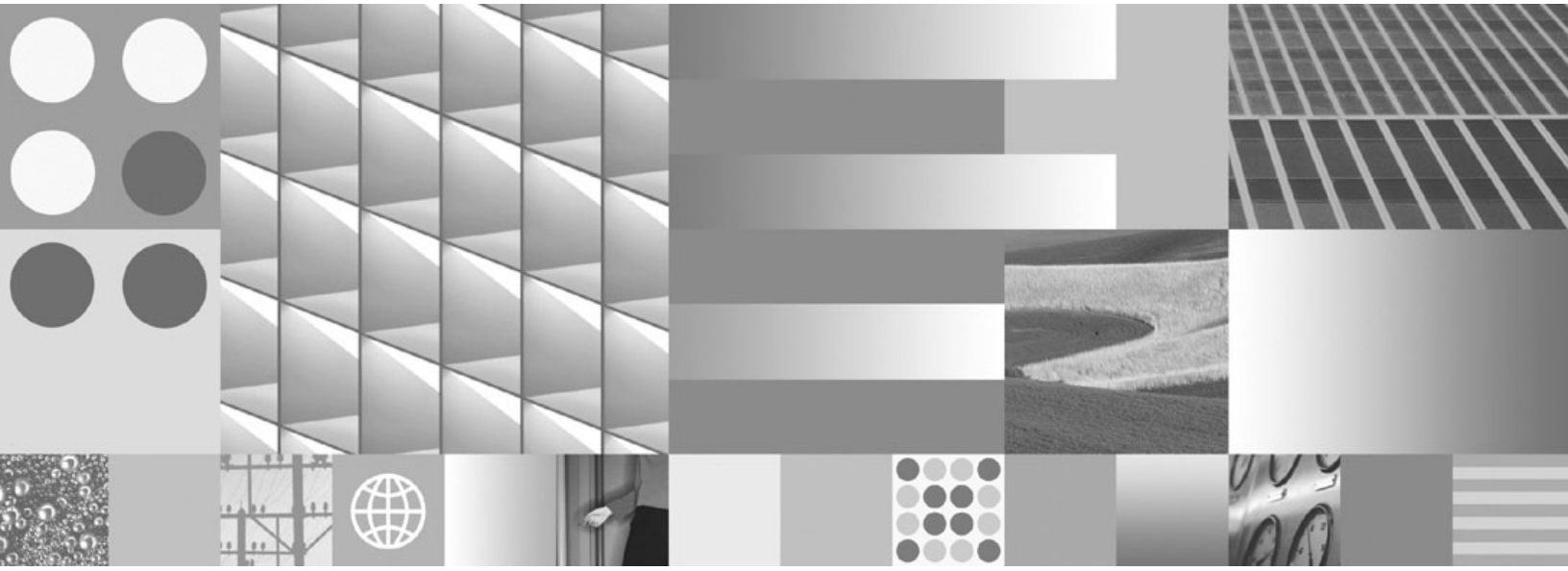
IBM FileNet Image Services

4.1.2

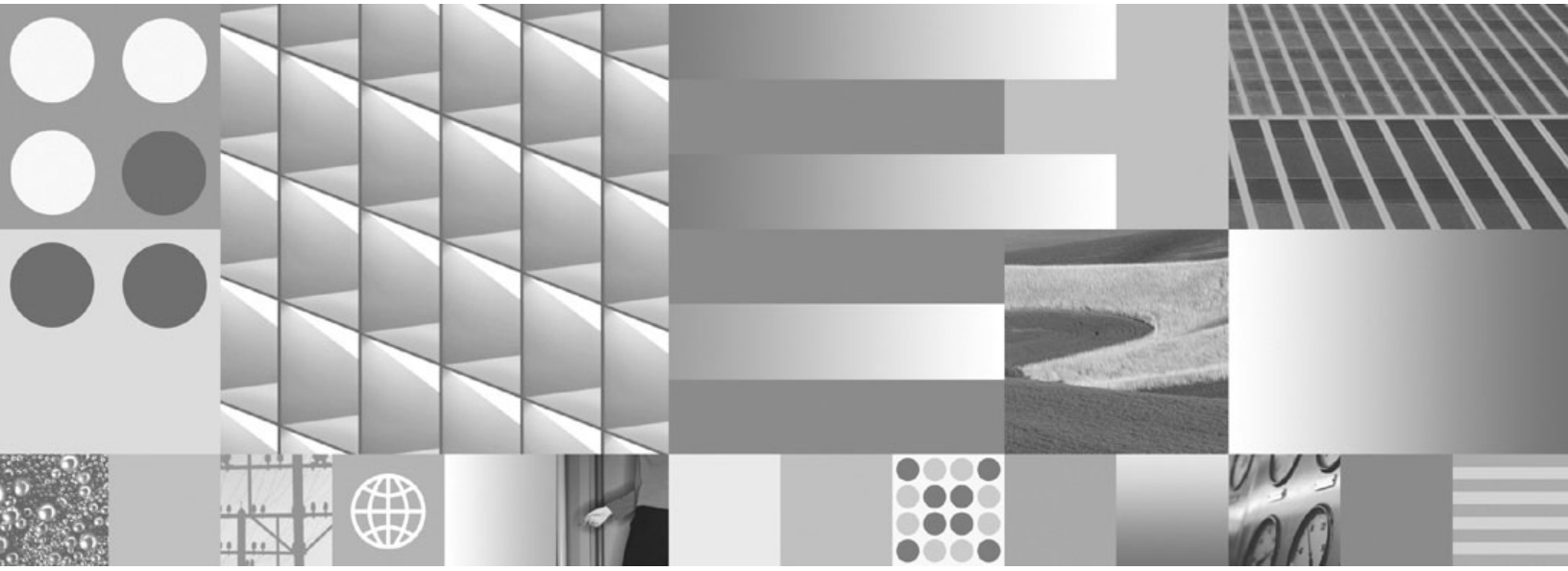


Index and WorkFlo Database Contents

SC19-2679-00

IBM FileNet Image Services

4.1.2



Index and WorkFlo Database Contents

SC19-2679-00

Note
Before using this information and the product it supports, read the information in "Notices" on page 113.

This edition applies to version 4.1.2 of IBM FileNet Image Services (product number 5724-R95) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Manual

This *Index and WorkFlo Database Contents* manual provides system administrators and other interested users with a description of the structure and contents of the FileNet index and WorkFlo databases.

Structured Query Language (SQL) is a standardized database query language. You must be familiar with SQL to use certain Oracle server manager functions. For more information there are many books available on SQL.

Transact-SQL is Microsoft's enhanced version of SQL for Microsoft® SQL Server™. Microsoft SQL Server is a relational database management system (RDBMS). If you are not familiar with Transact-SQL and the related tools for Microsoft SQL Server, see Microsoft's *Transact-SQL Reference* and *Microsoft SQL Server Administrator's Companion*.

We assume you are familiar with FileNet system operations and terminology as described in the following documentation:

- *IDM Desktop User's Help*
- *Image Services System Administrator's Handbook*

Document revision history

IS version	Date	Comment
4.1.2	Nov. 2008	Initial release.

Manual content

This manual contains the information you need to work with the data stored by FileNet® applications in an Oracle®, Microsoft® SQL Server, or IBM® DB2® RDBMS. The manual organization is described below.

Chapter 1, “Introduction,” on page 18 provides an overview of the FileNet index and WorkFlo databases, discusses the access permitted by each type of RDBMS license, and describes restrictions for accessing the FileNet database tables.

Chapter 2, “Working with Oracle,” on page 20 explains how to list Oracle database information using SQL and WQS_tool. This chapter also explains how to use the dclview tool to create a more user-friendly view of document index values, how to find the maximum length of string fields, and how to work with dates.

Chapter 3, “Working with Microsoft SQL Server,” on page 39 explains how to list Microsoft SQL Server database information using WQS_tool. This chapter also explains how to use the dclview tool to create a more user-friendly view of document index values and how to find the maximum length of string fields.

Chapter 4, “Working with DB2,” on page 55 explains how to access DB2 database information and work with tables. This chapter also explains how to use the dclview tool to create a more user-friendly

view of document index values, how to find the maximum length of string fields, and how to work with dates.

Chapter 5, "Table Descriptions," on page 74 contains detailed information on each FileNet-defined table in an index database.

Relational database support

Image Services supports IBM DB2, Oracle, and MSSQL relational databases. For information on the specific versions of the relational database software supported in this Image Services release, see the *IBM FileNet Image Services, IBM FileNet Image Services Resource Adapter, and IBM FileNet Print Hardware and Software Requirements* document. To download IBM FileNet documentation from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 15**

IBM DB2

All DB2 databases are site-controlled and must reside on remote AIX® servers or Solaris servers. Image Services on the Solaris server accesses the remote DB2 database by using DB2 client software installed on the IS server.

See *Guidelines for Installing and Configuring DB2 Software* for more information. To download IBM FileNet documentation from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 15**

Oracle

Oracle relational databases can be installed locally on the IS Root/ Index server, on an IS Application server, or on a remote database server. All new installations of Oracle are site-controlled.

See *Guidelines for Installing and Updating Site-Controlled Oracle Software on UNIX Servers* for more information. To download IBM FileNet documentation from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 15**.

MS SQL Server

Image Services software supports Microsoft SQL Server. MS SQL relational databases are supported only on Windows servers. Database tables are read-only accessible through PC WorkFlo or Microsoft SQL Server tools.

See *Guidelines for Installing and Updating RDBMS Software on Windows Servers* for more information. To download IBM FileNet documentation from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 15**.

Conventions used in this manual

The following paragraphs discuss the ways in which we call your attention to information throughout this document.

RDBMS Differences

To reduce redundancy, Oracle, Microsoft SQL Server and DB2 are frequently discussed in the same paragraphs. Oracle and DB2 informa-

tion is generally referred to first, followed by Microsoft SQL Server. For example:

> Table names beginning with WQM (Oracle/DB2) or wqm (Microsoft SQL Server) are WorkFlo queues.

File Paths

Since this manual is used for all platforms, examples of file path designations, where used, are given for both UNIX® and Windows® Server platforms.

Typing Instructions

To indicate commands, values, or other information you enter at your keyboard, we use the following indentation and typeface:

> **WQS_tool**

If the command is too long for the line, but you must type it continuously with no carriage returns, we use the following style:

> **select owner, table_name from all_tables where owner='F_SW' or owner='F_SQI';**

Command Syntax

Command syntax definitions are indented:

> DESCQUE <workspace> <queue name>

Optional parameters and keywords are within square brackets:

dclview [–c] <docclass1name> [<docclass2 docclass3 ...>]

Values you must specify are within angle brackets (< >). For example, for the following command:

DESCQUE <workspace> <queue name>

you must substitute the name of a command for the first field in angle brackets and a WQS queue name for the second field in angle brackets. For example:

DESCQUE workQs Dist1

Cautions, Notes, and Tips

Three message types call your attention to important information:

CAUTION	Signals possible damaging consequences of an action, such as loss of data or time.
Note	Draws your attention to essential information you should be sure to read.
Tip	Introduces an idea that might make your work easier.

