li>Oracle Net Services 9.2.0.1.0</li> <li>Oracle Net Listener 9.2.0.1.0</li> <li>Oracle Connection Manager 9.2.0.1.0</li> <li>Oracle Names 9.2.0.1.0</li> </ul>
	Oracle Enterprise Manager Products 9.2.0.1.0
	<ul> <li>Oracle9i Development Kit 9.2.0.1.0 Oracle C++ Call Interface 9.2.0.1.0</li> <li>Oracle Call Interface (OCI) 9.2.0.1.0 Oracle Objects for OLE 9.2.0.4.4 Oracle ODBC Driver 9.2.0.1.0 Oracle Provider for OLE DB 9.2.0.1.0 Oracle Programmer 9.2.0.1.0 Oracle XML Developer's Kit 9.2.0.0.0 (To remove the check from the Oracle XML Developer's Kit option, you need to remove the check from the Oracle HTTP Server option first.)</li> </ul>
	Oracle9i Windows Documentation 9.2.0.1.0
	Oracle HTTP Server 9.2.0.1.0
	Oracle Windows Interfaces 9.2.0.1.0
	Oracle Transparent Gateways 9.2.0.1.0
	iSQL*Plus 9.2.0.1.0
	Oracle JDBC/OCI Interfaces 9.2.0.1.0
Note	Some of the Oracle products listed above are not separately selected in the Oracle Installer. They are automatically installed when other

products are selected for installation.

**3** Set or verify that the Oracle\_SID is set correctly.

#### Install Oracle 9.2.0.2 Patch Set

After the Oracle9i products have been installed, you must install Oracle patch set version 9.2.0.2. You can find the patch set on the Oracle Web site at: <u>http://www.oracle.com/support/metalink/index.html</u>

### Apply Oracle Patch 2901676 (9.2.0.2.1 Patch 3)

After the 9.2.0.2 patch set has been installed, install Oracle 9.2.0.2.1 patch 3 with (patch number 2901676).

#### Create listener.ora and tnsnames.ora Files

Change to the <drive>:\\$ORACLE\_HOME\network\admin directory and create the listener.ora and the tnsnames.ora files. The following are samples of these two files:

### The tnsnames.ora File

```
# TNSNAMES.ORA Configuration File
# Oracle Server and Client Server

# TNSNAMES.ORA Configuration File
# Oracle Server and Client Server

# TNSNAMES.ORA Configuration File
# Oracle Server and Client Server
```

### The listener.ora File

### Start the Oracle Listener

On the Oracle Server, open a Command Prompt and start the listener by entering:

IsnrctI LSNRCTL> start

**Note** Ensure that listener.ora and tnsnames.ora files are correctly setup.

#### **Execute Oracle Loopback Test on the Oracle Server**

Verify that the internal Oracle networking is active and functional, by entering a sqlplus command in this format:

sqlplus <user>\<password>@<GLOBAL\_DBNAME from tnsnames.ora file>

For example, you might enter:

## sqlplus system\manager@Michigan\_IDB.world

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

# Configure the FileNet Image Services (Client) Server

The remote Oracle server has been successfully configured, and now you're ready to configure the FileNet Image Services (client) server.

You can use the procedures in this section to configure either:

- an Image Services Combined server or Root/Index server or
- an Image Services Application Server with WorkFlo Queue Services, SQL Services, or VWServices.
- Note Be sure to configure the Combined or Root/Index server first.

When adding an Application server to the configuration, use the same ORACLE\_SID (For example, **IDB**) and ORACLE\_UID (For example, **oracle**) as the Combined or Root/Index server.

### Install Oracle 9.2 Client Software

- 1 If you aren't already, logon as Windows Administrator.
- 2 Load the **Oracle 9.2** CD-ROM into the CD-ROM drive.

The Oracle9i Autorun screen appears.

**Note** There are two versions of the Oracle9i software on CD-ROM: Oracle9i Enterprise Edition and Oracle9i Standard Edition. The installation instructions in this appendix refer to the Enterprise Edition. If you are installing the Standard Edition, some text may be slightly different.

- **3** When you get to the Available Products screen, select *Oracle9i Client* 9.2.
- 4 At the Installation Types screen, select the *Custom* option.
- **5** When you get to the Available Product Components screen, make sure that only the Oracle products checked below are installed.

Uncheck any other products that may already be checked by default.

- ✔ Oracle 9i Client 9.2.0.1.0
  - ✔ Oracle Network Utilities 9.2.0.1.0
  - ✓ Oracle Database Utilities 9.2.0.1.0
  - ✓ SQL\*PLUS 9.2.0.1.0

After selecting the products, click Next.

