IBM

Course Exercises Guide

IBM FileNet Content Manager 5.2.1: Migrate Applications

Course code F285   ERC 1.0

IBM Training

Contents

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Exercise 1. Place holder

Estimated time

00:00

Overview

No hands on lab for this lesson.

Objectives

None

Exercise 2. Plan and prepare for application migration

Estimated time

00:55

Overview

In this exercise, you complete one-time configuration setup tasks to prepare the Sales application for migration and deployment to the destination environment.

Objectives

After completing this exercise, you should be able to:

- Verify object store Add-ons.

- Create a deployment tree.

- Create source and destination environments.

- Extract destination environment half maps.

Exercise Introduction

Introduction

In this exercise, you:

- Run one-time configuration tasks in FileNet Deployment Manager:
  - Verify that the object store Add-ons are compatible between the source and destination environment.
  - Create a deployment tree.
  - Create a source environment.
- Create a destination environment.
- Extract the destination environment half maps.

Activities

User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8

Before you begin

! **Important**

You must complete these tasks before you start the lesson exercises.

Start the student system:

To log in to the student system.

- Username: `Administrator`
- Password: `passw0rd`

Follow the instructions in Procedure 1 and 2 of Appendix A to start the system components."Start and Stop System Components" on page A-1.

Create an object store for the destination environment:

At a customer site, the development system and the UAT system would be two distinct FileNet P8 domains. Unfortunately the lab image is restricted to just one FileNet P8 domain. To demonstrate the deployment process, you create a new object store, Sales_UAT, to take the role of the destination environment.

1. Open the Administration Console for Content Platform Engine (ACCE).

   a. Open a Mozilla Firefox window.

   b. Go to the URL, `http://ecmedu01:9080/acce`.

💡 Hint

A bookmark, ACCE is created for your convenience.

---

   c. Log in with an account that has administrative rights on the FileNet P8 domain:

      - User name: `P8Admin`

      - Password: `IBMFileNetP8`

2. On the left navigation pane, right-click Object Stores > New Object Store.

   a. Use the following data to complete the wizard. Click Next to advance to the next page. Accept defaults for values that are not specified in the table.

Page	Field	Value
Name the Object Store	Display Name	SalesUAT
Define the Database	Database connection	FNOSDS
	Schema name	SalesUAT
Select the Type of Storage Area for Content	Storage area type	Database
Grant Administrative Access	Administrators	p8admin Sysadmins
Grant Basic Access	basic users	Clerks
Select Add-ons	click Workplace/Workplace XT Configuration	

   b. Review the Summary window. Verify that you see 11 Add-ons listed.

   c. Click Finish.

   d. On the Success screen, click Close.

💡 Hint

If you get an error that the database tables exist, repeat step 2 and make sure to enter the schema name on the Define the Database page.

---

3. Log out and close the browser window.

2.1. Run one-time configuration setup tasks

Introduction

In this activity, you run one-time configuration setup tasks that are required to prepare the Sales application for migration and deployment to the destination environment.

Procedures

Procedure 1: Explore the Sales Application package

The Solution Builder provided you with the Sales Application package. You need to extract the package and review the information included.

1. Use Windows Explore to locate the Sales Application package:

    a. Go to the path, `C:\Labs\FileNet Content Manager 5.2.1 Administration`

    b. Extract the file, Sales Application.zip, to:

    `C:\Labs\FileNet Content Manager 5.2.1 Administration`

2. Explore the contents of the Sales Application package:

    a. Change directories to the uncompressed folder.

    b. You see:
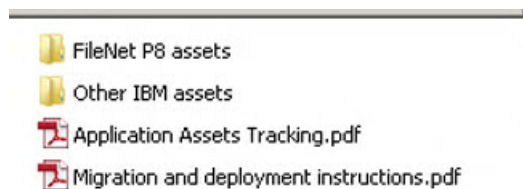
    c. The folder, FileNet P8 assets is empty. You add assets to this folder in a later exercise.

    d. The folder, Other IBM assets, contains the export of the, IBM Content Navigator, Sales desktop.

    e. The file, Application Assets Tracking.pdf, is a spreadsheet that lists the assets of the Sales Application. You explore the file in the next exercise.

    f. Explore the Migration and deployment instructions:

        - Open the file, Migration and deployment instructions.pdf.

        - Take a few minutes to read through the instructions. You do many of the steps listed in later exercises.

Procedure 2: Verify object store Add-ons

The object store add-on features must be compatible between the source environment and the destination environment. In other words, object store add-on features installed in the source object store that the application assets reference, must be installed in the destination environment.

1. Start Administration Console for Content Platform Engine (ACCE).

   a. Open a Mozilla Firefox window.

   b. Go to the URL, `http://ecmedu01:9080/acce`.

Hint

A bookmark, ACCE is created for your convenience.

---

   c. Log in with an account that has administrative rights on the FileNet P8 domain:

   - User name: `p8admin`

   - Password: `IBMFileNetP8`

2. Check object store add-on features for the source object store.

   a. On the left navigation pane, expand Object stores, if necessary.

   b. Right-click the object store, Sales, and select Install Add-on Features.

   - On the lower half of the display, the installed add-on features are listed.

   - You should see 8 listed:

Installed add-on features
`5.2.1 Base Content Engine Extensions`
`5.2.1 Process Engine Extensions`
`5.2.1 Base Application Extensions`
`5.2.1 Stored Search Extensions`
`5.2.1 Workplace Base Extensions`
`5.2.1 Workplace Template Extensions`
`5.2.1 Workplace XT Extensions`
`5.2.1 Teamspace Extensions`

   c. Click Cancel.

3. Check object store add-on features for the destination object store.

    a. On the left navigation pane, right-click the object store, SalesUAT, and select Install Add-on Features.

    b. Verify that 7 of the 8 Add-on features that are installed in the Sales object store, are installed in the SalesUAT object store.

       - The 5.2.1 Teamspace Extensions does not exist in SalesUAT.

         Since the Sales application assets do not include any teamspaces, you can leave this add-on feature uninstalled. For this exercise, you install the add-on feature.

    c. In the upper table of the Install- Add-on Features page, select the feature, 5.2.1 Teamspace Extensions.

    d. Click OK.

    e. Click OK on the success window.