Accessing IBM FileNet Documentation

To access documentation for IBM FileNet 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 category” list.

3. On the Product Support page, click **Documentation** and then click **Product Documentation**.

4. On the Product Documentation page, locate the document you need, then click the icon in the appropriate release column to access the document.

IBM FileNet Education

IBM provides various forms of education. Please visit the IBM Information Management support page at (**www.ibm.com/software/data/support**).

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 **comments@us.ibm.com**. 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**. 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 takes approximately 30 minutes to complete and must be completed in a single session; there is no option to save a partially completed response.

1
Introduction

The Image Services software stores much of your data in an RDBMS database called the index database. The index database stores:

- Document index values, index field definitions, and document class definitions
- An audit trail showing each time index cataloging is turned on or off for any document class
- Menu and validation tables
- Folder definitions, and folder contents
- WorkFlo queues

On a WorkFlo Queue server, an RDBMS database stores additional WorkFlo queues.

An RDBMS database consists of a set of tables, some of which are interrelated, and a set of rules for making insertions, updates, and deletions. Each table stores data related to a set of similar entities, and the columns of a table describe the attributes of the entity.

Note The database table ID used by index and WorkFlo Queue services is F_SW (Oracle) or f_sw (Microsoft SQL Server). The database table ID used by eProcess is F_SQI (Oracle) or f_sqi (Microsoft SQL Server). These IDs, used by the FileNet software to log on to the RDBMS, are the owners of the tables.

You can access an RDBMS database using Oracle or Microsoft SQL Server. On UNIX platforms, you can use Oracle and on Windows Server you can use either Oracle or Microsoft SQL Server.

CAUTION Your access to the FileNet database tables is read-only to preserve the integrity of the database. The FileNet database tables must not be altered using tools other than FileNet software. Any modification by non-FileNet software could violate your support agreement and result in time and materials charges for repair of the database.

Note An existing customer database can be incorporated into a FileNet database and a FileNet database can be incorporated into an existing customer database.

2
Working with Oracle

This chapter explains:

- How to use SQL select and describe statements and WQS_tool to find the index table and column names for use in queries (we assume that you know SQL)
- How to save WQS_tool output to a file
- How to use dclview to create views, which give you a more user-friendly view of document index values
- How to use WorkFlo queue views, which are created for you automatically
- How to work with dates and times stored in the database as numbers
- How to find the size of a field

Using SQL*Plus

If you have an Oracle license, you can use SQL*Plus to send SQL select and describe statements to Oracle.

Logging On

To log onto SQL*Plus:

1. Log on to the appropriate server.
2. Enter:

   sqlplus

3. Enter the username:

   f_operator

   The f_operator username has read-only privileges.

4. Enter the password:

   f_operator

   You see this prompt:

   SQL>

   You can now enter SQL*Plus commands.

Changing the Password

To change the f_operator password:

1. Log onto SQL*Plus.
2. Enter this command, substituting the new password for <password>:

   alter user f_operator identified by <password>;

Listing Tables

A set of standard FileNet tables always exists in the index database. Table names beginning with WQM are WorkFlo queues. See **Chapter 5, “Table Descriptions,” on page 74**. To list the names of all FileNet-created tables in an index database, enter this SQL command on the Index server:

select owner, table_name from all_tables where owner=‘F_SW’ or owner=‘F_SQI’;

This statement produces a list similar to the following (on a WorkFlo Queue server, this statement lists only WorkFlo queues):

```
SQL>select owner, table_name from all_tables where
owner='F_SW' or owner='F_SQI';

OWNER                          TABLE_NAME
------------------------------ ------------------------
F_SW                           SYS_NUMBERS
F_SW                           USER_INDEX
F_SW                           INDEX_CLUSTER
F_SW                           DOCUMENT_CLASS
F_SW                           DOC_CLASS_INDEX
F_SW                           DOCTABA
F_SW                           FOLDER
F_SW                           FOLDER_CONTENTS
F_SW                           FOLDER_TABS
F_SW                           NO_CAT_AUDIT
F_SW                           MENU
OWNER                          TABLE_NAME
------------------------------ ------------------------
F_SW                           MENU_ITEMS
F_SW                           VALIDATION_TAB
F_SW                           VALIDATION_TAB_ITEMS
F_SW                           WQS_IDSEED
F_SW                           WQS_WORKSPACES
F_SW                           WQS_QUEUES
F_SW                           WQS_FIELDS
18 rows selected.
```

All tables are owned by F_SW. To list the tables in the index database, enter this SQL command:

select owner, table_name from all_tables where owner='F_SW';

Listing the Columns of a Table

Users logged in as f_operator or f_cso could list the FileNet tables explicitly. Users logged in as f_maint can use sys.dbc_tab_columns.

To list a table's columns, enter an SQL select statement.

select column_name from all_tab_columns where table_name='<table>';

Replace <table> with the table name using uppercase letters.

When you use a select statement to list the columns of the doctaba table, you see something like this:

```
SQL>select column_name from all_tab_columns where table_ name='DOCTABA';

COLUMN_NAME
------------------------------
A32
F_DOCNUMBER
F_DOCCLASSNUMBER
F_ENTRYDATE
F_LASTACCESS
F_ANNOTATIONFLAG
F_ARCHIVEDATE
F_PURGEDATE
F_DELETEDATE
F_RETENTBASE
F_RETENTDISP

COLUMN_NAME
------------------------------
F_RETENTOFFSET
F_PAGES
F_SECURITYSPEC
F_ACCESSRIGHTS
F_DOCTYPE
F_STATUS
A31
18 rows selected.
```

If you have an Oracle license, you can list the columns of a table with an SQL describe statement in this format:

describe <table name>

Replace <table name> with the name of the desired table. For example, to list information for doctaba, enter this statement:

describe DOCTABA

This describe statement lists the name of each column in the table, whether the column requires a value (not null), and the column type.

For example:

```
SQL>describe DOCTABA
Name                           Null?       Type
-----------------------------  ----------  -----
F_DOCNUMBER                    NOT NULL     NUMBER(10)
F_DOCCLASSNUMBER               NOT NULL     NUMBER(5)
F_ENTRYDATE                    NOT NULL     NUMBER(10)
F_LASTACCESS                                NUMBER(10)
F_ANNOTATIONFLAG                            VARCHAR2(1)
F_ARCHIVEDATE                               NUMBER(10)
F_PURGEDATE                                 NUMBER(10)
F_DELETEDATE                                NUMBER(10)
F_RETENTBASE                                VARCHAR2(1)
F_RETENTDISP                                VARCHAR2(1)
F_RETENTOFFSET                              NUMBER(5)
F_PAGES                                     NUMBER(5)
F_SECURITYSPEC                              VARCHAR2(12)
F_ACCESSRIGHTS                              VARCHAR2(12)
F_DOCTYPE                                   VARCHAR2(1)
F_STATUS                                    NUMBER(5)
A31                                         VARCHAR2(239)
A32                                         NUMBER
A33                                         VARCHAR2(239)
A34                                         VARCHAR2(14)
```

Viewing User Index Names

In doctaba, the user-defined indexes are named A31, A32, and so on. To view numbered column names as the actual index names, enter:

select f_columnname, f_indexname from user_index;

This statement produces a list similar to the one shown below. It maps the doctaba column names A31, A32, and so on, to the user-defined index names stored in the user_index table.

```
SQL>select f_columnname, f_indexname from user_index;

F_COL F_INDEXNAME
----- ------------------
      F_DOCNUMBER
      F_DOCCLASSNUMBER
      F_ARCHIVEDATE
      F_PURGEDATE
      F_DELETEDATE
      F_ENTRYDATE
      F_LASTACCESS
      F_RETENTOFFSET
      F_PAGES
      F_DOCTYPE
      F_RETENTBASE

F_COL F_INDEXNAME
----- ------------------
      F_RETENTDISP
      F_ACCESSRIGHTS
a31   test1
a32   test2

15 rows selected.
```

Managing WorkFlo Queues

A WQS_tool table report gives you the names of the workspaces and queues on the server, including the server ID and table ID that relate to the queue name. The name format is **WQMsssQnnnnnn**, where **sss** is the server ID and **nnnnnn** is the table ID. For example, the table name of the Charlotte queue in the report below is **WQM001Q001011**.

For queues created under IMS version 3.0.3 or earlier, the name format is **WQM1nnnnn**, where **nnnnn** is the table ID listed in the report. A queue's name does not change. For example, the ApplDistQ in the report below was created under version 3.0.3, so its table name is **WQM101001**.

To enter the WQS_tool utility for managing WorkFlo queues, enter the following command at the operating system prompt:

WQS_tool

To list the workspaces, queue names, and table IDs, enter:

table * *

This displays a report:

```
<WQS_tool>table * *
Workspace     Queue name     table name    Queue Server
------------  -------------- -----------   -----------
pcwfl         ApplDistQ        01001         WflServer
SomeBank      Fax_In           01007         WflServer
SomeBank      Greensboro       01010         WflServer
SomeBank      DealerRules      01006         WflServer
SomeBank      Charlotte        01011         WflServer
```

Note Enter workspace and queue names instead of *** *** to see reports on specific tables. For example, to see a report on the table in the Charlotte queue, enter:

table SomeBank WQM001Q001011

Mapping Queue Column Names to Field Names

The user-defined column names in a WorkFlo queue table are UF000, UF001, UF002, and so on.

In addition to the queue column names, you need to know:

- The queue field names
- How to map the queue field names to the names you need to enter in an SQL select statement

To map the queue field names to column names, see the table **"Contents of wqs_fields" on page 104**.

To identify the queue field names, use the WQS_tool DESCQUE command in this format:

DESCQUE <workspace> <queue name>

For example, to display the queue field names and the corresponding database column names for the Dist1 queue in the workspace called workQs, enter:

DESCQUE workQs Dist1

This displays a report similar to the following:

```
<WQS_tool>DESCQUE workQs Dist1

Queue:workQs/Dist1   Server: WflServer:corona:FileNet
Table id:01028

    Field          DB Column     Indexed?     Unique?
--------------     ---------     --------     -------
DocumentID            UF000
name                  UF001
```

Saving WQS_tool Commands and Output to a File

Use these statements in WQS_tool to save both your commands and output to a file:

outputfile <filename>
output on

For example, enter:

outputfile /tmp/WQ_info

output on

table * *

This command creates the file /tmp/WQ_info containing the table statement and the output of the table statement. All subsequent statements and output are appended to the output file until you enter this command to stop:

output off

Viewing Tables with spacerpt

By default, the **spacerpt** tool reports on all FileNet tables in the RDBMS database.

By using the –u option with a username, you can restrict the tables that display.