- 6 Respond to the subsequent prompts as appropriate for your site.
- **7** When the oracle install finishes, the Net Configuration Assistant screen appears.
- 8 In the Net Configuration Assistant screen, click *Cancel* and then Yes to confirm.

- 9 If an error message appears, ignore it and click *OK*.
- **10** Click *Next* to continue.
- 11 When the software installation is complete, click *Exit*.

The installation of the Oracle 9.2 software is complete. Remove the Oracle9i CD from the CD-ROM drive.

#### Ensure the Remote Environment is Setup Correctly

Make sure that the following are setup correctly on your system.

- Ensure that the local variable is setup correctly in the system environment. (Michigan\_IDB.world, for example).
- Ensure that ORACLE\_HOME is set up correctly in the Registry.
- Verify that the NLS\_LANG parameter is set to the appropriate value (AMERICAN\_AMERICA.WE8ISO8859P1, for example) for your locale.
- Check the values of the NLS\_TERRITORY (America, for example) and NLS\_CHARACTERSET (US7ASCII, for example) parameters.

# Copy the tnsnames.ora file onto the FileNet (Client) Server

Copy the **tnsnames.ora** file from the **<drive>:\<oracle home direc-tory>\network\admin** directory on the Oracle server to the **same** directory on the FileNet IS (Client) server. This ensures that the two tnsnames.ora files are identical on both servers.

**Note** The tnsnames.ora file on the Oracle server may describe more than one listener process if more than one independent FileNet Image Services system is configured to access the same Oracle server.

The tnsnames.ora file on the Image Services (client) server should describe only one listener process.

On an Application server, the tnsnames.ora file should be identical to the tnsnames.ora file on the Combined or Root/Index server. That is, it should describe only one listener process.

### Test Oracle Networking on the FileNet IS (Client) Server

Oracle Networking has already been configured and tested on the Oracle server.

**1** Test the Oracle Client's ability to access the database on the remote Oracle server by entering the following command:

## tnsping <GLOBAL\_DBNAME>

where <GLOBAL\_DBNAME> is the global database name used in the tnsnames.ora and listener.ora files. For example: Michigan\_IDB.world. This verifies that the tnsnames file on the IS server can communicate successfully with the listener.ora file on the Oracle server.

2 To verify that you can access the Oracle database from the Image Services server, enter an sqlplus command in the following format:

sqlplus <user/password>@<GLOBAL\_DBNAME>

where the user and password are the ones the Database Administrator set up earlier. For example:

## sqlplus system\manager@Michigan\_IDB.world

You should now be logged on to the Oracle server with no errors.

# **Test the Local Environment Setting**

**1** To verify the local environmental settings, enter a sqlplus command in the following format:

sqlplus <user/password>

For example:

### sqlplus system/manager

You should now be logged on to the Oracle server via NET 8 and the LOCAL environment setting, the same as the IS software will be.

**2** Exit from sqlplus.

# Report to Sys Admin and FileNet TC

The new Oracle server has been successfully installed and configured, and the server on which you plan to install Image Services software has been configured as an Oracle client.

Please return the following information to the System Administrator and the FileNet Technical Consultant or ValueNET Partner.

### Set ORACLE\_SID

When you set the \$ORACLE\_SID, write it in the space below:

#### \$ORACLE\_SID: \_\_\_\_\_

(instance identifier) (e.g., IDB)

### Name Oracle Database Administration Group

When you create the users and groups for administering the RDBMS databases, write down the name of the group that will be used for database administration. Later, the FileNet user **fnsw** must be made a member of this group.

#### Name of DBA Group:

(for database administration)

(e.g., dba)

#### **Tablespace Names**

Make sure the tablespaces are set up as shown:

FileNet Guidelines for File	Net-Used Tablespaces
-----------------------------	----------------------

FileNet Recommended Tablespace Names *	Tablespace Names You Actually Assign	Minimum Tablespace Size (MB)	Tablespace Size (MB) You Actually Create
fnsys_ts		200	
fntmp_ts		400	
fnusr_ts (optional for eProcess)		200	

fnsys\_ts is the name of the dedicated FileNet default tablespace. fntmp\_ts is the name of the dedicated FileNet temporary tablespace.

**fnusr\_ts** is the name of the optional user tablespace for eProcess. If your IS system will not be using these FileNet products, you do not need to create this tablespace.