ⓘ Information

You can have more add-on features in the destination object store than the source object store.

---

4. Log out of the Administration Console and close the browser window.

Procedure 3: Create a deployment tree

In this procedure, you start FileNet Deployment Manager and create a deployment tree.

1. Start FileNet Deployment Manager.

    a. Start > All Programs > IBM FileNet P8 Platform > FileNet Deployment Manager.

    b. The Select Deployment Tree Location window displays (it can take a few seconds for the window to display).

2. Create a deployment tree:

    a. To the right of the Deployment Tree selection box, click Browse.

    b. Select Local Disk C:

    c. Click Make New Folder and name it, FDM-Deploy.

    d. Click Return.

    e. Click OK.

    f. Click Ok to close the Select Deployment Tree Location window.

    g. FileNet Deployment Manager opens. You see two nodes, **Environments** and **Source-Destination Pairs**.

3. Review the deployment tree folder structure.

   a. Open a Windows Explorer window and browse to C:\FDM-Deploy.

   b. Notice the folders that were created when you created the deployment tree.

✏️ Note

The folders are all empty since in a new deployment tree.

---

   c. Minimize the Windows Explorer window.

   d. Leave FileNet Deployment Manager open for the next procedure.

Procedure 4: Create a source environment

In this procedure, you create a source environment in FileNet Deployment Manager.

1. In FileNet Deployment Manager, on the left navigation pane, right-click the Environments node and select New > Environment.

2. Type `Sales_Dev` in the name field.

3. Click Finish.

4. Maximize the Windows Explorer window to explore the changes to the deployment tree, C:\FDM-Deploy.

   a. Expand the Environments folder.

   b. Select Sales_Dev.

   c. Notice the files created and the Assets folder.

✏️ Note

You work with these files in later exercises.

---

5. Open the file, C:\FDM-deploy\Environments\Sales_Dev\EnvironmentConfig.xml, with Notepad++. If you get a prompt that a newer version of Notepad++ is available, click Cancel.

   a. Notice the <Connection target = "p8" use = "yes"> tag, and note the series of empty tags contained.

ℹ️ Information

The environment exists, but it does not have any configuration data.

---

   b. Minimize Notepad++.

   c. Minimize the Windows Explorer window.

---

6. Configure the Content Platform Engine Connection.

   a. In FileNet Deployment Manager, right-click the node, Sales_Dev, and select Open.

   b. FileNet Deployment Manager opens the environment to the CPE Connection tab because it detects that the connection is not configured.
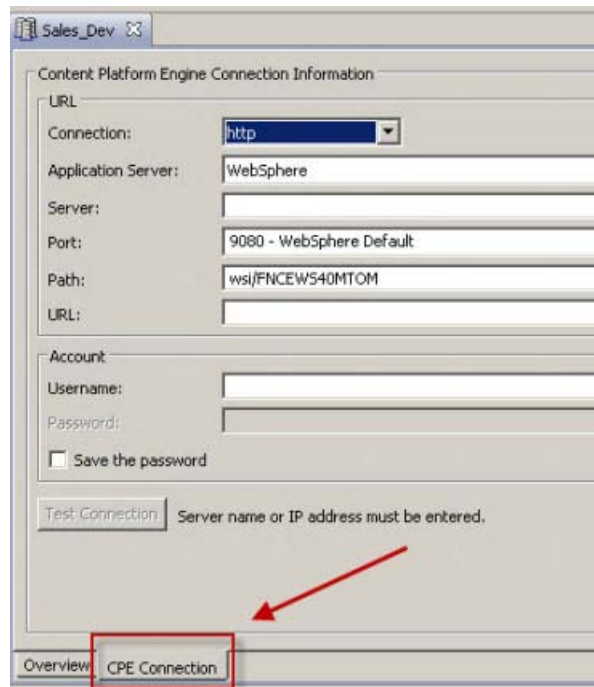
   c. Complete the CPE Connection configuration.

     - In the Server field type: `ecmedu01`.

     - In the Account section, select the box, Save the password.

     - In the user name field, type `p8admin`.

     - In the Password field, type `IBMFileNetP8`.

   d. Save your entries.

     - File > Save.

     e. Click Test Connection.

        - You should see, Successfully Connected, to the right of Test Connection.

7. Maximize the Notepad++ window and click Yes to update the file, EnvironmentConfig.xml.

     a. Notice that the tags, under the <Connection target = "p8" use = "yes"> tag, are no longer empty, they contain the CPE connection information that you configured.

     b. Close the file, EnvironmentConfig.xml.

     c. Close Notepad++.

8. In FileNet Deployment Manager, close the Sales_Dev tab.

9. Leave FileNet Deployment Manager open for the next activity.

2.2. Challenge: Create a destination environment

Scenario

You are preparing to migrate the FileNet P8 assets of the Sales application. FileNet Deployment manager requires that you have a source and destination environment defined. You need to create a destination environment.

Typically, the source and destination environments are different FileNet P8 Domains. You do not have two domains on your student system. You use a second object store as the destination environment.

> **ⓘ Important**
>
> You must complete this task to continue with the remaining exercises.

Data

Item	Value
Server	ecmedu01
Save the password	select
User name	p8admin
Password	IBMFileNetP8

Challenge

- Use FileNet Deployment Manager to create a destination environment, Sales_UAT, in the deployment tree, C:\FDM-Deploy.

- Use the data provided to Configure the CPE Connection.

- Close the Sales_UAT tab after you successfully test the connection.

Verification

- You should see two environment nodes listed under the node, Environments, in FileNet Deployment Manager, in the deployment tree, C:\FDM-Deploy.
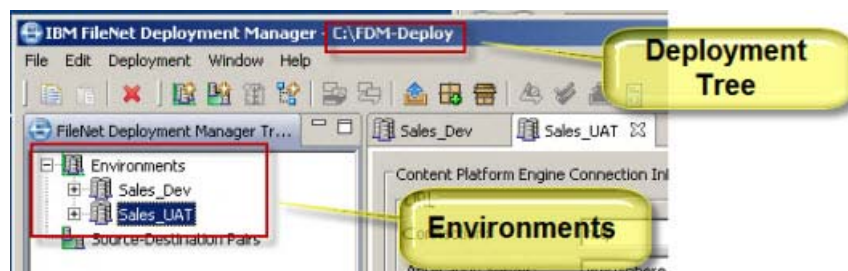
- Explore the environment, Sales_UAT, folder structure with Windows Explorer.