To see all tables, enter:

spacerpt –u f_swr

Creating Views

Use **dclview** to create a view for each document class and a general view of all columns in doctaba. Creating a view consumes very little disk space.

The name of a document class view is F_<document class name>, and the name of the general view is F_DOCTABA. A document class view contains all the FileNet columns and the user columns for the particular document class.

These views translate column names to index names, integer dates to actual dates, and so on. In other words, dclview produces a user-friendly view of the database. You can query on a view using an SQL select statement like you can for any other table.

The syntax for the dclview command is:

dclview [–c] [–g] [–a]<docclass1name> [<docclass2 docclass3 ...>]

The following table describes the options you can use with the dclview command.

Option	Action
–c	Creates a view in the database. Omit the –c option to display the CREATE VIEW statements on the standard output without creating a view.
<doc-class>	Creates a view for one or more specified document classes.
–g	Creates the general view on all columns. Can be combined with <docclass>.
–a	Creates views on the general view and on all document classes.

The dclview program creates public synonyms for each view. The columns of a view are different from the equivalent columns in doctaba in the following ways:

- F_DOCCLASSNUMBER is replaced by F_DOCCLASSNAME
- All date columns, which are integers in doctaba, are converted to actual dates and displayed using the default format DD-MON-YYYY
- F_DOCTYPE displays Image, Text, Form, Mixed, or Other instead of a numeric value
- F_RETENTBASE displays as Closing or Entry instead of a numeric value
- F_RETENTDISP displays as Delete or Archive instead of a numeric value

- F_PAGES displays as 1 instead of NULL for single page documents
- F_ACCESSRIGHTS automatically displays as hexadecimal bytes

User column names are distinguished by case. As a result, whenever you use any column names with lowercase letters, you must surround those letters with double quotes (for example, “abc”).

You can list a view in the same way that you list a table. The described method lists views you created using dclview and views created for you by the FileNet software. To list views, use this select statement:

select owner, view_name from all_views where owner=‘F_SW’;

Creating WorkFlo Queue Tables and Views

Creating a new WorkFlo queue creates both a table and a view on the table. On an existing WorkFlo queue, the software creates the view when a user opens the queue. The name of such a view is:

<workspace>.<queue>

Use the view to refer to a queue table without using the queue ID.

A view on a WorkFlo queue:

- Translates F_PRITIME to two fields, F_PRIORITY and F_ENTRYTIME
- Translates dates from integers to actual dates using the Oracle default date format DD-MON-YYYY

Note F_ENTRYTIME, which is not translated, is the number of seconds from midnight on January 1, 1970.

Determining Maximum String Lengths

String lengths can be helpful in planning the layout of a report. To determine the maximum length of all string fields in doctaba, use this select statement:

select F_INDEXNAME, F_MAXIXSIZE from USER_INDEX where F_INDEXTYPE='2';

Example output:

```
F_INDEXNAME        F_MAXIXSIZE
------------------ -----------
F_DOCTYPE                    1
F_RETENTBASE                 1
F_RETENTDISP                 1
F_ACCESSRIGHTS              12
test1                        3
test2                        2

6 rows selected.
```

To determine the maximum length of a particular string field in doctaba, use this select statement:

select F_MAXIXSIZE from USER_INDEX where F_INDEXNAME='<name>';

Replace <name> with the case-sensitive index name. For index types other than string, F_MAXIXSIZE is always 0, indicating that no maximum exists.

Working with Dates

FileNet software stores a date as an integer. A date is the number of days from the fixed date January 1, 1970. For example, January 4, 1970 is stored as the value 3.

As explained below, you can use dclview to create a view that translates integer dates to actual dates for document records. To query on folder dates or WorkFlo queue dates, however, you need to translate an integer date to an actual date using the **to_date** function as shown in the examples below. Optionally, you can change the output date format using the **to_char** function as well. See the *SQL Language Reference Manual* for more information on dates and functions.

Translating an Integer Date to a Date

In this example, the to_date function translates the document entry date into the default Oracle date format.

select F_DOCNUMBER, to_char(to_date('1/1/1970','mm/dd/yyyy') +F_ENTRYDATE, 'DD/MM/YYYY') "date" from DOCTABA;

The output looks like this:

```
doc#        date
----------- ------------
2100004324  19/05/1997
2100004323  05/03/2001
2100004322  23/01/2001
2100004320  23/01/2001
2100004307  05/01/2001
2100004030  19/12/2000
```

Changing the Date Format

This example produces the same list as the previous example but uses the to_char function to change the output date format and renames the date expression column.

select F_DOCNUMBER “doc#”,to_char(to_date(‘1/1/1970’,’mm/dd/yyyy’)+F_ENTRYDATE,’fmMonth ddth,YyyY’) “date” from DOCTABA;

The output:

```
doc#        date
----------- --------------------
2100004030  December,19th,2000
2100004307  January,5th,2001
2100004320  January,23rd,2001
2100004321  January,23rd,2001
2100004322  January,23rd,2001
2100004323  March,5th,2001
2100004324  May,19th,1997
```

Selecting Documents Based on Dates

This SQL statement selects documents based on dates. Subtracting the fixed date (0) from the desired date (an integer) yields a number of days that matches the data in the database.

select F_DOCNUMBER, F_ENTRYDATE, to_char(to_date('1/1/1970','mm/dd/yyyy')+f_entrydate) from DOCTABA where to_char(to_date('1/1/1970','mm/dd/yyyy')+F_ENTRYDATE =('05-JAN-01');

The output:

```
F_DOCNUMBER F_ENTRYDATE TO_CHAR(TO_DATE('1/1/1970','mm/dd/yyyy')+F_EN...
----------- ----------- ------------------------------------------------
2100004304  11327       05-JAN-01
2100004305  11327       05-JAN-01
2100004306  11327       05-JAN-01
2100004307  11327       05-JAN-01
```

3

Working with Microsoft SQL Server

This chapter explains:

- How to use isql statements and WQS_tool to find the index table and column names for use in queries (We assume that you know isql.)
- How to save WQS_tool output to a file
- How to use dclview to create views, which give you a more user-friendly view of document index values
- How to use WorkFlo queue views, which are created for you automatically
- How to find the size of a field

Using isql

If you use Microsoft SQL Server, you can send isql statements to your RDBMS. Enter isql statements, which are case sensitive, exactly as shown in the examples.

Starting Microsoft ISQL_w

To use isql, choose ISQL_w from the Microsoft SQL Server program group. Enter your name and password in the dialog that appears.

You can now enter isql commands in the Query window. All isql commands must be followed by a **go** command. After you enter a command, click the execute button in the toolbar.

Changing the Password

To change the f_operator password, enter this series of commands:

sp_password “<oldpassword>”,“<newpassword>”

go

Listing Tables

A set of standard FileNet tables always exists in the index database. Table names beginning with wqm are WorkFlo queues. See **Chapter 5, “Table Descriptions,” on page 74**.

To list the names of all FileNet-created tables in the index database, enter this series of commands on the Index server:

use fnsys

go

select user_name(uid), name from sysobjects where type=‘U’ and (uid=user_id(‘f_sw’) or uid=user_id(‘f_sqi’))

go

This select statement produces a list similar to the following (on a WorkFlo Queue server, this statement lists only WorkFlo queues):

```
name
------------------------------ ------------------
 f_sw                           sys_numbers
 f_sw                           user_index
 f_sw                           index_cluster
 f_sw                           document_class
 f_sw                           doc_class_index
 f_sw                           doctaba
 f_sw                           folder
 f_sw                           folder_contents
 f_sw                           folder_tabs
 f_sw                           no_cat_audit
 f_sw                           menu
 f_sw                           menu_items
 f_sw                           validation_tab
 f_sw                          validation_tab_items
 f_sw                           wqs_idseed
 f_sw                           wqs_workspaces
 f_sw                           wqs_queues
 f_sw                           wqs_fields
(19 rows affected)
```

Listing the Columns of a Table

Users logged in as f_operator or f_cso could explicitly list the FileNet tables. Users logged in as f_maint can use sys.dbc_tab_columns. To list a table's columns, enter an isql select statement:

select name from syscolumns where id=object_id('<table>')

Replace <table> with the table name using lowercase letters. When you use a select statement to list the columns of the doctaba table, you see something like the following:

```
name
 ------------------------------
 f_docnumber
 f_docclassnumber
 f_entrydate
 f_lastaccess
 f_annotationflag
 f_archivedate
 f_purgedate
 f_deletedate
 f_retentbase
 f_retentdisp
 f_retentoffset
 f_pages
 f_securityspec
 f_accessrights
 f_doctype
 f_status
 f_docformat
 f_doclocation
 a31
 a32
 a33
 a34
 a35
 a36
(24 rows affected)
```

If you use Microsoft SQL Server, you can list the columns of a table with an isql statement in this format:

sp_help ‘<table>’

Replace <table> with the name of the desired table. For example, to list information for doctaba, enter this series of commands:

sp_help 'f_sw.doctaba'

go

The detailed output lists the name of each column in the table, whether the column requires a value (not null), and the column type.

```
Name          Owner           Type              Data_located_on_segment   When_created
--------      -------------   ----------------  -----------------------   -----------------
doctaba       f_sw            user table        default                   Jan 31 1997 11:12AM

Column_name         Type    Length   Prec  Scale  Nulls  Default_name   Rule_name    Identity
----------------  -------  -------  -----  -----  -----  ------------  ----------    -------

f_docnumber       numeric     6       10     0      0        NULL          NULL          0

f_docclassnumber    int       4      NULL   NULL    0        NULL          NULL          0

f_entrydate         int       4      NULL   NULL    0        NULL          NULL          0

.
.
.
a31               numeric     7      14     5       1        NULL          NULL          0

a32               numeric     8      15     7       1        NULL          NULL          0

a33               numeric     8      16     7       1        NULL          NULL          0

index_name          index_description                index_keys        index_max_rows_per_page
----------          -----------------                ----------        -----------------------

da_docnumber        clustered,                       f_docnumber                 69
                    unique located on default

da_archivedate      nonclustered,                    f_archivedate,              89
                    unique located on default        f_docnumber

da_deletedate       nonclustered                     f_deletedate                87
                    unique located on default        f_docnumber

da_a49              nonclustered                     f_docnumber                 71
                    unique located on default a49
```

Viewing User Index Names

In doctaba, the user-defined indexes are named a31, a32, and so on. To view numbered column names as the actual index names, enter:

```
select f_columnname, f_indexname from f_sw.user_index

go
```

This select statement, which produces a list similar to the one shown below, maps the doctaba column names a41, a42, and so on, to the user-defined index names stored in the user_index table.

```
 f_columnname f_indexname
 ------------ ------------------
 NULL         F_DOCNUMBER
 NULL         F_DOCCLASSNUMBER
 NULL         F_ARCHIVEDATE
 NULL         F_PURGEDATE
 NULL         F_DELETEDATE
 NULL         F_ENTRYDATE
 NULL         F_LASTACCESS
 NULL         F_RETENTOFFSET
 NULL         F_PAGES
 NULL         F_DOCTYPE
 NULL         F_RETENTBASE
 NULL         F_RETENTDISP
 NULL         F_ACCESSRIGHTS
 NULL         F_DOCFORMAT
 NULL         F_DOCLOCATION
 a40          User_index_num
 a41          DVT_num_idx1
 a42          DVT_ascii_idx1
 a43          DVT_date_idx1
 a44          DVT_menu_idx1
 a45          DVT_num_idx2
 a46          DVT_ascii_idx2
 a47          DVT_date_idx2
 a48          DVT_menu_idx2
(24 rows affected)
```

Managing WorkFlo Queues

A WQS_tool table report gives you the names of the workspaces and queues on the server, including the server ID and table ID that relate to the queue name. The name format is **wqmsssqnnnnnn**, where **sss** is the server ID and **nnnnnn** is the table ID. For example, the table name of the Charlotte queue in the report below is **wqm001q001011**.