# Install Image Services

After the Oracle software has been successfully installed, the FileNet Technical Consultant or ValueNet Partner can now install the Image Services software on the client server. These procedures are found in chapter 3 of the <u>IS Installation and Configuration Procedures for</u> <u>Windows Server, Release 4.0.0</u>.

# **Remote Microsoft SQL Server RDBMS Guidelines**

If you have a **Remote SQL Server** database, the Database Administrator needs to perform the procedures in the following sections.

# **Configure the Remote Microsoft SQL Server**

After the new server has been set up with the appropriate version of the Windows operating system and has been connected to the network, you can begin installing and configuring the SQL Server software.

### **Shutdown All Applications**

Before installing Microsoft SQL Server 2000 software, make sure that any SQL server-related applications are shut down. This is especially important, if you have any applications running that are using ODBC drivers. If these applications are left running, they may cause installation errors.

### Installing Remote Microsoft SQL Server 2000 Software

In this section you will install the Microsoft SQL Server software. For instructions on doing this, refer to the Microsoft web site at: <u>http://msdn.microsoft.com/library/default.asp?ShowPane=false&URL=/library/psdk/sql/getstart\_4fht.htm</u>.

Note Certain SQL Server information will need to be entered during the installation procedure. Refer to the table in the section <u>"Additional</u> Information (Microsoft SQL Server ONLY)" on page 15 for this information.

As you install the SQL Server software, use the following guidelines:

- When the Installation Definition dialog box appears, select the *Server and Client Tools* option.
- When the Instance Name dialog box appears, clear the Default checkbox and enter an Instance name, such as INSTANCE1, PAY-ROLL, CLAIMS, etc.
- **Note** Named instances are recommended. In addition, the instance name you specify must be different from any other SQL instance that may already be defined on this server.
  - When the Authentication Mode dialog box appears, select either Mixed Mode or Windows Authentication. In this release, **both modes** are supported.
- **Note** If you want to use SQL Server Authentication you must add the SA password to the MSSQL\_SA\_PW Environment Variable.
  - When the Collation Settings dialog box appears:
    - a Select the Collation Designator radio button.
    - b In the Collation designator drop-down list box, select the appropriate designator, such as *Latin1\_General*.
    - c Select the checkbox for the appropriate Sort order, such as *Binary.*

#### **Reboot the Server**

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

1 Make sure that all applications and windows have been closed.

**2** Reboot the server.

### Verify the File Names and Filegroups

Ensure the File Names and Filegroups have been setup properly.

Refer to the SQL installation documentation to create the Site Database. You can find these instructions at the Microsoft web site at: <u>http://msdn.microsoft.com/library/default.asp?Show-</u> Pane=false&URL=/library/psdk/sql/getstart\_4fht.htm

atabase Properties - Site DB					
General Data	Files   Transac	tion Log			
Database files					
File Name	Loca	ation	Initial si	Filegroup	
Site DB_Data		S:\mssql8\MSSQL\data\	200	PRIMARY	
fn_data		S:\mssql8\MSSQL\data\	200	fnsys_fg	

# Configure the FileNet Image Services (Client) Server

After the remote SQL database server has been successfully configured, you're ready to install the Microsoft SQL database software on the FileNet Image Services (client) server.

You can use the procedures in this section to configure either:

• an Image Services Combined server or Root/Index server or

- an Image Services Application Server with WorkFlo Queue Services, SQL Services, or VWServices.
- Note Be sure to configure the Combined or Root/Index server first.

#### Installing Remote Microsoft SQL Server 2000 Software

In this section you will install the Microsoft SQL Server software. For instructions on doing this, refer to the Microsoft web site at: <u>http://</u>msdn.microsoft.com/library/default.asp?ShowPane=false&URL=/ library/psdk/sql/getstart\_4fht.htm.

NoteCertain SQL Server information will need to be entered during the<br/>installation procedure. Refer to the table in the section <u>"Additional</u><br/>Information (Microsoft SQL Server ONLY)" on page 15 for this<br/>information.

# Test SQL Networking on the FileNet IS (Client) Server

- 1 Verify that the SQL networking is active and functional by entering the appropriate isql command.
  - With Windows Authentication, enter the isql command in the following format:

isql -E -S <server\instance> -d Indexdb

For example:

### isql -E -S Maui\payroll -d indexdb

• With SQL Server Authentication, enter the isql command in the following format: isql -U sa -P <password> -S <server\instance> -d indexdb

For example:

isql -U sa -P aloha -S Maui\payroll -d indexdb

2 If the commands were successful, the select prompt will appear.

# Install Image Services 4.0.0 Software

After the Microsoft SQL Server software has been successfully installed, the FileNet Technical Consultant or ValueNet Partner can continue with the Image Services installation in chapter 3 of the <u>IS</u> <u>Installation and Configuration Procedures for Windows Server,</u> <u>Release 4.0.0</u>.

