



Configuration Guide



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Note

Before using this information and the product it supports, read the information in "Notices" on page 11.

This edition applies to version 4.5 of IBM FileNet Content Manager (program number 5724-R81), and to all subsequent releases and modifications until otherwise indicated in new editions.

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CFS-CMOD configuration

Overview

This document provides technical details and configuration steps for the three main integration areas between IBM Content Manager OnDemand (CMOD) and IBM FileNet Content Federation Services (CFS): Federation of CMOD documents into the CFS system, Records Management control of these federated documents, and Viewer integration into Workplace XT.

Content federation

Content federation is a method of providing access to business content stored on multiple computer systems. The content on each system can be generated by different applications and can be stored in different databases. The content stored on one system can be retrieved from another system using a different application than the one used to originally store the content. Content that is accessible in this way is referred to as federated content.

CFS-CMOD provides a mechanism by which content contained in an IBM Content Manager OnDemand (CMOD) system becomes accessible to an IBM FileNet P8 system. This mechanism comprises two steps: exporting the metadata (CMOD fields and their values), and a document reference identifier as XML; and importing this XML into a document object residing in the IBM FileNet P8 system.

Setting up for federation

Before import and export can proceed, you must complete administrative tasks in both FileNet Enterprise Manager and Content Manager OnDemand Administrator client applications.

1. Create a fixed content device in Enterprise Manager.
This task is detailed in the FileNet P8 online help.
2. Create a fixed storage area in Enterprise Manager.
This task is detailed in the FileNet P8 online help.
3. Enable Application Groups through the OnDemand Administrator client to allow document federation.
 - a. To modify an existing Application Group, click on the Application Groups object, right-click on the desired Application Group, and select Update from the pop-up menu.
 - b. To allow document federation for a new Application Group, right-click on the Application Group object and select New Application Group from the pop-up menu.
 - c. Click on the Advanced button on the General tab
 - d. In the Interoperate with FileNet P8 section of the resulting dialog box, check **Yes** to the question *Use Content Federation Services (CFS-OD)?*

The *Federate Documents Automatically* option causes the OnDemand server to generate metadata information for each existing document as well as any new documents loaded to the application group. If this option is not checked, you must manually specify which documents to federate through an OnDemand client. See [“Export unscheduled mode” on page 7](#) for more details.

If the *Enable FileNet Records Manager to records declare automatically* is checked, the OnDemand server assumes that any documents that are federated into FileNet P8 are declared as records to FileNet Records Manager. If you do not select this check box, then the documents that are federated into FileNet are not declared as records in FileNet P8 Records Manager.

- e. Click on the Field Definition tab and add a new database field. Enter a name for the database field and click Add.
 - f. Click on the Field Information tab and select the newly created field from the Name drop-down.
 - g. Leave the Type as Filter and change the Data Type to Small Int (2).
 - h. Check the CFS-OD box.
 - i. Continue updating or creating the Application Group and click OK.
4. Create a Document Class through FileNet Enterprise Manager.
This step is detailed in the FileNet P8 online help.
 5. Configure the mapping between the OnDemand Application Group fields and the Document Class parameters Enterprise Manager.
This step is detailed in the FileNet P8 online help.
 6. Configure the CFSOD Export utility for document federation.

CFSOD export utility

Requirements and background

- The CFSOD Export utility is a Java application that uses jdbc drivers to connect to the OnDemand database.
 - You must install the correct Type 4 jdbc driver for your OnDemand database type (DB2, Oracle or MSSQL Server).
 - The jdbc driver must be in the classpath for the CFSOD Exporter utility
- The OnDemand database instance contains all of the tables necessary for the CFSOD Export utility to function:
 - ARSCFSODWORK, CFS_IMP_QUEUE, CFS_IMP_QUEUE_ERROR, CFS_IMP_SESSION, CFS_REPOSITORY_MAP, FDB_VERSION_SERIES.
- The utility was designed to be scheduled as a cron job (for UNIX systems) or via Windows Scheduler. A typical schedule would run the utility once a day typically when other system utilization is low.
- In order to run the CFSOD Exporter utility, you need to have at least a 1.4.2 JVM installed.