To enter the WQS_tool utility for managing WorkFlo queues, enter the following command at the operating system prompt:

WQS_tool

To list the workspaces, queue names, and table IDs, enter:

table * *

This displays a report:

Workspace	Queue name	table name	Queue Server
pcwfl	ApplDistQ	01001	WflServer
SomeBank	Fax_In	01007	WflServer
SomeBank	Greensboro	01010	WflServer
SomeBank	DealerRules	01006	WflServer
SomeBank	Charlotte	01011	WflServer

Note Enter workspace and queue names instead of *** *** to see reports on specific tables. For example, to see a report on the table in the Charlotte queue, enter:

table SomeBank wqm001q001011

Mapping Queue Column Names to Field Names

The user-defined column names in a WorkFlo queue table are uf000, uf001, uf002, and so on. In addition to the queue column names, you need to know:

- the queue field names
- how to map the queue field names to the names you need to enter in an isql statement

To map the queue field names to column names, see **"Contents of wqs_fields" on page 104**.

To identify the queue field names, use the WQS_tool DESCQUE command in this format:

DESCQUE <workspace> <queue name>

For example, to display the queue field names and the corresponding database column names for the Dist1 queue in the workspace called workQs, enter:

DESCQUE workQs Dist1

This displays a report similar to the following:

```
Queue:workQs/Dist1 Server: WflServer:corona:FileNet
Table id: 01028

    Field          DB Column     Indexed?     Unique?
--------------     ---------     --------     -------
DocumentID            UF000
name                  UF001
```

Saving WQS_tool Commands and Output to a File

Use these statements in WQS_tool to save both your commands and output to a file:

```
outputfile <filename>
output on
```

For example, enter:

```
outputfile /tmp/WQ_info

output on

table * *
```

This command creates the file /tmp/WQ_info containing the table statement and the output of the table statement. All subsequent statements and output are appended to the output file until you enter this command to stop:

```
output off
```

Viewing Tables with spacerpt

By default, the **spacerpt** tool reports on all FileNet tables in the RDBMS database. To see the tables in the user-defined (fnusr) database (Microsoft SQL Server only), enter:

```
spacerpt –d fnuser
```

Note Before you can use spacerpt, you must set the F_MAINT_PW environment variable to the password previously set in the set_f_maint_pw script.

Creating Views

Use **dclview** to create a view for each document class and a general view of all columns in doctaba. Creating a view consumes very little disk space.

The name of a document class view is f_<document class name>, and the name of the general view is f_doctaba. A document class view contains all the FileNet columns and the user columns for the particular document class.

These views translate column names to index names, integer dates to actual dates, and so on. In other words, dclview produces a user-friendly view of the database. You can query on a view using an isql statement like you can for any other table.

The syntax for the dclview command is:

dclview [–c] [–g] [–a]<docclass1name> [<docclass2 docclass3 ...>]

The following table describes the options you can use with the dclview command.

Option	Action
–c	Creates a view in the database. Omit the –c option to display the CREATE VIEW statements on the standard output without creating a view.
<doc-class>	Creates a view for one or more specified document classes.
–g	Creates the general view on all columns. Can be combined with <docclass>.
–a	Creates views on the general view and on all document classes.

The columns of a view are different from the equivalent columns in doctaba in the following ways:

- f_docclassnumber is replaced by f_docclassname.
- f_pages displays as 1 instead of null for single page documents.

The views are created with case-sensitive column names, because user column names are distinguished by case.

You can list a view in the same way that you list a table. The described method lists views you created using dclview and views created for you by the FileNet software.

To list views, enter the following series of commands:

```
use fnsys

go

select user_name(uid), name from sysobjects where type='v'
and uid=user_id('f_sw')

go
```

Creating WorkFlo Queue Tables and Views

Creating a new WorkFlo queue creates both a table and a view on the table. On an existing WorkFlo queue, the software creates the view when a user opens the queue.

The name of such a view is:

<workspace>.<queue>

Use the view to refer to a queue table without using the queue ID.

A view on a WorkFlo queue translates f_pritime to two fields, f_priority and f_entrytime.

Determining Maximum String Lengths

String lengths can be helpful in planning the layout of a report. To determine the maximum length of all string fields in doctaba, use this isql select statement:

select f_indexname, f_maxixsize from f_sw.user_index where f_indextype='2'

go

Example output:

```
f_indexname              f_maxixsize
-------------------      -------------------------
 F_DOCTYPE               1.00000
 F_RETENTBASE            1.00000
 F_RETENTDISP            1.00000
 F_ACCESSRIGHTS          12.00000
 F_DOCFORMAT             239.00000
 F_DOCLOCATION           239.00000
 DVT_ascii_idx1          50.00000
 DVT_ascii_idx2          50.00000
 DVT_str_cluster         50.00000
 PO_NUMBER               25.00000
 SAP_ID                  15.00000
 DOC_TYPE                5.00000
 INVOICE_NUMBER          20.00000
 ACK_NUMBER              10.00000
 CREDIT_MEMO_NUMBER      20.00000
(15 rows affected)
```

To determine the maximum length of a particular string field in doctaba, use this isql select statement:

select f_maxixsize from user_index where f_indexname='<name>'

go

Replace <name> with the case sensitive index name.

For index types other than string, f_maxixsize is always 0, indicating that no maximum exists.

4
Working with DB2

This chapter explains:

- How to use access DB2, logon to the database instance, and work with the tables
- How to manage WorkFlo Queues
- How to create views
- How to determine string lengths
- How to work with dates

Using DB2

Depending upon the server platform you complete one of the following steps to access DB2:

- On UNIX, enter db2 at the command line to start the DB2 Command Line Processor.
- On Windows Server, select the program IBM DB2, then select Command Line Tools, then select Command Line Center or Comment Line Processor.

Logon to the Database Instance

Once you are in the Command Line processor, enter the following:

connect to <database instance name> user f_sw using f_sw

You will then see a display similar to the following::

```
db2 => connect to indexdb user f_sw using f_sw

   Database Connection Information

 Database Server         = DB2/AIX64 8.1.0
 SQL authorization ID    = F_SW
 Local database alias    = INDEXDB
```

Listing Tables

A set of standard FileNet tables always exists in the index database. Table names beginning with wqm are WorkFlo queues. See **Chapter 5, “Table Descriptions,” on page 74**.

Note The tables in this section are owned by F_SW.

To list the names of all FileNet-created tables in the index database, enter the following :

list tables

This select statement produces a list similar to the following:

```
db2 => list tables

Table/View                      Schema          Type  Creation time
------------------------------- --------------- ----- --------------------------
DOC_CLASS_INDEX                 F_SW            T     2003-12-02-09.33.56.465145
DOCTABA                         F_SW            T     2003-12-02-09.33.57.572030
DOCUMENT_CLASS                  F_SW            T     2003-12-02-09.33.55.276572
F_DOCTABA                       F_SW            T     2003-12-04-15.26.57.229072
F_MSAR_1GB                      F_SW            T     2003-12-04-15.26.58.504508
FOLDER                          F_SW            T     2003-12-02-09.33.58.910654
FOLDER_CONTENTS                 F_SW            T     2003-12-02-09.34.00.279018
FOLDER_TABS                     F_SW            T     2003-12-02-09.34.01.558285
GUIDS                           F_SW            T     2003-12-02-09.33.53.026819
INDEX_CLUSTER                   F_SW            T     2003-12-02-09.33.54.180740
MENU                            F_SW            T     2003-12-02-09.34.03.548612
MENU_ITEMS                      F_SW            T     2003-12-02-09.34.05.163902
NO_CAT_AUDIT                    F_SW            T     2003-12-02-09.34.02.603993
SYS_NUMBERS                     F_SW            T     2003-12-02-09.33.50.810387
USER_INDEX                      F_SW            T     2003-12-02-09.33.51.831782
VALIDATION_TAB                  F_SW            T     2003-12-02-09.34.06.219875
VALIDATION_TAB_ITEMS            F_SW            T     2003-12-02-09.34.07.391230
WQM001Q000001                   F_SW            T     2003-12-04-11.53.16.538700
WQM001Q000002                   F_SW            T     2003-12-05-09.59.36.152675
WQS_FIELDS                      F_SW            T     2003-12-04-11.15.54.243849
WQS_IDSEED                      F_SW            T     2003-12-04-11.15.53.609280
WQS_QUEUES                      F_SW            T     2003-12-04-11.15.53.937636
WQS_RELEASE                     F_SW            T     2003-12-04-11.15.54.498134
WQS_WORKSPACES                  F_SW            T     2003-12-04-11.15.53.700585

  24 records(s) selected.

db2 =>
```

Note: The “T” under Type means table, “V” means view.