2.3. Extract destination environment half maps

Introduction

In this activity, you extract the object store and security principal data half maps for the destination environment.
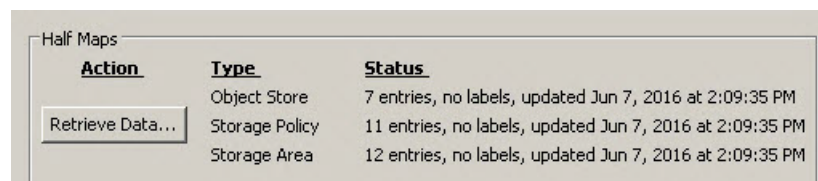
Procedures

Procedure 1: Extract the object store data half map

1. Make sure you are in FileNet Deployment Manager. On the left navigation pane, double-click the Sales_UAT environment to open it.

   a. Make sure you the **Overview** tab, at the bottom of the screen is selected.

2. Click the first Retrieve Data, to retrieve the object store data.

   a. Select, From Content Platform Engine, click Next.

   b. Select the two Options:

      - Retrieve storage policies for each object store.

      - Retrieve storage areas for each object store.

   c. For Mode, accept the default, **Merge retrieved data with existing half map**.

   d. Click Finish.

   e. Click OK to close the success confirmation window.

3. You should see:

4. Verify the object store data:

   a. Expand the Sales_UAT node in the navigation pane.

   b. Right-click the node, Object Store Data, select open.

c. You see a list of the object stores configured.

Label	Name ▲	Symbolic Name	ID
	LoanProcess	LoanProcess	{3C506A21-BA3F-4F8A-8699-6F0E3CB33B68}
	LoanProcessQA	LoanProcessQA	{D9FE3F92-56F3-4BFA-B081-49ACAF9ACD1E}
	P8ConfigObjectStore	P8ConfigObjectStore	{FE38CCB2-2604-4845-8EE9-19C1A6D18D58}
	Sales	Sales	{B58C9704-8B80-4535-A79E-DE77FEC66960}
	SalesQA	SalesQA	{BC29329E-1FA0-4BED-8E44-CE6E570CA5FE}
	SalesSBx	SalesSBx	{5E812A89-CD86-411A-8DD8-2C9D28BDBDCF}
	SalesUAT	SalesUAT	{E0437C68-4ED9-47F1-A38F-102A309C0E0D}

Procedure 2: Extract the security principal data half map
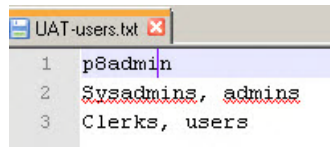
Before retrieving the users and groups for a destination environment, planning must take place to decide what users and groups are used in the destination environment.

For this procedure, the following table outlines the users and groups to be used for the two environments.

User and group accounts

Source Environment	Destination Environment	Label
p8admin	p8admin	
p8admins	Sysadmins	admins
p8users	Clerks	users

1. Create a filter Label File.

   a. Use Notepad or Notepad++ to create a text file, C:\FDM-Deploy\UAT-users.txt.

   b. Add the users and groups listed under the **Destination Environment** column, in the table. Add the corresponding label, separated by a comma. One entry per line.

```
UAT-users.txt
1   p8admin
2   Sysadmins, admins
3   Clerks, users
```

   c. Save the file.

   d. Close the text editor.

2. Click the Sales_UAT tab to return to the Sales_UAT properties page.

3. Retrieve Security Principal Data:

   a. Click the second Retrieve Data.

   b. Select the option **From Content Platform Engine's LDAP Provider**, click Next.

   c. Click **Retrieve Realms**.

      - You see the realm, o=sample selected>

      All the LDAP realms that are configured in the FileNet P8 domain are listed. In this FileNet P8 domain, only one realm exists.

d. In the Filter section, select **Use a Label File**, browse to C:\FDM-Deploy\UAT-users.txt.
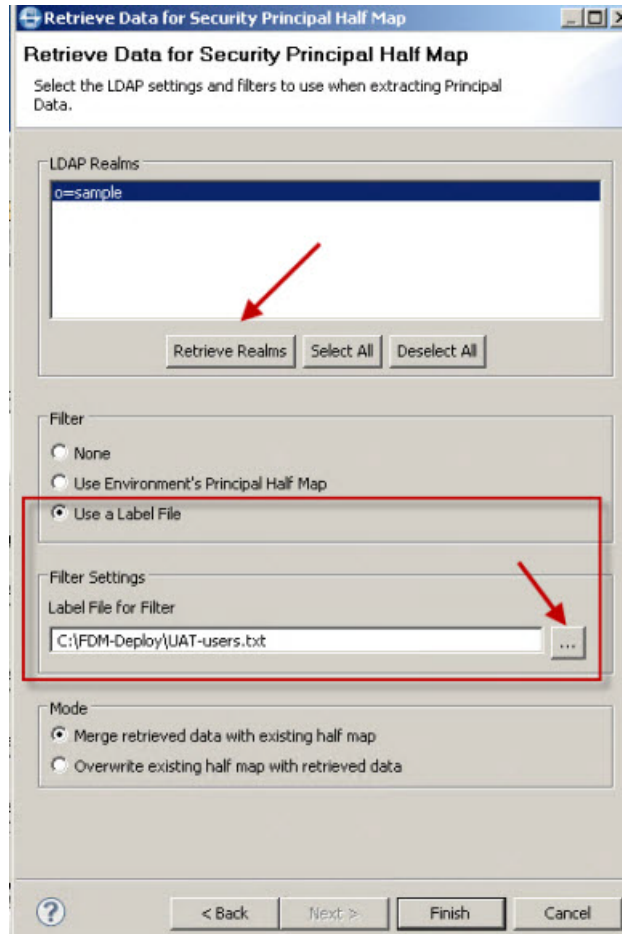
e. Click Finish.

f. Click OK to close the success confirmation window.