5

# **Updating RDBMS Software**

This chapter contains guidelines for updating a Site-controlled Oracle or Microsoft SQL Server database.

If you server has a FileNet-controlled Oracle or Microsoft SQL Server database, use the procedures in chapter 3 of the *Image Services Update Procedure for Windows Server, Release 4.0.0.* 

Because the FileNet Image Services software requires certain RDBMS products to be installed, the DBA needs to follow these guidelines.

To update a site-controlled Oracle RDBMS, continue to the section below. To update a site-controlled Microsoft SQL Server RDBMS, skip to the section, <u>"Guidelines for Updating a Site-Controlled</u> Microsoft SQL Server RDBMS" on page 61.

# **Guidelines for Updating a Site-Controlled Oracle RDBMS**

If you have a site-controlled Oracle database, the Database Administrator needs to perform the following steps.

# Install Oracle9*i* Products

- To install Oracle9i Server software on a FileNet Image Services server or an independent (remote) Oracle server accessed by FileNet Image Services, continue to the next section, <u>"Oracle</u> <u>Server"</u>.
- To install Oracle 9i Client software on a FileNet Image Services server used to access a remote server, skip to the section, <u>"Oracle</u> <u>Client" on page 58</u>.

### **Oracle Server**

Follow the steps in this section to install Oracle9i server software.

- **Note** If you are updating an Image services system that accesses a remote Oracle database server, you do not need to update the Oracle software or datasets on the remote server. Just update the Oracle client software on the Image Services server to Oracle9i.
  - 1 As the Oracle user, make sure the first Oracle9*i* Enterprise Release 2 CD-ROM is loaded and launch the Oracle Universal Installer.
  - 2 Ensure that, at a minimum, the following Oracle9*i* products, with checkmarks, are installed.
    - ✓ Oracle 9i Database 9.2.0.1.0
       ✓ Oracle 9i 9.2.0.1.0

Enterprise Edition Options 9.2.0.1.0 Oracle Advanced Security 9.2.0.0.0 Oracle Partitioning 9.2.0.1.0 Oracle Spatial 9.2.0.1.0 Oracle Label Security 9.2.0.1.0 Oracle OLAP 9.2.0.1.0 Oracle Data Mining 9.2.0.1.0 Oracle COM Automation Feature 9.2.0.1.0 ✓ Oracle Net Services 9.2.0.1.0 ✓ Oracle Net Listener 9.2.0.1.0 Oracle Connection Manager 9.2.0.1.0 Oracle Names 9.2.0.1.0 Oracle Enterprise Manager Products 9.2.0.1.0 ✓ Oracle9i Development Kit 9.2.0.1.0 Oracle C++ Call Interface 9.2.0.1.0 ✓ Oracle Call Interface (OCI) 9.2.0.1.0 Oracle Objects for OLE 9.2.0.4.4 Oracle ODBC Driver 9.2.0.1.0 Oracle Provider for OLE DB 9.2.0.1.0 Oracle Programmer 9.2.0.1.0 Oracle XML Developer's Kit 9.2.0.0.0 (To remove the check from the Oracle XML Developer's Kit option, you need to remove the check from the Oracle HTTP Server option first.) Oracle9i Windows Documentation 9.2.0.1.0 Oracle HTTP Server 9.2.0.1.0 Oracle Windows Interfaces 9.2.0.1.0

Oracle Transparent Gateways 9.2.0.1.0

iSQL\*Plus 9.2.0.1.0

Oracle JDBC/OCI Interfaces 9.2.0.1.0

**Note** Some of the Oracle products listed above are not separately selected in the Oracle Installer. They are automatically installed when other products are selected for installation.

### **Run Upgrade Scripts**

Prior to installing Oracle patch set 9.2.0.2 you must run the oracle upgrade scripts.

**CAUTION** It is imperative that the upgrade scripts be run at this time to prevent database corruption.

### Install Oracle 9.2.0.2 Patch Set

After the Oracle9i products have been installed, you must install Oracle patch set version 9.2.0.2. You can find the patch set on the Oracle Web site at: <u>http://www.oracle.com/support/metalink/index.html</u>

## Apply Oracle Patch 2901676 (9.2.0.2.1 Patch 3)

After the 9.2.0.2 patch set has been installed, install Oracle 9.2.0.2.1 patch 3 with (patch number 2901676).