You can also list all of the tables that belong to F_SW by entering the following:

select table_name, table_type from sysibm where table_ schema = ‘F_SW’

This select statement produces a list similar to the following:

```
db2 => select table_name, table_type from sysibm.tables where table_
schema = 'F_SW'

TABLE_NAME                                  TABLE_TYPE
------------------------------------------  -------------------------------
DOC_CLASS_INDEX                             BASE TABLE
DOCTABA                                     BASE TABLE
DOCUMENT_CLASS                              BASE TABLE
F_DOCTABA                                   VIEW
F_MSAR_1GB                                  VIEW
FOLDER                                      BASE TABLE
FOLDER_CONTENTS                             BASE TABLE
FOLDER_TABS                                 BASE TABLE
GUIDS                                       BASE TABLE
INDEX_CLUSTER                               BASE TABLE
MENU                                        BASE TABLE
MENU_ITEMS                                  BASE TABLE
NO_CAT_AUDIT                                BASE TABLE
SYS_NUMBERS                                 BASE TABLE
USER_INDEX                                  BASE TABLE
VALIDATION_TAB                              BASE TABLE
VALIDATION_TAB_ITEMS                        BASE TABLE
WQM001Q000001                               BASE TABLE
WQM001Q000002                               BASE TABLE
WQS_FIELDS                                  BASE TABLE
WQS_IDSEED                                  BASE TABLE
WQS_QUEUES                                  BASE TABLE
WQS_RELEASE                                 BASE TABLE
WQS_WORKSPACES                              BASE TABLE


  24 records(s) selected.
```

Listing the Columns of a Table

The following command lists all column definitions of a table:

describe table <tablename>

Replace <tablename> with the table name using lowercase letters. When you use a describe statement to list the columns of the doctaba table, you see something like the following:

:

```
db2 => describe table doctaba

Column                    Type     Type
name                      schema   name              Length    Scale Null
------------------------- -------- ----------------- --------- ----- ----
F_DOCNUMBER               SYSIBM   DECIMAL                10     0 No
F_DOCCLASSNUMBER          SYSIBM   INTEGER                 4     0 No
F_ENTRYDATE               SYSIBM   INTEGER                 4     0 No
F_LASTACCESS              SYSIBM   INTEGER                 4     0 Yes
F_ANNOTATIONFLAG          SYSIBM   VARCHAR                 1     0 Yes
F_ARCHIVEDATE             SYSIBM   INTEGER                 4     0 Yes
F_PURGEDATE               SYSIBM   INTEGER                 4     0 Yes
F_DELETEDATE              SYSIBM   INTEGER                 4     0 Yes
F_RETENTBASE              SYSIBM   VARCHAR                 1     0 Yes
F_RETENTDISP              SYSIBM   VARCHAR                 1     0 Yes
F_RETENTOFFSET            SYSIBM   INTEGER                 4     0 Yes
F_PAGES                   SYSIBM   INTEGER                 4     0 Yes
F_SECURITYSPEC            SYSIBM   VARCHAR                12     0 Yes
F_ACCESSRIGHTS            SYSIBM   VARCHAR                12     0 Yes
F_DOCTYPE                 SYSIBM   VARCHAR                 1     0 Yes
F_STATUS                  SYSIBM   INTEGER                 4     0 Yes
F_DOCFORMAT               SYSIBM   VARCHAR               239     0 Yes
F_DOCLOCATION             SYSIBM   VARCHAR               239     0 Yes
A31                       SYSIBM   DECIMAL                18     4 Yes
A32                       SYSIBM   VARCHAR               239     0 Yes
A33                       SYSIBM   INTEGER                 4     0 Yes
A34                       SYSIBM   VARCHAR                14     0 Yes
A35                       SYSIBM   DECIMAL                18     4 Yes
A36                       SYSIBM   VARCHAR               239     0 Yes
A37                       SYSIBM   INTEGER                 4     0 Yes
A38                       SYSIBM   VARCHAR                14     0 Yes
A39                       SYSIBM   DECIMAL                18     4 Yes
A40                       SYSIBM   VARCHAR               239     0 Yes
  28 records(s) selected.
```

You can also list the column names of a table by entering the following select statement:

select column_name from sysibm.columns where table_name = ‘DOCTABA’

This select statement produces a list similar to the following:

```
db2 => select column_name from sysibm.columns where table_name = 'DOCTABA'

COLUMN_NAME
--------------------------------------------------------------------------------
A31
A32
A33
A34
A35
A36
A37
A38
A39
A40
F_ACCESSRIGHTS
F_ANNOTATIONFLAG
F_ARCHIVEDATE
F_DELETEDATE
F_DOCCLASSNUMBER
F_DOCFORMAT
F_DOCLOCATION
F_DOCNUMBER
F_DOCTYPE
F_ENTRYDATE
F_LASTACCESS
F_PAGES
F_PURGEDATE
F_RETENTBASE
F_RETENTDISP
F_RETENTOFFSET
F_SECURITYSPEC
F_STATUS

  28 records(s) selected.
```

Viewing User Index Names

In doctaba, the user-defined indexes are named A31, A32, and so on. To view numbered column names as the actual index names, enter the following:

select f_columnname, f_indexname from user_index

This statement produces a list similar to the one shown below. It maps the doctaba column names A31, A32, and so on, to the user-defined index names stored in the user_index table.

```
db2 => select f_columnname, f_indexname from user_index

F_COLUMN_NAME F_INDEXNAME
------------- ----------------
-             F_DOCNUMBER
-             F_DOCCLASSNUMBER
-             F_ARCHIVEDATE
-             F_PURGEDATE
-             F_DELETEDATE
-             F_ENTRYDATE
-             F_LASTACCESS
-             F_RETENTOFFSET
-             F_PAGES
-             F_DOCTYPE
-             F_RETENTBASE
-             F_RETENTDISP
-             F_ACCESSRIGHTS
-             F_DOCFORMAT
-             F_DOCLOCATION
a31           DVT_num_idx1
a32           DVT_acsii_idx1
a33           DVT_date_idx1
a34           DVT_menu_idx1
a35           DVT_num_idx2
a36           DVT_ascii_idx2
a37           DVT_date_idx2
a38           DVT_menu_idx2
a39           DVT_num_cluster
a40           DVT_str_cluster

  25 records(s) selected.

db2 =>
```

Managing WorkFlo Queues

A WQS_tool table report gives you the names of the workspaces and queues on the server, including the server ID and table ID that relate to the queue name. The name format is **WQMsssQnnnnnn**, where **sss** is the server ID and **nnnnnn** is the table ID. For example, the table name of the Charlotte queue in the report below is **WQM001Q001011**.

If this is a fresh install, all queues should have **WQMsssQnnnnnn** as the name format. If existing customers have moved from the Oracle or MSSQL database to the DB2 database, some older queues that were created under IMS 3.0.3 or earlier can have **WQM1nnnnnn** as the format, where **nnnnnn** is the table ID listed in the report.

To enter the WQS_tool utility for managing WorkFlo queues, enter the following command at the operating system prompt:

WQS_tool

To list the workspaces, queue names, and table IDs, enter:

table * *

This displays a report:

```
<WQS_tool>table * *
Workspace     Queue name     table name    Queue Server
------------  -------------- -----------   -----------
pcwfl         ApplDistQ        01001         WflServer
SomeBank      Fax_In           01007         WflServer
SomeBank      Greensboro       01010         WflServer
SomeBank      DealerRules      01006         WflServer
SomeBank      Charlotte        01011         WflServer
```

Note Enter workspace and queue names instead of *** *** to see reports on specific tables. For example, to see a report on the table in the Charlotte queue, enter:

table SomeBank WQM001Q001011

Mapping Queue Column Names to Field Names

The user-defined column names in a WorkFlo queue table are UF000, UF001, UF002, and so on.

In addition to the queue column names, you need to know:

- The queue field names
- How to map the queue field names to the names you need to enter in an SQL select statement

To map the queue field names to column names, see the table **"Contents of wqs_fields" on page 104**.

To identify the queue field names, use the WQS_tool DESCQUE command in this format:

DESCQUE <workspace> <queue name>

For example, to display the queue field names and the corresponding database column names for the Dist1 queue in the workspace called workQs, enter:

DESCQUE workQs Dist1

This displays a report similar to the following:

```
<WQS_tool>DESCQUE workQs Dist1

Queue:workQs/Dist1   Server: WflServer:corona:FileNet
Table id:01028

    Field          DB Column     Indexed?     Unique?
--------------     ---------     --------     -------
DocumentID            UF000
name                  UF001
```

Saving WQS_tool Commands and Output to a File

Use these statements in WQS_tool to save both your commands and output to a file:

outputfile <filename>
output on

For example, enter:

outputfile /tmp/WQ_info

output on

table * *

This command creates the file /tmp/WQ_info containing the table statement and the output of the table statement. All subsequent statements and output are appended to the output file until you enter this command to stop:

output off

Creating Views

Use **dclview** to create a view for each document class and a general view of all columns in doctaba. Creating a view consumes very little disk space.

The name of a document class view is f_<document class name>, and the name of the general view is f_doctaba. A document class view contains all the FileNet columns and the user columns for the particular document class.

These views translate column names to index names, integer dates to actual dates, and so on. In other words, dclview produces a user-friendly view of the database. You can query on a view using an isql statement like you can for any other table.

The syntax for the dclview command is:

dclview [–c] [–g] [–a]<docclass1name> [<docclass2 docclass3 ...>]

The following table describes the options you can use with the dclview command.

Option	Action
–c	Creates a view in the database. Omit the –c option to display the CREATE VIEW statements on the standard output without creating a view.
<docclass>	Creates a view for one or more specified document classes.
–g	Creates the general view on all columns. Can be combined with <docclass>.
–a	Creates views on the general view and on all document classes.

The columns of a view are different from the equivalent columns in doctaba in the following ways:

- f_docclassnumber is replaced by f_docclassname.
- f_pages displays as 1 instead of null for single page documents.

The views are created with case-sensitive column names, because user column names are distinguished by case.

You can list a view in the same way that you list a table. The described method lists views you created using dclview and views created for you by the FileNet software.

To list views, enter the following series of commands:

select name, qualifier from sysibm.sysviews where creator = 'F-SW'

```
db2 => select name, qualifier from sysibm.sysviews where creator = 'F_SW'

NAME                      Qualifier
------------------------- -------------------------
F_DOCTABA                 F_SW
F_MSAR_1GB                F_SW
```

Creating WorkFlo Queue Tables and Views

Creating a new WorkFlo queue creates both a table and a view on the table. On an existing WorkFlo queue, the software creates the view when a user opens the queue.

The name of such a view is:

<workspace>.<queue>

Use the view to refer to a queue table without using the queue ID.

A view on a WorkFlo queue translates f_pritime to two fields, f_priority and f_entrytime.

Determining Maximum String Lengths

String lengths can be helpful in planning the layout of a report. To determine the maximum length of all string fields in doctaba, use this select statement:

select F_INDEXNAME, F_MAXIXSIZE from USER_INDEX where F_INDEXTYPE='2';

Example output:

```
F_INDEXNAME        F_MAXIXSIZE
------------------ -----------
F_DOCTYPE                    1
F_RETENTBASE                 1
F_RETENTDISP                 1
F_ACCESSRIGHTS              12
test1                        3
test2                        2

6 rows selected.
```

To determine the maximum length of a particular string field in doctaba, use this select statement:

select F_MAXIXSIZE from USER_INDEX where F_INDEX-NAME='<name>';

Replace <name> with the case-sensitive index name. For index types other than string, F_MAXIXSIZE is always 0, indicating that no maximum exists.

Working with Dates

FileNet software stores a date as an integer. A date is the number of days from the fixed date January 1, 1970. For example, January 4, 1970 is stored as the value 3. As explained below, you can use dclview to create a view that translates integer dates to actual dates for document records. To query on folder dates or WorkFlo queue dates, however, you need to translate an integer date to an actual date.