Usage information

A typical command line execution of the CFSOD Exporter utility is as follows

```
java -classpath <jdbc driver>;CFSODExporter.jar [configure] [options]
```

The [configure] action is used to save all the [options] specified to a configuration file.

The following options are supported

- u <userid> This is the user id needed to authenticate to the database instance.
- p <password> This is the user's password needed to authenticate to the database instance.
- o <port> This is the connection port number associated with the database instance.
- l <db instance> This is the database instance name.
- d <path> Directory in which trace files can be stored.
- t <export trace> This will enable tracing for the utility. A value of 0 disables trace and a value of 1 enables trace.
- n <number> As mentioned in the Export and Import Process section, the number of documents exported per session entry (in the CFS_IMP_SESSION table) can be configured. Provide a number between 1 and 250.
- f <path> If the 'configure' action is used as described above, this is the complete path and filename to write the configuration parameters file. Otherwise, this is the complete path and filename from which to read configuration parameters.

Configuring CFS-CMOD for use with CMOD on Oracle

If you are using Content Manager OnDemand with an Oracle database, complete the following steps prior to setting up a fixed content storage device for use with CFS-CMOD. These steps are needed because CMOD uses integrated Oracle security.

1. On the CMOD Oracle server, do the following:
 - a. Use a tool such as SQLPlus to create an additional Oracle user (also known as the proxy_user).
 - b. Issue this command:

```
ALTER USER cmod_user GRANT CONNECT THROUGH proxy_user;
```
2. On the Content Engine application server, use the application server administration console to set up the JDBC data source, and enter the Oracle user name (from Step 1) as follows:

proxy_user[cmod_user]/password

Export and import process

The communication from the FileNet CFS system to an OnDemand server is accomplished through the OnDemand Web Enablement Kit Application Programming Interfaces (ODWEK API). ODWEK configuration parameters are provided during the 'Create a Fixed Content Device' wizard, and these parameters are necessary to initialize the ODWEK server interface.

After you identify the Fixed Content Device and Storage Area, you must create a mapping between FileNet Document Classes and OnDemand Application Groups. However, you must first enable OnDemand Application Groups for federation through the OnDemand Administrative Client. Please refer to ["Setting up for federation"](#) for details on enabling an Application Group for federation.

After you enable an OnDemand Application Group for federation, the application becomes available in the FileNet Enterprise Manager's Content Federation properties section. You need to map the Application Group fields to the correct type of Document Class property (For example, Integer, Date, and other properties).

When a mapping exists between the P8 Document Class and an OnDemand Application Group, document federation can begin. Federation is a two part process: import and export. The import process runs as part of CFS, and periodically polls database tables for new items to import. These items consist of XML, which describes the document's metadata.

The export process is handled by the CFSOD Exporter utility, which creates XML for each document which can be ingested by the importer process. You can schedule the CFSOD Exporter utility to run at times when the OnDemand and FileNet systems are not very active. Refer to ["CFSOD export utility"](#) for details on configuring the CFSOD Exporter utility. You can export OnDemand documents in two modes: batch and unscheduled.

Export batch mode

Batch mode export will, based on a user-defined schedule, export OnDemand metadata for all documents within an Application Group. After you enable an Application Group for federation, OnDemand populates the ARSCFSODWORK database table with metadata for each document loaded in the Application Group.

Before the CFS-CMOD Exporter utility can export the metadata, the utility must first query the CFS_REPOSITORY_MAP database table to determine if the Application Group has been successfully mapped to FileNet Document Classes.

If the mapping is successful, the CFS-CMOD Exporter utility builds XML from the metadata for each related OnDemand document, and places XML into the CFS_IMP_QUEUE database table. The utility validates the XML based on the CFS import XML schema, and then imports the XML into the FileNet P8 system. Each row in the CFS_IMP_QUEUE is given a session identifier. This session identifier is entered into the CFS_IMP_SESSION table. When the import process runs, it receives a session identifier from the CFS_IMP_SESSION table and processes all rows in the CFS_IMP_QUEUE table which match that session identifier. You can configure the number of CFS_IMP_QUEUE rows per session identifier, but the maximum of 250.