4. Verify the security principal data half map:

a. On the navigation pane, under the Sales_UAT environment, double-click the node, Security Principal Data.

5. You see a list of security principals retrieved.

Note

Notice how the labels are automatically set, based on the entries in the label file.

---

6. Close FileNet Deployment Manager.

Exercise review and wrap-up

In this exercise, you completed the following tasks:

- Verify that the object store Add-ons are compatible between the source and destination environment.

- Run one-time configuration tasks in FileNet Deployment Manager:

  - Create a deployment tree.

  - Create a source environment.

  - Create a destination environment.

- Extract the destination environment half maps.

_i_ Information

The tasks to create the destination environment and extract the destination environment half maps, can be completed later, but they must be completed before converting the assets. If the tasks are run later, planning for the tasks, should be completed during the Planning and Preparation Phase.

Exercise 3. Export the application assets

Estimated time

00:65

Overview

In this unit, you export the FileNet P8 application assets and create an application package for application migration.

Objectives

After completing this exercise, you should be able to:

- Export the FileNet P8 assets of the Sales Application.
- Export an IBM Content Navigator desktop.

Exercise Introduction

Introduction

In this exercise, you export the Sales application assets. You complete the activities to:

- Export the FileNet P8 assets of the Sales Application.

- Export an IBM Content Navigator desktop.

Activities

User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8

Note

Passwords are always case-sensitive.

3.1. Export the FileNet P8 application assets

Introduction

In this activity, you export the FileNet P8 assets of the Sales Application. You:

- Explore the assets that comprise the Sales Application and review the Migration and Deployment documentation.

- Use FileNet Deployment Manager to create an export manifest, add the application assets, and export the data to a deploy data set.

- Create the source environment half maps by using the data in the deploy data set.

Procedures

Procedure 1: Explore the Sales application assets

The Sales Application package includes an Application Assets Tracking spreadsheet for the Sales Application. You use the spreadsheet to explore the Sales Application assets that you need to export.

1. Open the Application Assets Tracking spreadsheet:

   a. Change directories to:

      `C:\Labs\FileNet Content Manager 5.2.1 Administration\Sales Application`

   b. Open the file, Application Assets Tracking.pdf.

   c. You see two types of FileNet P8 assets, Orders, and Customers.

   d. Read the description and dependencies for each row.

   e. Minimize the spreadsheet.

   f. In the next steps, you explore the FileNet P8 assets in the Sales object store.

2. Start the Administration Console for Content Platform Engine.

   a. In your browser, go to `http://ecmedu01:9080/acce`

   b. Log in as the `P8admin` user (password: `IBMFileNetP8`).

3. Open the Sales object store.

4. Explore the Orders folder

   a. In the left navigation pane, expand Browse > Root Folder.

   b. Select the Orders folder to open it.

   c. On the Contents tab, you should see a list of documents, of three different classes; Order, ProductOrder, and ServiceOrder.

5. Explore the Order Class.

   a. In the left navigation pane, expand Data Design > Classes > Document

   b. Select Order to open it.

   c. Select the Property Definitions tab, you should see six property definitions.
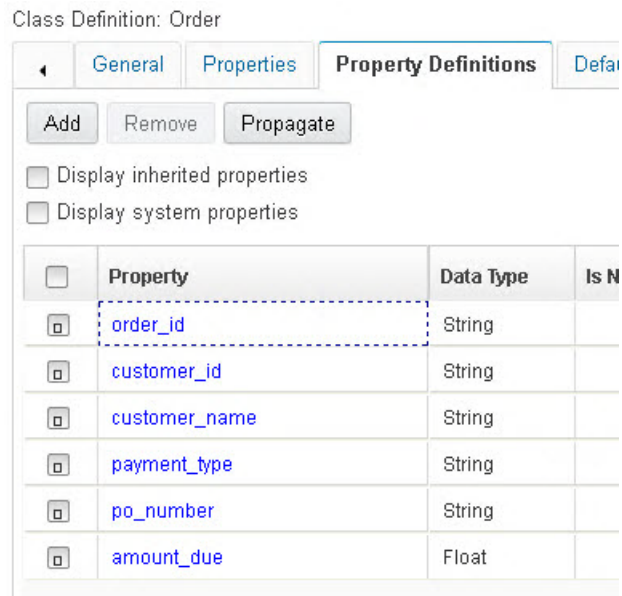
6. Explore the Order subclasses:

   a. On the navigation pane, expand the class, Order.

   b. Explore the two subclasses listed.

   c. Verify that ProductOrder contains one extra property definition defined.

   d. Verify that ServiceOrder contains two extra property definitions defined.

7. Explore the Customers folder

   a. Browse > Root Folder.

   b. Open the Customers folder.

c. On the Contents tab, change the default view of *Show Documents* to *Show Custom Objects*. Two objects should be listed.
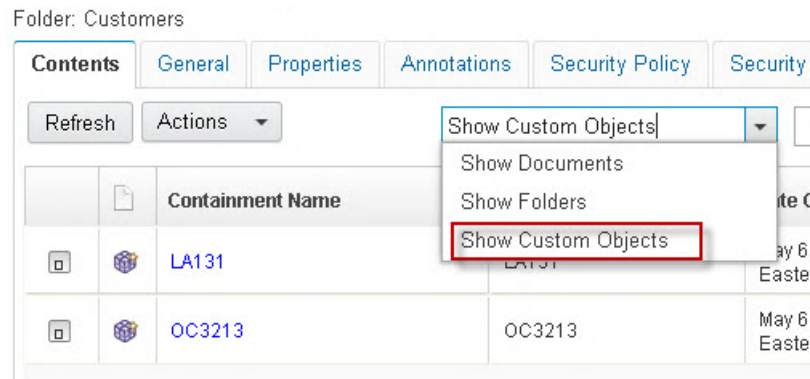
d. Notice that both objects belong to the Class: Customer.

8. Explore the Custom Object, Customer:

   e. In the left navigation pane, expand Data Design > Classes > Custom Object

   f. Open Customer.

   g. Select the Property Definitions tab, you see four property definitions.