Translating an Integer Date to a Date

Enter the following select statement to translate the F_entrydate into a readable format:

select f_docnumber, DATE(F_entrydate + 719163) from doctaba

The output looks like this:

```
db2 => select f_docnumber, DATE(F_entrydate + 719163) from doctaba

F_DOCNUMBER 2
------------
   100000. 12/02/2003
   100001. 12/02/2003
   100002. 12/02/2003

 3 record(s) selected.

db2 =>
```

Note: FileNet date begins on 01/01/1970 and DB2 begins its count on 01/01/0001, so you have to add 719163 to the FileNet date for it to correspond to the DB2 date.

5
Table Descriptions

This chapter describes the FileNet tables in the RDBMS databases on a system running the Image Services software.

The index database, which resides on a Combined server or an Index server, is an RDBMS database containing the following FileNet-defined tables:

- Standard tables in the index database
- WQS system tables containing workspace and queue descriptions
- Any number of WorkFlo queue tables (these tables are in the index database only if you define WorkFlo queues)

In addition to WorkFlo queues in the index database, each Application server running WorkFlo Queue services maintains an RDBMS database (the WorkFlo Queue database) containing WorkFlo queues.

Standard Tables

These tables appear in every index database:

ce_id_map	ce_os_dcl_map	doctaba
document_class	doc_class_index	export_log
folder	folder_contents	folder_tabs (not used)
GUIDS	index_cluster	menu
menu_items	no_cat_audit	sys_numbers
user_index	validation_tab	validation_tab_items
wqs_workspaces	wqs_idseed	wqs_queues
wqs_fields		

ce_id_map table

The ce_id_map table is used to store f_ce_os_id mapping to the object store GUID, the CE domain GUID, the object store name, and the CE domain name.

Contents of ce_id_map

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_CE_OS_ID	f_ce_os_id	The CE Object Store ID that is uniquely assigned by Image Services from the sys_numbers table (page 96).
F_CE_OS_GUID	f_ce_os_guid	The CE Object Store GUID assigned by Content Engine.
F_CE_DOMAIN_GUID	f_ce_domain_guid	The CE Domain GUID assigned by Content Engine.
F_CE_OS_NAME	f_ce_os_name	The CE Object Store name configured by user from Content Engine.

Contents of ce_id_map, Continued

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_CE_DOMAIN_NAME	f_ce_domain_ name	The CE Domain name configured by user from Content Engine.
F_UPDATE_TIMEDATE	f_update_timedate	An update time/date stamp.

ce_os_dcl_map table

The columns of the ce_os_dcl_map table associate the CE domain/ object store to Image Services document class and it is controlled by Enterprise Manager. More than one object store could be associated (mapped) with one Image Services document class.

Contents of ce_os_dcl_map

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_CE_OS_ID	f_ce_os_id	The CE Object Store ID.
F_DCL_ID	f_dcl_id	The Image Services Document Class ID that is associated with the CE Object Store ID.

doctaba table

The doctaba table has 22 FileNet-defined columns and up to 224 user-defined columns named A31 to A254 (Oracle and DB2) or a31 to a254 (Microsoft SQL Server). Each column represents an index field and each row contains the index values associated with a committed document.

See **"Viewing User Index Names" on page 27** (Oracle users) or **page 45** (Microsoft SQL Server users) or **"Viewing User Index Names" on page 64** (DB2 users).

Contents of doctaba

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_DOCNUMBER	f_docnumber	System-assigned document ID number.
F_DOCCLASSNUMBER	f_docclassnumber	System-assigned document class number.
F_ENTRYDATE	f_entrydate	Date the document was cataloged (the number of days from 1/1/70).
F_LASTACCESS	f_lastaccess	Not used.
F_ANNOTATIONFLAG	f_annotationflag	Not used. Value is always null.
F_ARCHIVEDATE	f_archivedate	Date the document is eligible for archiving (the number of days from 1/1/70).
F_PURGEDATE	f_purgedate	Not used.
F_DELETEDATE	f_deletedate	Date the document is eligible for deletion (the number of days from 1/1/70).
F_RETENTBASE	f_retentbase	Date on which the retention period begins for a given document: null = document close date 1 = document file date (entry date)

Contents of doctaba, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_RETENTDISP	f_retentdisp	Action to be taken with a document once its retention period ends: null = delete 1 = archive
F_RETENTOFFSET	f_retentoffset	Counting from F_RETENTBASE (Oracle) or f_retentbase (Microsoft SQL Server), the number of months until the document is eligible for deletion or archiving.
F_PAGES	f_pages	Number of pages in the document: null = 1 page
F_SECURITYSPEC	f_securityspec	Not used.
F_ACCESSRIGHTS	f_accessrights	Security clearance needed for a given document.
F_DOCTYPE	f_doctype	Specifies the document type: null = image 1 = text 2 = form 3 = mixed (more than one type) 4 = not used 5 = other 6 = Document from P8
F_DOCFORMAT	f_docformat	Supports heterogeneous objects as a document type.
F_DOCLOCATION	f_doclocation	References externally stored documents.
F_STATUS	f_status	Not used.
F_ACCESSRIGHTS_RD	f_accessrights_rd	“Read” security clearance needed for a given document.

Contents of doctaba, Continued

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_ACCESSRIGHTS_WR	f_accessrights_wr	“Write” security clearance needed for a given document.
F_ACCESSRIGHTS_AX	f_accessrights_ax	“Append/Execute” security clearance needed for a given document.
F_CE_OS_ID	f_ce_os_id	The CE Object Store ID the corresponding document is exported to.
A31 - A254	a31 - a254	Each of these columns represents a user-defined index field. See **“Mapping Queue Column Names to Field Names” on page 29** (Oracle and DB2 users) or **page 48** (Microsoft SQL Server users).

document_class table

The columns of the document_class table describe the attributes of a document class—except for the index fields (which are described in the doc_class_index table). Each row describes a document class.

Contents of document_class

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_DOCCLASSNUMBER	f_docclassnumber	System-assigned document class number.
F_DOCCLASSNAME	f_docclassname	User-assigned document class name.
F_DESCR	f_descr	User-assigned document class definition.

Contents of document_class, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_DOCTABLEID	f_doctableid	Not used.
F_PAGES	f_pages	Number of pages per document expected for a given document class: 0 = variable number of pages
F_BATCHSIZE	f_batchsize	Number of pages per batch expected for a given document class.
F_PRIMARYPATH	f_primarypath	Not used.
F_OPTIONALDE	f_optionalde	Listing of the optional verification steps selected by default for the particular document class. No commas between the numbers: 2 = image verify 6 = index verify 7 = batch total verify
F_BYPASSINDX	f_bypassindx	Not used.
F_TABOUT	f_tabout	Specifies if an operator must use the Execute key to exit from an indexing form (document entry on an IWS/CWS only): null = Execute key required y = Execute, Tab, or Return key
F_INDEXINGFORM	f_indexingform	Indexing form name used for a given document class.
F_QUERYFORM	f_queryform	Not used.
F_EXCEPTIONFLAG	f_exceptionflag	Not used.
F_DOCTYPE	f_doctype	Not used.

Contents of document_class, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_WORKFLOWQUEUE	f_workflowqueue	Name of the WorkFlo (distributor) queue to which all document ID numbers in this document class will be added at committal time.
F_WORKFLOWSYSTEM	f_workflowsystem	Name of the WorkFlo system that has the WorkFlo queue defined in F_WORKFLOWQUEUE (Oracle) or f_workflowqueue (Microsoft SQL Server).
F_FAMILYNUMBER	f_familynumber	Number of the media family associated with a given document class. A value of –1 indicates that clustering is in use.
F_FAMILYNAME	f_familyname	Name of the media family associated with a given document class.
F_RETENTDISP	f_retentdisp	Action to be taken with a document once its retention period expires: null = delete 1 = archive
F_RETENTBASE	f_retentbase	Date the retention period begins for a given document: null = document close date 1 = document file date (entry date)
F_RETENTOFFSET	f_retentoffset	Counting from F_RETENTBASE (Oracle) or f_retentbase (Microsoft SQL Server), the number of months until the document is eligible for deletion or archiving.
F_ARCHIVEPERIOD	f_archiveperiod	Not used.
F_SECURITYSPEC	f_securityspec	Not used.
F_CONVERTFLAG	f_convertflag	Not used.

Contents of document_class, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_ACCESSRIGHTS	f_accessrights	Default security information for a document class.
F_STATUSFLAG	f_statusflag	Not used.
F_NUMBERPATHS	f_numberpaths	Not used.
F_NUMBERINDICES	f_numberindices	Number of user-defined index fields associated with a given document class: –1 = not used 0 = document class with no index n = number of index fields
F_NUMBERSCANSECTNS	f_numberscansectns	Not used.
F_APERCARDFILE	f_apercardfile	Not used.
F_GROUP4	f_group4	Not used.
F_NOCATALOG	f_nocatalog	Indicates whether cataloging is enabled or disabled for this document class: null = enabled y = disabled
F_NUMBERGUIDS	f_numberguids	Indicates the number of globally unique identifiers for the document class. One GUID is added automatically to the GUIDS table. min = 1, max = 10
F_DMA_NAME	f_dma_name	Display name initially copied from the document class name. It can be modified but cannot be left blank.

Contents of document_class, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_DELAYMIGRATE	f_delaymigrate	Controls when documents in this class are migrated to storage media: –1 = no migration 0 = no delay; migrate immediately n = number of seconds to delay before migrating
F_ACCESSRIGHTS_RD	f_accessrights_rd	“Read” security clearance needed for a document class.
F_ACCESSRIGHTS_WR	f_accessrights_wr	“Write” security clearance needed for a document class.
F_ACCESSRIGHTS_AX	f_accessrights_ax	“Append/Execute” security clearance needed for a document class.
F_CE_OS_ID	f_ce_os_id	Document class default CE Object Store ID. This value must be set in the CFS Connector - IS Catalog Export Tool run through the Remote Admin Console. Also, the object store to document class relationship must be established before the Remote Admin Console setting is made. Any documents committed to the document class will now generate an entry in the export_log table (see **page 87**).

doc_class_index table

The columns of the doc_class_index table describe the attributes of an index field. Each row represents an index field as it is used in one document class. An index field used in two document classes appears in two different rows.

Contents of doc_class_index

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_COLUMNAME	f_columname	Name of the index information column in doctaba (for example, A32 or a32).
F_INDEXNAME	f_indexname	User-assigned name for the indexing field.
F_DOCCLASSNUMBER	f_docclassnumber	System-assigned document class number.
F_BATCHTOTAL	f_batchtotal	Specifies if batch totals can be performed on an associated (numeric) index field: null = no 1 = yes
F_VERIFYFLAG	f_verifyflag	Specifies if index verification can be performed on an index field: null = no 1 = yes
F_REQDFLAG	f_reqdflag	Specifies if an associated index field is mandatory: null = mandatory 1 = optional
F_QUERYMATCH	f_querymatch	Not used.