Export unscheduled mode

Unscheduled mode export allows you to pick and choose OnDemand documents to federate. The OnDemand Application Group must be marked to allow federation through the OnDemand Administrator client. See [“Setting up for federation” on page 3](#) for details on enabling an Application Group for federation.

To select documents for federation, initiate a search from one of the OnDemand clients (Windows client or WEBi). You can select a subset of the documents in the search results. After you select the documents, submit a federation request, which causes the OnDemand server to create entries in the ARSCFSODWORK database table with document metadata, and to notify the client that the request to federate documents has been completed. The CFS-CMOD Export utility proceeds to export the documents in a manner identical to the batch mode described above.

Records Management

All of the features and controls from IBM FileNet Records Manager are applicable to federated CMOD documents. Document retention in a CMOD system is defined by the length of time the documents are maintained and the type of media on which the documents are stored. However, CMOD documents that have been declared as records under Records Manager control are *locked down*. CMOD will not apply document retention policy to these documents until Records Manager indicates that these documents can be destroyed.

Declaring a record

You can declare federated CMOD documents as records by the following methods:

Declaring a record during the export and import process

As part of the Batch Mode export and import process described previously, an Application Group configuration option is available to automatically declare documents as records. This option is accessed through the OnDemand Administrator Client as described in [“Setting up for federation” on page 3](#). When checked, this option causes the OnDemand server to internally mark all documents as records.

Similarly, if the Application Group is not set to automatically federate documents but is configured to automatically declare documents as records, documents which are federated in unscheduled mode (as described in [“Export unscheduled mode” on page 7](#)) causes the OnDemand server to internally mark these documents as records.

Although the exported documents are placed on hold in the CMOD server, they must still be manually declared as records through the IBM FileNet Records Manager client.

Declaring a federated document as a record

You can place a document on hold by declaring the document as a record through IBM FileNet Records Manager. After you declare a federated document as a record, CFS communicates the declaration to the CMOD server through ODWEK. The CMOD server also declares the document as a record. If the Application Group has the option to automatically declare records enabled, the request from IBM FileNet Records Manager is ignored by the CMOD server, preventing unnecessary processing by the CMOD server.

Destroying a record

The disposition of a record can take many forms. However, the only form relevant to federated CMOD documents declared as records is destroy. When a federated CMOD document record is eligible to be destroyed, CFS communicates this eligibility to the CMOD server through ODWEK. At this time, the CMOD document record is removed and the document is deleted.

Viewing federated CMOD documents

CMOD Documents which have been federated are accessible through the IBM FileNet Workplace XT client. This client supports browser-based viewing of CMOD documents in the same way as WEBi or a custom client built with ODWEK.

NOTE You can view OnDemand documents from Workplace XT, but not from Workplace. In Workplace XT, access to OnDemand content is limited to viewing and the Download action menu is disabled. In Workplace, there is no support for viewing OnDemand documents. The Download option in Workplace is enabled for OnDemand documents, but the download will not contain a fully formatted OnDemand document.

To support viewing of federated AFP and Line Data documents in a Content Manager OnDemand repository, complete these steps:

1. Install the ODWEK Toolkit on each Workplace XT server.
2. Configure the Line Data viewer so that it can be used through Workplace XT.

3. Run the AFP plug-in on all client machines that will be used to view AFP documents.
4. In the Workplace XT General Settings, specify the name and password of the user account used to authenticate with a Content Manager OnDemand server.

For details about these steps, see the following FileNet P8 Documentation help topics:

- [Install AFP and Line Data viewers](#), located under System Administration > Application Engine and Workplace XT Administration > Workplace XT administration.
- [General Settings for IBM Content Manager OnDemand \(Workplace XT\)](#), located under User help > Actions, preferences, and tools > Site preferences > General Preferences > IBM Content Manager OnDemand.

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