ℹ Information

The Sales Application FileNet P8 assets include:

Asset name	Type	Comments
Orders	Folder	7 documents of class: Order 3 documents of class: ProductOrder 12 documents of class: ServiceOrder
Customers	Folder	2 custom objects of class: Customer
Order	Class: subclass of Document	6 property definitions
ProductOrder	Class: subclass of Order	1 extra property definition
ServiceOrder	Class: subclass of Order	2 extra property definitions
Customer	Class: Custom Object	4 property definitions

It is important to have this information so that when the data is exported, you can validate the number of assets.

---

9. Log out of the administration console.

10. Close the browser window.

Procedure 2: Create the export manifest

1. Open FileNet Deployment Manager.

   a. Double-click the icon on the desktop.

   b. Click OK to accept the deployment tree location.

2. Expand Environments > Sales_Dev

3. Right-click the node, Export Manifests, and select New > Export Manifest.

4. Name the export manifest: `Sales-app-assets`.

5. Click Finish. The export manifest is visible in the navigation pane.

Procedure 3: Add assets to the export manifest

1. Open the export manifest:

   a. On the left, double-click Sales-app-assets.xml.

2. Add items to the export manifest:

   a. Click the green plus icon, in the menu bar, to add Assets.

   b. In the tree view, expand Object Stores > Sales > Browse

   c. Select the Root Folder.

   d. In the right pane, select the following folders:

      • Click **Customers**.

      - Ctrl-click **Orders**.

   e. Click Add.

   f. Click Close to close the Add Assets window.

3. Configure the Include Options:

   a. The two rows are selected, click the pencil icon, next to the green plus sign icon, in the menu bar, to open the Include Options window.

    b. Go to the section labeled, Folders and Contained Objects and clear the option to Include parent folders (you do not want to include the parent folder, Root Folder, in the export).

📝 Note

You are including, subfolders, contents of folders, and relationship to containing folders.

    c. Go to the section labeled, Document-Related.

       - Set the option, "Include annotations on documents, folders, and custom objects.
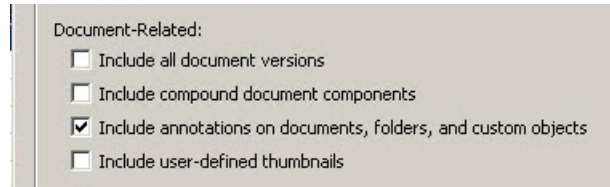
ⓘ Information

For the Sales Application, only the current versions of the documents need to be exported. No compound documents exist, so it does not matter whether you select the option to Include compound document components. Selecting include options that do not apply to the asset in the export manifest, have no effect.

    d. Go to the section labeled, Data Design.

       - Select the option to Include subclasses.
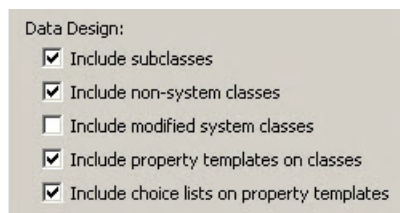
ⓘ Information

From the Application Asset Tracking spreadsheet, you know that the class Order, includes two subclasses. You can select the option to include subclasses or you can leave the option cleared and explicitly add the two subclasses to the export manifest.

    e. Click OK to close the Include Options window.

4. Click File > Save All to save your entries.

Procedure 4: Export the data

In this procedure, you export the assets that you added to the export manifest, and create a deploy data set.

1. Right-click Sales-app-assets.xml and select Export.

2. The Export Options window is displayed.
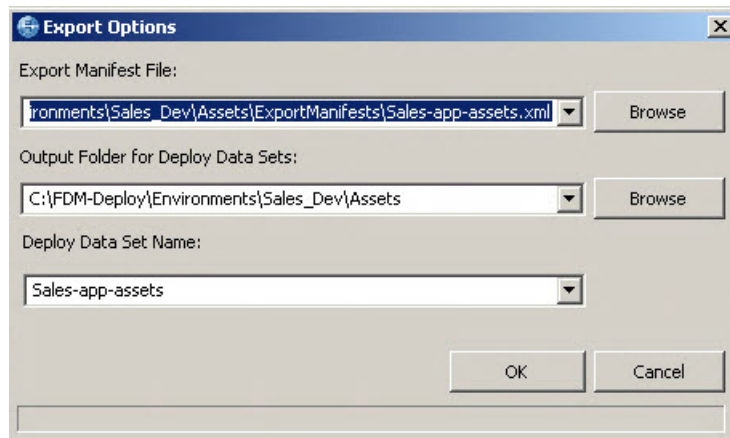
3. Accept the default values for the deploy data set output folder and the deploy data set name. Make note of the Output Folder for the deploy data set.

 Note

You can change the values to whatever you want. However, it is easier if you leave the values that FileNet Deployment Manager creates.

---

4. Click OK.

5. You should see 86 items processed. Click OK to close the success notification.

6. Review the deployment.log to see what assets were exported.

   a. In Windows Explorer, open the C:\FDM-deploy\Temp\Run.*<timestamp>* folder for the latest run.

   b. Open the deployment.log with Notepad or Notepad++. In the bottom half of the file, you see details of the items that were exported.

   Notice how adding two items to the export manifest with appropriate include options results in many exported items.

Optional

You exported files from the Sales object store to a deploy data set. The deploy data set contains the exported assets. It is a folder, in the deployment tree, that contains a set of files. Inspect the files in the deploy data set.

- In Windows Explorer, Browse to C:\FDM-deploy\Environments\Sales_Dev\Assets.

- Examine the file, ExportManifests\Sales-app-assets.xml.

- Explore the deploy data set, Sales-app-assets.

  - Notice that it is a folder that contains several xml files and a Content folder.

  - Examine each of the files and the folder.

When you are done, close all open files.

Procedure 5: Extract the data half maps from the deploy data set

In this procedure, you use the deploy data set that you created in Procedure 4 to extract the data half maps for the source environment.

1. In FileNet Deployment Manager, double-click the Sales_Dev environment to open it.

2. Retrieve the object store half map:

   a. Click the first Retrieve Data to retrieve the object store data.

   b. Accept, From Deploy Data Set File, click Next.

   c. Under Select Deploy Data Set, ensure that the correct deploy data set is selected:

      C:\FDM-Deploy\Environments\Sales_Dev\Assets\Sales-app-assets

   d. Select the two Options:

      - Retrieve storage policies for each object store.