If you are updating a **remote** Oracle system, continue to the next section, <u>"Oracle Client"</u> to install Oracle 9i Client software on the FileNet Image Services server.

If you are **not** updating a remote Oracle System, skip to the section, "Report to Sys Admin and FileNet TC" on page 59.

# **Oracle Client**

Follow these steps to install Oracle 9*i* Client software:

- 1 As the Oracle user, make sure the Oracle9*i* Enterprise Release 2 CD-ROM is loaded and launch the Oracle Universal Installer.
- 2 When you get to the Available Products screen, select *Oracle9i Client 9.2.0.1.0*.
- 3 At the Installation Types screen, select the *Custom* option. Click *OK*.
- 4 When you get to the Available Product Components screen, make sure that, at a minimum, the Oracle products checked below are installed.

Uncheck any other products that may already be checked by default.

- ✓ Oracle 9*i* Client 9.2.0.1.0
   Oracle Enterprise Manager Products 9.2.0.1.0
   Enterprise Manager Client 9.2.0.1.0
   Oracle Change Management Pack
   Oracle Diagnostics Pack 9.2.0.1.0
   Oracle Tuning Pack 9.2.0.1.0
   Oracle Management Pack for Oracle Applications 9.2.0.1.0
   Oracle Management Pack for Oracle Standard Edition 9.2.0.1.0
  - ✔ Oracle Network Utilities 9.2.0.1.0
  - ✔ Oracle Database Utilities 9.2.0.1.0
  - ✓ SQL\*Plus 9.2.0.1.0 Oracle JDBC/OCI Interfaces 9.2.0.1.0 Oracle Internet Directory Client 9.2.0.1.0 Oracle Programmer 9.2.0.1.0 Oracle XML Developers Kit 9.2.0.1.0 Oracle9*i* for Windows Documentation 9.2.0.1.0

✓ Oracle Universal Installer 2.2.0.12.0 Oracle Advanced Security 9.2.0.1.0

After selecting the products, click Next.

- **5** Respond to the subsequent prompts as appropriate for your site.
- 6 When the Oracle 9*i* Server software has been installed successfully, continue to the next section, <u>"Report to Sys Admin and FileNet TC"</u>

# **Report to Sys Admin and FileNet TC**

Please provide the information below to the System Administrator and the FileNet Technical Consultant or ValueNET Partner.

# ORACLE\_SID

Ensure that the ORACLE\_SID is known, written in the space below, and set correctly.

Site-Controlled ORACLE_SID:_	
(instance identifier)	(e.g., IDB)

## Name Oracle Database Administration Group

Write down the name of the group that will be used for database administration. Later, the FileNet user **fnsw** must be made a member of this group.

### Name of DBA Group:

(for database administration)

(e.g., dba)

# **Update Image Services**

After the Oracle software has been successfully updated, the FileNet Technical Consultant or ValueNet Partner can continue with the Image Services update in chapter 4 of the <u>Image Services Update Proce-</u> dures for Windows Server, Release 4.0.0.

# Guidelines for Updating a Site-Controlled Microsoft SQL Server RDBMS

If your SQL Server RDBMS is Site-controlled, the Database Administrator needs to perform the following steps.

# **Minimum Microsoft SQL Server Components**

Ensure that, at a minimum, the following SQL Server components are installed.

SQL Server Component	Version Number
Server Components	Microsoft SQL Server 2000
Management Tools	Microsoft SQL Server 2000
Client Connectivity	Microsoft SQL Server 2000
Books Online (optional)	Microsoft SQL Server 2000

# **File Group Names**

Make sure there are file group names set up as shown in the table below.

#### FileNet Guidelines for Site-Controlled/FileNet-Used File Groups

FileNet Equivalent/Default File Group Names	Site-Controlled File Group Names	Minimum File Group Size (MB)	Site-Controlled File Group Size (MB)
fnsys_fg		200	
fnusr_fg		200	

\*Required for full-use RDBMS

fnsys\_fg is the name of the dedicated FileNet default file group. fnusr\_fg is the name of the user file group.

# **Notify System Users**

Notify system users that during the Image Services update the Microsoft SQL Server software will be shut down several times.

# **Report to Sys Admin and FileNet TC**

Please provide the information above to the System Administrator and the FileNet Technical Consultant or ValueNET Partner.

# **Update Image Services**

After the Microsoft SQL Server software has been successfully updated, the FileNet Technical Consultant or ValueNet Partner can continue with the Image Services update in chapter 4 of the <u>Image</u> <u>Services Update Procedures for Windows Server, Release 4.0.0.</u>