Contents of doc_class_index, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_OCRFLAG	f_ocrflag	Indicates how data is entered into an associated index field: null = keyboard 1 = OCR (optical character recognition) 2 = not used
F_UNITS	f_units	Specifies unit of measure for OCR input: 1 = inches 2 = millimeters
F_FONTFILE	f_fontfile	Specifies the OCR font: 1 = 14 pt alphanumeric 2 = 14 pt numeric 3 = 14 pt Times 4 = OCR-B
F_DOCPAGENO	f_docpageno	Not used. This value is always set to 0.
F_XOFFSET	f_xoffset	For OCR input only, the horizontal offset in F_UNITS (f_units) from the upper left-hand corner of the document.
F_YOFFSET	f_yoffset	For OCR input only, the vertical offset in F_UNITS (f_units) from the upper left-hand corner of the document.
F_XLENGTH	f_xlength	For OCR input only, the width of the area in F_ UNITS (f_units).
F_YHEIGHT	f_yheight	For OCR input only, the height of the area in F_ UNITS (f_units).

Contents of doc_class_index, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_OCRSIZE	f_ocrsize	For OCR input only, the maximum number of characters to be read for a given index field.
F_APERCARDIXLOC	f_apercardixloc	For OCR input only, shows the location of bar codes on a page. The bar codes can be in 1 to 5 locations on the page. If you use autoindexing, each string index in a document class can have this field. The format of this value is: ccllccllccllccllccll where **cc** is the starting column number of a bar code and **ll** is the number of columns. For example, with a bar code in columns 1 through 5 and another in columns 20 through 24, the data in this field would be: 01052005000000000000

export_log table

The export_log table holds export log information created as part of a document committal if the Document Class Object Store property (f_ce_os_id) is set. The export_log table is also used for exporting existing doctaba entries to P8 when documents are either deleted or updated. The f_ce_os_id entry is also set in doctaba.

Contents of export_log

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_CE_OS_ID	f_ce_os_id	CE Object Store ID where the corresponding document ID is exported to.
F_SEQNUM1	f_seqnum1	High water mark sequence number (most significant 32 bits)
F_SEQNUM2	f_seqnum2	High water mark sequence number (least significant 32 bits)
F_DOCNUMBER	f_docnumber	The Image Services Document ID.
F_ACTION	f_action	Export action to be taken: 1 : Insert during document committal. 2 : Export using the CFS Connector - IS Catalog Export Tool. 3 : Update when document DIRs are updated. 4 : Delete doctaba after export. 5 : Delete when documents are deleted.
F_DCL_ID	f_dcl_id	The Image Services Document Class ID that is associated with the corresponding document ID.
F_CAT_IN_DOCTABA	f_cat_in_doctaba	'Y': Catalog in doctaba 'N': No catalog in doctaba

Contents of export_log, Continued

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_NEW_DIR	f_new_dir	New DIR (Document Index Record) for all action types. These entries are RAW data.
F_OLD_DIR	f_old_dir	Old DIR - is only used for updates action - null okay. These entries are RAW data.

folder table

The columns of the folder table describe folder attributes. Each row describes one folder.

contents of folder

Oracle/DB2 Column Name	MSSQL Server Column Name	Contents
F_FOLDERNUMBER	f_foldernumber	System-assigned identification number for this folder.
F_FOLDERNAME	f_foldername	User-assigned name for the folder.
F_CREATIONDATE	f_creationdate	Date the folder was created (stored as the number of days from 1/1/70).
F_ARCHIVEDATE	f_archivedate	Date the folder becomes eligible for archiving (stored as the number of days from 1/1/70).
F_DELETEDATE	f_deletedate	Date the folder becomes eligible for deletion (stored as the number of days from 1/1/70).

contents of folder, Continued

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_RETENTBASE	f_retentbase	Date on which the retention period begins for a given folder: null = folder close date 1 = folder creation date
F_RETENTOFFSET	f_retentoffset	Counting from F_RETENTBASE (Oracle) or f_retentbase (Microsoft SQL Server), the number of months until the folder is eligible for deletion or archiving.
F_RETENTDISP	f_retentdisp	Action to be taken with a folder once its retention period ends: null = delete 1 = archive
F_AUTODELPERIOD	f_autodelperiod	From date filed, the number of months until a document is eligible for automatic unfiling from the folder.
F_ACCESSRIGHTS	f_accessrights	Folder security information.
F_ACCESSRIGHTS_RD	f_accessrights_rd	“Read” folder security information.
F_ACCESSRIGHTS_WR	f_accessrights_wr	“Write” folder security information.
F_ACCESSRIGHTS_AX	f_accessrights_ax	“Append/Execute” folder security information.

folder_contents table

Each row of the folder_contents table represents a document that is filed in a folder. The columns describe the attributes of a filed document in a folder.

Contents of folder_contents

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_FOLDERNUMBER	f_foldernumber	System-assigned identification number for this folder.
F_DOCNUMBER	f_docnumber	Document ID number of a document filed in the folder.
F_DOCTABLEID	f_doctableid	Used internally by INX when renumbering F_ORDINAL (Oracle) or f_ordinal (Microsoft SQL Server).
F_AUTODELETEDATE	f_autodeletedate	Date (stored as the number of days from 1/1/70) the document is eligible to be automatically unfiled from the folder. 0 = not eligible on any date
F_ORDINAL	f_ordinal	Sequential position of this document in the folder. This is the order in which the document was filed.

GUIDS table

The columns of the GUIDS table describe the attributes of a Globally Unique IDentifier's table. GUIDs are DMA-compliant, 16-byte integers used to uniquely identify each element transported over a network. The system ensures unique GUID assignments by automatically generating this integer using an algorithm based on the system's network card MAC address and a format that complies with the specifications provided for the system's platform. Each row in the GUIDS table contains the attribute values of a GUID created by the user.

Contents of GUIDS

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_COLUMNNAME	f_columnname	An inherited value that is populated with the column name from the User Index if the GUID is associated with an index, or null if the GUID is associated with a document class.
F_DOCCLASSNUMBER	f_doclassnumber	An inherited value that is populated with the document class number if the GUID is associated with a document class, or null if the GUID is associated with an index .
F_GUID	f_guid	Never null, always unique (36 characters).

index_cluster table

The index_cluster table contains information on documents in any document class that uses clustering. It contains the name of the cluster, the cluster ID number, the index fields associated with the document class, the media family involved, and so on.

Contents of index_cluster

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_CLUSTERNO	f_clusterno	System-assigned cluster space number. Currently only one index cluster space is supported per system.
F_COLUMNNAME	f_columnname	Name of the column in doctaba that contains the value for a specific index field.
F_INDEXNAME	f_indexname	User-assigned name of this indexing field.
F_FAMILYNAME	f_familyname	Name of the media family on which documents clustered under this index name will be stored.
F_FAMILYNO	f_familyno	System-assigned identification number for a given media family name.
F_CLUSTERSIZE	f_clustersize	Expected average number of documents for this cluster.
F_INDEXTYPE	f_indextype	The type of indexing field: 1 = numeric 2 = string 4 = menu 8 = date
F_UPCASE	f_upcase	Case specification for the associated string index value: null = string stored in uppercase 1 = string stored as entered in uppercase, lowercase, or mixed case

menu table

The columns of the menu table describe the attributes of a menu. Each row contains the attribute values of a user-created menu.

Contents of menu

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_MENUNUMBER	f_menunumber	System-assigned menu ID number. A new number is assigned if the menu is updated.
F_MENUNAME	f_menuname	User-assigned menu name.
F_DESC	f_desc	User-defined menu description.
F_LASTMOD	f_lastmod	The number of seconds since 12:00 a.m. January 1, 1970 that the menu was created or last modified.
F_USERCODE	f_usercode	Version information for internal use only.
F_NUMITEMS	f_numitems	Number of choices in the menu.
F_TRANSLATERULE	f_translaterule	Rule to be followed in translation.
F_LANGUAGE	f_language	Language character set for the menu: y = English a = Arabic

menu_items table

The columns of the menu_items table describe the attributes of a menu item. Each row contains the attribute values of a menu item from a user-created menu.

Contents of menu_items

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_MENUNUMBER	f_menunumber	System-assigned menu ID number.
F_ORDINAL	f_ordinal	Sequential position of this item in the menu.
F_ITEMCODE	f_itemcode	User-assigned code for this menu item.
F_ITEMDESC	f_itemdesc	User-defined description of this menu item.

no_cat_audit table

The no_cat_audit table, intended for internal use, maintains an audit trail of changes to the index cataloging field. The columns of the no_cat_audit table describe the attributes of the audit trail. Each row represents an update to the index cataloging field for a document class.

Contents of no_cat_audit

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_DOCCLASSNUMBER	f_docclassnumber	System-assigned document class number.
F_DOCCLASSNAME	f_docclassname	User-assigned name for a document class. **Oracle users:** If the first entry is oragen Init, the audit trail is complete. If the first entry is INX Init, the audit trail was implemented after the database was created on the date shown in the F_NO_CAT_DATE field.
F_NO_CAT_DATE	f_no_cat_date	Date index cataloging was turned off or on.
F_NOCATALOG	f_nocatalog	Status of the index cataloging field. YES = cataloging is disabled NO = cataloging is enabled

sys_numbers table

The sys_numbers table is intended for internal use only. It merely keeps an ongoing list of the next available number to be assigned to an index column name, document class, cluster, or folder.

Contents of sys_numbers

Column Name	Null?	Type
F_SYSID	NOT null	VARCHAR2(30)
F_NEXTNAME		VARCHAR2(30)
F_NEXTNUMBER		NUMBER(10)

user_index table

The columns of the user_index table describe the attributes of an index. Each row contains the attribute values of a user-defined index.

Contents of user_index

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_COLUMNNAME	f_columnname	System-assigned identification number for a user-defined index. For example, the first index created is named A31 (Oracle) or a31 (Microsoft SQL Server), the second is named A32 (Oracle) or a32 (Microsoft SQL Server), and so on.
F_INDEXNAME	f_indexname	User-assigned name for an index (date, time, name, address).
F_DESCR	f_descr	User-assigned definition of the associated index name. The definition appears only when you are defining or modifying an index definition in Database Maintenance.
F_INDEXTYPE	f_indextype	The type of index: 1 = numeric 2 = string 4 = menu 8 = date
F_INVERTED	f_inverted	Indicates whether the index is inverted: null = not inverted 1 = inverted index With a large database, retrievals are practical only when using an inverted index (also called a retrieval key).