      - Retrieve storage areas for each object store.

   e. For Mode, accept the default, **Merge retrieved data with existing half map**.

   f. Click Finish.

   g. Click OK to close the success confirmation window.

   h. You should see:

Half Maps		
Action	**Type**	**Status**
	Object Store	1 entry, no labels, updated Jun 8, 2016 at 1:03:29 PM
Retrieve Data...	Storage Policy	1 entry, no labels, updated Jun 8, 2016 at 1:03:29 PM
	Storage Area	1 entry, no labels, updated Jun 8, 2016 at 1:03:29 PM

      i.   Verify the object store data:

- Expand the Sales_Dev node in the tree view, if necessary.

- Right-click the node, Object Store Data, select open.

      j.   You see one object store listed, Sales.

3. Add a label to the object store half map:

   a.   In the label column, type: `SalesOS`.

   b.   Save your entries, File > Save.

   c.   Close the Object Store Data for Sales_Dev tab.

4. Retrieve Security Principal Data:

   a.   In the Sales_Dev tab, click the second Retrieve Data.

   b.   Accept, Deploy Data Set File, click Next.

   c.   Under Select Deploy Data Set, ensure that the correct deploy data set is selected.

   d.   For Mode, accept the default, **Merge retrieved data with existing half map**.

   e.   Click Finish.

   f.   Click OK to close the success confirmation window.

5. Verify the security principal data half map:

   a.   On the navigation pane, under the Sales_Dev environment, double-click the node, Security Principal Data.

   b.   You see a list of three security principals retrieved.

   c.   Add labels to the entries:

- Label: `admins`, to **p8admins**.

- Label: `users`, to **p8users**.

Label	Short Name ▲	Display Name	Type	Name
	p8admin	P8Admin	User	cn=P8Admin,o=sample
admins	p8admins	P8Admins	Group	cn=P8Admins,o=sample
users	p8users	P8Users	Group	CN=P8Users,cn=groups,o=sample

Hint

To add a label, double-click the cell and type the value.

   d.   Save your entries, File > Save.

   e.   Close the Security Principal Data for Sales_Dev tab.

6. Close all the open tabs. File > Close All.

7. Leave FileNet Deployment Manager open for the next activity.

3.2. Challenge: Extract the Service Data half map

Scenario

You completed the export of the Sales Application FileNet P8 assets and created a deploy data set. You extracted the object store and security principal data half maps from the source environment.

You need to extract any service data that the deploy data set assets reference.

Data

Item	Value
Source for Service Data	From CPE Deploy Data Set
Select Deploy Data Set	C:\FDM-deploy\Environments\Sales_Dev\Assets\Sales-app-assets
Mode	Merge Retrieved data with existing half map (default)

Challenge

- Use FileNet Deployment Manager and the data that is provided to extract the service data half map for the source environment, Sales_Dev.

Verification

The assets in the deploy data set, Sales-app-assets, do not reference any service data. No service data entries are retrieved.
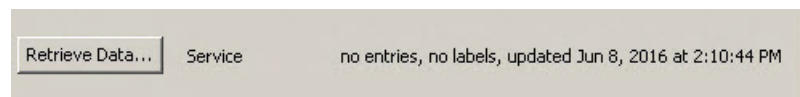
It is a good idea to always extract the service data to make sure that no service data is missed.

3.3. Challenge: Create a deploy package

Scenario

You completed the export of the Sales Application FileNet P8 assets and created a deploy data set. You used the deploy data set to extract the object store and security principal data half maps from the source environment.

You need to create a deploy package for the Sales Application. You save the deploy package and the export manifest, used to create it, in the Sales Application package folder. The Sales Application package can be put under change control and used to migrate and deploy the Sales Application to other environments.

Data

Item	Value
Deploy data set	C:\FDM-Deploy\Environments\Sales_Dev\Assets\Sales-app-assets
Source Environment	Sales_Dev
Deploy Package	C:\FDM-Deploy\Environments\Sales_Dev\Assets\Sales-app-assets.zip

Challenge

- Use FileNet Deployment Manager and the data that is provided to create a deploy package for the source environment, Sales_Dev.

  - File > Deploy Package > Create Deploy Package

- Save the deploy package to the Sales Application package folder.

  - Copy the deploy package and save it to:

  C:\Labs\FileNet Content Manager 5.2.1 Administration\Sales Application\FileNet P8 assets

- Save the export manifest to the Sales Application folder.

  - Create a folder to store the export manifest:

  <...>\Sales Application\FileNet P8 assets\Export Manifests

  - Copy and paste the export manifest, used to create the deploy data set, to the Export Manifests folder you created.

Verification

1. The deploy package compressed file, is listed under the folder:

   C:\FDM-deploy\Environments\Sales_Dev\Assets

2. The compressed file contains:
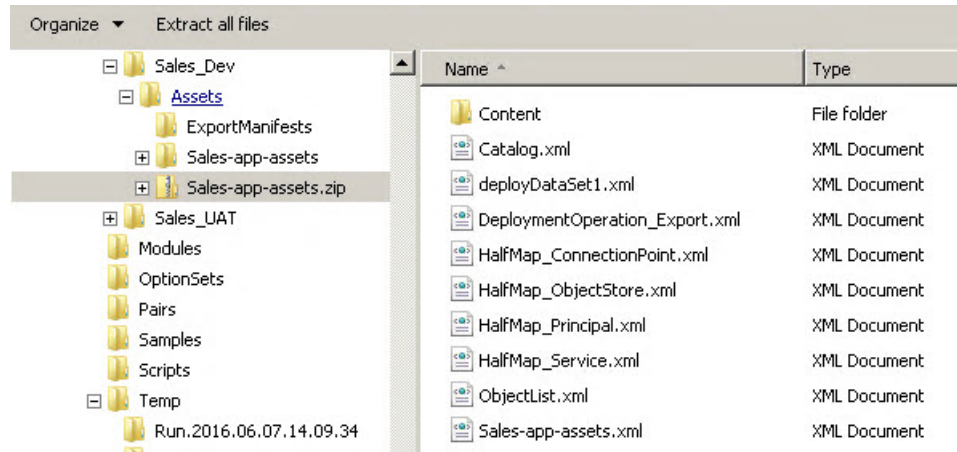
3. Close FileNet Deployment Manager.

ℹ **Information**

Creating the application package for an IBM FileNet Content Manager application is the responsibility of the Solution Builder that builds the application, and the administrators that migrate and deploy the application. The Solution Builder creates the initial draft and then hands it off to the administrators who add any necessary files and update the Deployment and Migration instructions.

3.4. Export an IBM Content Navigator desktop

Introduction

In this activity, you export the other IBM Assets of the Sales Application. Based on the information in the Application Assets Tracking spreadsheet, the only other asset you need to export is the Sales desktop.

On the student system, you have only one FileNet P8 domain and one instance of IBM Content Navigator. The Sales desktop does not exist yet so that you can import it in a later exercise. For this activity, you export the Sample desktop, which is almost identical to the Sales desktop.

Procedures

Procedure 1: Export a desktop

In this procedure, you use the IBM Content Navigator administration tool to export the Sample desktop.

1. Open IBM Content Navigator administration tool.

   a. Open a Mozilla Firefox window.
   b. Go to URL http://ecmedu01:9080/navigator/?desktop=admin

      - You can also use the bookmark, Content Navigator Administration.

   c. Log in with a Content Navigator administrator account.

      • User name: `P8Admin`

      • Password: `IBMFileNetP8`

   d. The administration tool opens to the Desktops tab.

2. Select the Sample Desktop and click Export.

3. Change the file name to a name that is more meaningful.

   For example: `SampleDesktop-export.properties`

4. Select the Repositories to export:

   a. Click the Repositories tab.

   b. Select the Sales repository only.

💡 **Hint**

You can clear the top check box to clear all the repositories, then select Sales.

---

5. Select the plug-ins to export:

    a. Click the Plug-ins tab.

    b. Select the IBM Administration Console for Content Platform Engine plug-in only.

6. Select the Themes to export:

    a. Do not include any themes in the export.

ⓘ Information

The Sample desktop does not have any custom themes. The themes that are listed are the standard themes that are created when a desktop is created, you do not need to export them.

---

7. Complete the Export:

    a. Click Export, on the lower right.

    b. Select, Save File and click OK.

8. Examine the exported desktop:

    a. In Windows Explorer, go to Favorites\Downloads.
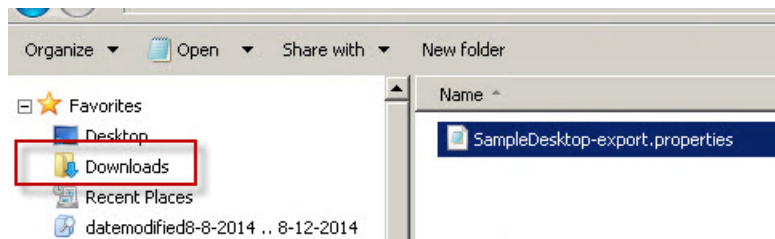
ⓘ Information

If this file was the export of the desktop for the Sales Application, you would copy the file to the folder, Other IBM assets, in the Sales Application package folder.

---

9. Log out of the IBM Content Navigator administration tool and close the browser window.

Exercise review and wrap-up

In this exercise, you completed the following tasks:

- Export the FileNet P8 assets of the Sales Application.
- Export an IBM Content Navigator desktop.

Exercise 4. Convert and analyze the FileNet P8 assets

Estimated time

00:15

Overview

In this unit, you use the source and destination environment half maps to create data maps that to facilitate the conversion of the FileNet P8 assets of the Sales Application and get them ready to import into the destination object store. You also run a change impact analysis to discover the impact of the import on the destination environment before running the import.

Objectives

After completing this exercise, you should be able to:

- Convert the FileNet P8 assets.
- Analyze the impact of the import on the destination environment.

Exercise Introduction

Introduction

In this exercise, you:

- Define a source-destination pair.
- Create data maps to map object store and security principal data between the source and destination environments.
- Convert the exported assets to use the destination environment object store and security principals.
- Run a change impact analysis to create a report that lists the import impact to the destination object store.

Activities

User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8

✎ **Note**

Passwords are always case-sensitive.

4.1. Convert the FileNet P8 assets

Introduction

In this activity, you:

- Define a source-destination pair.
- Create data maps to map object store and security principal data between the source and destination environments.
- Convert the exported assets to use the destination environment object store and security principals.

Procedures

Procedure 1: Define a source-destination pair

1. Open FileNet Deployment Manager.

2. In the navigation pane, right-click Source-Destination pair and select, New > Source-Destination Pair.

3. Enter a name for the pair (pick a name that identifies the source and destination environments). For example: `Sales_DevtoSales_UAT`.

4. For the Source Environment, select Sales_Dev.

5. For the Destination Environment, select Sales_UAT.

6. Click Finish.

7. The new source-destination pair is listed in the navigation pane.
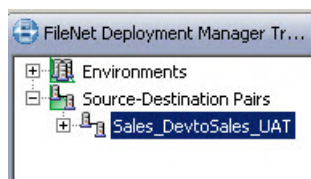
Procedure 2: Add a label to the source half map

In this procedure, you add a label to the destination object store half map to facilitate mapping.

1. In the left navigation pane, expand Environments > Sales_UAT.

2. Double-click Object Store Data to open it.

3. In the row that contains the name, SalesUAT, type, `SalesOS`, in the label column.

Label	Name ▲	Symbolic Name
	LoanProcess	LoanProcess
	LoanProcessQA	LoanProcessQA
	P8ConfigObjectStore	P8ConfigObjectStore
	Sales	Sales
	SalesQA	SalesQA
	SalesSBx	SalesSBx
SalesOS	SalesUAT	SalesUAT

4. Click File > Save.

5. Close the Object Store Data for Sales_UAT tab.

Procedure 3: Create the source-destination pair data maps

In this procedure, you use the source and destination environment half maps to create source-destination pair data maps.

1. Open the source-destination pair:

    a. In the navigation pane, double-click Sales_DevtoSales_UAT.

2. Create the object store data map:

    a. Click the first Map Data.

    b. Click OK to close the success confirmation window.

    c. The object store map opens. You see that the source name, Sales, is mapped to the destination name, SalesUAT.

    d. Close the tab.