Contents of user_index, Continued

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_NOOFDUPLIC	f_noofduplic	Not used. This value is an estimate of how many duplicate inputs exist for the same index. **Oracle users:** Might appear in older databases: 1 = many 2 = few 3 = none
F_UPPERCASE	f_uppercase	Case specification for the associated string index value: null = string stored in uppercase 1 = string stored as entered in upper, lower, or mixed case)
F_MINIXSIZE	f_minixsize	Not used. Value of this field is always 0.
F_MAXIXSIZE	f_maxixsize	If the associated index type is 2 (string), this column depicts the maximum number of characters that this string can contain. For index types other than string, this value is always 0.
F_VALFLAG	f_valflag	This attribute is no longer used.
F_VALIDENT	f_valident	This attribute is no longer used.
F_MASK	f_mask	Template used for a numeric or date index.
F_NUMBERGUIDS	f_numberguids	Indicates the number of globally unique identifiers for the user index. One GUID is added automatically to the GUIDS table. min = 1, max = 10

Contents of user_index, Continued

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
F_DMA_NAME	f_dma_name	Display name initially copied from the user index name. It can be modified but cannot be left blank.
F_MENUNAME	f_menuname	If the associated index type is 4 (menu), this column contains the name of the user-assigned menu. If it is not a 4, there will be no information in this field, because the index will not be a menu type.

validation_tab table

The columns of the validation_tab table describe the attributes of a validation table. Each row contains the attribute values of a validation table created by the user.

Contents of validation_tab

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_VALTABNUMBER	f_valtabnumber	System-assigned validation table ID number.
F_VALTABNAME	f_valtabname	User-assigned validation table name.
F_DESC	f_desc	User-defined validation table description.
F_NUMITEMS	f_numitems	Number of items in the validation table.

validation_tab_items table

The columns of the validation_tab_items table describe the attributes of a validation item. Each row contains the attribute values of a validation table item.

Contents of validation_tab_items

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_VALTABNUMBER	f_valtabnumber	System-assigned validation table ID number.
F_ORDINAL	f_ordinal	Sequential position of this item in the table. This is the order in which the items were created.
F_ITEMCODE	f_itemcode	User-assigned code for this item.
F_ITEMDES	f_itemdesc	User-defined description of this item, which is made available to the user as a selectable string value.

WQS Tables

Workspace and queue descriptions are in the WQS (Oracle) or wqs (Microsoft SQL Server) database allowing the same workspace to be defined on multiple WQS servers. The WQS system tables are:

- wqs_idseed
- wqs_workspaces
- wqs_queues
- wqs_fields
- wqs_release

During an update or conversion (Oracle RDBMS only), all workspaces and queues created previously are automatically converted to include the new WQS tables.

wqs_idseed table

The wqs_idseed table stores a sequential ID number of the queues created.

Contents of wqs_idseed

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
F_IDSEED	f_idseed	ID number for multiple queues.

wqs_workspaces table

The columns in the wqs_workspaces table store the workspaces.

Contents of wqs_workspaces

Oracle/DB2 Column Name	MSSQLServer Column Name	Contents
WS_NAME	ws_name	Workspace name.
WS_LEVEL	ws_level	Workspace level: 4 levels for old queues, 5 levels for current.
WS_TIMESTAMP	ws_timestamp	Time of creation.
WS_ACCESS	ws_access	Workspace security.
WS_DESC1	ws_desc1	Workspace description.
WS_DESC2	ws_desc2	Workspace description.
WS_DESC3	ws_desc3	Workspace description.
WS_DESC4	ws_desc4	Workspace description.
WS_ACCESS_RD	ws_access_rd	“Read” workspace security.
WS_ACCESS_WR	ws_access_wr	“Write” workspace security.
WS_ACCESS_AX	ws_access_ax	“Append/Execute” workspace security.

wqs_queues table

The wqs_queues table columns store the queues.

Contents of wqs_queues

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
Q_WS	q_ws	Workspace name.
Q_NAME	q_name	Queue name.
Q_LEVEL	q_level	Queue level: four levels for WQM1, five levels for WQM00.
Q_REVISION	q_revision	Number of times queue definition has been modified.
Q_TIMESTAMP	q_timestamp	Creation time.
Q_DESCACC	q_descacc	Description security.
Q_CONTENTACC	q_contentacc	Contents security.
Q_TEXT1	q_text1	Queue description.
Q_TEXT2	q_text2	Queue description.
Q_TEXT3	q_text3	Queue description.
Q_TEXT4	q_text4	Queue description.
Q_NUMFIELDS	q_numfields	Number of user fields.
Q_SERVERID	q_serverid	Queue server ID number.
Q_TABLEID	q_tableid	Table number (nnnnn).
Q_DESCACC_RD	q_descacc_rd	“Read” description security.
Q_DESCACC_WR	q_descacc_wr	“Write” description security.
Q_DESCACC_AX	q_descacc_ax	“Append/Execute” description security.
Q_CONTENTACC_RD	q_contentacc_rd	“Read” contents security.
Q_CONTENTACC_WR	q_contentacc_wr	“Write” contents security.
Q_CONTENTACC_AX	q_contentacc_ax	“Append/Execute” contents security.

wqs_fields table

The columns in the wqs_fields table store the queue fields.

Contents of wqs_fields

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
FLD_SERVERID	fld_serverid	Field server ID number.
FLD_TABLEID	fld_tableid	Field table ID number.
FLD_ID	fld_id	Field ID number.
FLD_NAME	fld_name	Field name.
FLD_TYPE	fld_type	Field type. Numbers from 1 to 12 identify the field type: 1 number (floating point) 2 string 3 time 4 selection 5 document (document number) 6 folder (folder number) 7 integer 8 date 9 access (not used) 10 boolean
FLD_LENGTH	fld_length	Number of characters in the field.
FLD_PREC	fld_prec	Decimal precision (number of digits).
FLD_SCALE	fld_scale	Decimal scale (number of fractional digits).
FLD_UNIQUE	fld_unique	Only one occurrence of each value.

Contents of wqs_fields

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
FLD_REQUIRED	fld_required	Cannot be null.
FLD_RENDEZ	fld_rendez	For rendezvous queues.
FLD_DISPLAY	fld_display	Hidden or displayable.

wqs_release table

The wqs_release table is defined with one column, rel_relnum, that was once used to determine whether wqs conversion tools are needed to be called during upgrade. This table only contains one row of information.

Contents of wqs_release

Oracle/DB2 Column Name	MS SQL Server Column Name	Contents
REL_RELNUM	rel_relnum	WQS release number.

WorkFlo Queue Tables

A WorkFlo queue table has six system-defined columns, followed by the user-defined columns UF000–UFnnn (Oracle) or uf000–ufnnn (Microsoft SQL Server), which describe the attributes of a WorkFlo queue. Each row contains the values associated with an item in the WorkFlo queue. See also **"Managing WorkFlo Queues" on page 28** (Oracle users) or **page 47** (Microsoft SQL Server users).

Except for F_STATUS (Oracle) or f_status (Microsoft SQL Server), a WorkFlo script can set and retrieve the value in any queue field.

Contents of a WorkFlo Queue

Oracle/DB2 Column Name	MS SQL Server Column Name	WorkFlo Parameter	Definition
F_PRITIME	f_pritime	F_Priority and F_ETime	Priority of the item concatenated with the time it entered the queue. Because of the format, this field is intended for internal use only.
F_STATUS	f_status	F_Busy	Boolean field indicating if an item is busy: 0 = not busy (the default) 1 = busy
F_DELAY	f_delay	F_Delay	Time after which the item can be retrieved. The default is no delay with the value –2000000000 (–2.000E+09), meaning the item is eligible for retrieval without delay.
F_TIMEOUT	f_timeout	F_TimeOut	Time after which the item is considered too old. The default is no timeout.
F_USERID	f_userid	F_UserID	Three-part NCH name of a user. The default is (ANYONE).

Contents of a WorkFlo Queue, Continued

Oracle/DB2 Column Name	MS SQL Server Column Name	WorkFlo Parameter	Definition
F_GROUPID	f_groupid	F_GroupID	Three-part NCH name of a group. The default is (ANYONE).
UF000-UFnnn	uf000-ufnnn	<variable>	User-defined queue field.

Glossary

In this Glossary, terms shown in italics are glossary entries.

ageable cache

Ageable *cache* is time-limited storage on magnetic *media*. Objects remaining in ageable cache past a specified time are eligible for deletion if space is needed to store other objects. See *page cache*.

cache

Cache is the magnetic disk space used to store documents on the way to and from storage media (and can act as permanent storage when you do not use optical storage media). Portions of the cache storage are allocated to the different cache types (referred to as logical caches). See *ageable cache*, *folder notes cache*, *page cache*.

clustering

Clustering directs the FileNet system to store all documents with a common *index* value (for example, the same loan number) in a reserved space on particular *media*.

database

A database is a collection of logically related records or files. The FileNet System uses two types of databases: a third-party relational database for index data and multi-keyed databases for document addresses and work in progress. See **“RDBMS” on page 111**.

document

Documents can be images, text, forms, mixed (combinations of types), or imported DOS files stored on the FileNet system's storage media.

document class

A document class describes the scanning, indexing, and security characteristics of a group of documents.

folder

A folder is a logical grouping of document images. A folder has a specified set of retention, disposition, and filing parameters, and a name, pathname, and ID number.

Image Services

FileNet Image Services is a set of servers and services providing a single document image *database*. The database includes a single *index database*, a single document locator database, and the collection of document images on storage media.

index

An index contains the information used for retrieving documents. All index information is stored in the index database and also on storage media in page zero of the document. Later, when you need to look at the document, the FileNet software looks in this database for index information that satisfies a retrieval query.

index database

The index database, an *RDBMS* database (Oracle or Microsoft SQL Server), contains document and folder information and can contain WorkFlo queues.

informational index

Informational index is a term used to refer to an index that is not set up as a *retrieval key*.

magnetic disk

Magnetic disk, usually an internal hard disk on your system, is where the Image Services software, *cache*, and databases are stored.

magnetic disk cache

See *cache*.

media

Media is any material on which data is stored (magnetic disk, optical disk, magnetic tape). We usually refer to optical disks as storage media.

media family

The media family defines what type of storage *media* the *document class* uses. In general, the media family controls which media surfaces will be used by the document classes that use the family.

page cache

Page *cache*, also known as retrieval cache, is a cache containing all documents being committed to or retrieved from *storage media*. In addition, documents being retrieved from media for printing are stored in page cache before being moved to print cache. Page cache is an *ageable cache*.

query

A query is a request for information or the act of requesting information from a database.

RDBMS

RDBMS is an acronym for Relational DataBase Management System. The RDBMS manages the *index database* and *WorkFlo queue database*.

retention parameters

Retention parameters specify a starting event and a number of months after that event when a document is eligible for deletion. You set up retention parameters when you create a *document class*.

retrieval

Retrieval is the act of entering a query that results in a list of documents in a query match report. Often, the process includes getting document images from the *storage library* or document indexing information from the database on the *Index server*.

retrieval key

A retrieval key is an index pertaining to certain documents to enable quick document *retrieval*.

storage library

A storage library is a storage media jukebox, a unit that has a number of slots for containing storage *media* and a robotic arm that moves the media between slots, drives, and the input/output slot.

System Monitor

An application that displays read-only reports about the state of the FileNet system. The reports are generated from data in the FileNet Management Information Base (MIB), the central *database* containing Image Services system information.

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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.

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