3. Create the security principal data map:

    a. Click the second Map Data.

    b. Click OK to close the success confirmation window.

    c. The security principal map opens. You see three principals that are listed:

		Source Short Name	Destination Short Name	Source Display Name	Destination Display Name	Source Principal Type
		p8admins	sysadmins	P8Admins	SysAdmins	Group
		p8users	clerks	P8Users	Clerks	Group
		p8admin	p8admin	P8Admin	P8Admin	User

    d. Close the tab.

Procedure 4: Convert the deploy data set

In this procedure, you use the source-destination pair data maps you created and the deploy data set that contains the exported FileNet P8 assets to convert the assets. The conversion process modifies the assets to use the destination environment object store and security principals.

1. On the navigation pane, right-click the source-destination pair, Sales_DevtoSales_UAT, and select Convert Assets.

2. Select the deploy data set. Usually you can accept the default, unless you changed the naming conventions that FileNet Deployment Manager uses (browse to the correct folder, if necessary).

3. Click Next.

4. On the Select Output Folder for Converted Deploy Data Set, accept the default values for the folder and the file name.

    Folder: `C:\FDM-deploy\Environments\Sales_UAT\Assets`

    File: `C:\FDM-deploy\Environments\Sales-Dev\Assets\Sales-app-assets.converted`

5. Click Finish.

6. The assets are successfully converted:
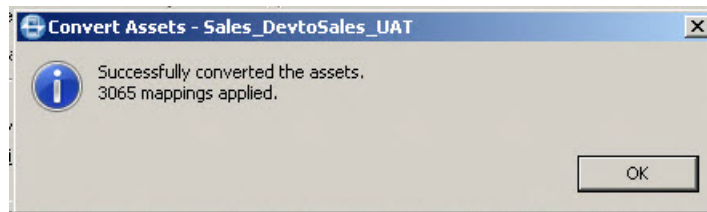
ℹ **Information**

The number of mappings can be much larger than the number of assets exported. Each asset can have multiple references. Depending on the include options, references might need to be mapped.

7. Click OK to close the window.

8. Leave FileNet Deployment Manager open for the next activity.

4.2. Run a pre-import analysis

Introduction

In this activity, you run a change impact analysis, which creates a report of how the import impacts the destination object store. The report also checks for failures and warnings so that you can resolve any potential issues before running the import.

Procedures

- Procedure 1, "Run a change impact analysis," on page 4-6
- Procedure 2, "Analyze the change impact analysis report," on page 4-7

Procedure 1: Run a change impact analysis

Before you attempt to import the converted FileNet P8 assets into the destination environment, you want to see how the destination object store is impacted. In this procedure, you use FileNet Deployment Manager to run a change impact analysis and create a report.

1. In FileNet Deployment Manager, right-click the source-destination pair, Sales_DevtoSales_UAT, and select Analyze.

2. Analyze Change Impact on Destination Environment window:

    a. Select the deploy data set (generally you can accept the default).

    `C:\FDM-deploy\Environments\Sales-UAT\Assets\Sales-app-assets.converted`

    b. Click Next.

3. Select Import Analysis Options window:

    a. Accept the default option.

i   **Information**

No assets are imported yet, all the options result in updating all the objects. If it is not the first time that you run the import, then choose the appropriate option.

    b. Click Next.

4. Change Impact Report Options window:

    a. Accept the default path, but note the path for the Change Impact Report file.

    b. Click the option to Include details for all objects in report.

    c. Leave the option to view report after processing selected.

    d. Click Next.

5. Summary window.

   a. Review the options.

   b. Click Finish.

6. When the analysis is complete, you see get a message that all 86 assets passed validation with 29 warnings.
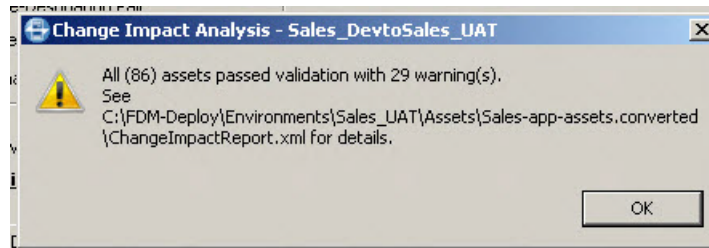
   a. When you are ready, click OK.

7. The Change Impact Analysis Report opens.

Procedure 2: Analyze the change impact analysis report

In this procedure, you learn how to read and interpret the change impact analysis report.

1. Review the summary section of the report:

   a. Click the Summary link on the report.

   b. Review the information included in the report.

   c. Note:

      - Total # of Assets Analyzed.

      - Total # of Failures.

      - Total # of Warnings.

      - Total # of Assets that would be created during Import.

- Total # of Assets that would be Skipped during Import.

    d.   Click the link, <u>Back to Top</u>, when you are ready to continue.

2.   Click the link, <u>Assets that Passed Analysis with Warnings</u>.

3.   Explore the first warning:

Name	Class	ID	Analysis Status	Import Operation	Estimated Size	Comments
Order Basic 200	Order	{278A72C7-FFE5-447A-A856-7A569824288C}	Warning	Create	0.00 KB	Object to be imported references a storage object that does not exist at the destination. Import will fail if using storage policy or area from the exported object. Object being imported: Name='Order Basic 200', ID={278A72C7-FFE5-447A-A856-7A569824288C}, Class=Order. Related object: ID={000A8C36-3AF9-4167-AD23-EAC939A005CD}, Class=StorageArea

    a.   The first three columns provide, the display name, the class type, and the ID of the object to be created (Import Operation column).

    b.   The Comments column provides the details of the warning.

    c.   If you attempt to import the object, Order Basic 200, and use the storage policy or storage area from the exported object, the import fails. The cause is a related object of class, StorageArea, does not exist.

4.   Find the missing object.

    a.   Copy the last object ID listed in the Comments column (include the braces).

    b.   Open the Administration Console for Content Platform Engine (ACCE).

    c.   Open the Sales object store.

    d.   Click Search. On the right, click New Object Store Search.

  e. Complete the search criteria:

    - Class: **StorageArea**

    - Criteria:

      ○ Column: **ID**

      ○ Condition: **Equal To**

      ○ Value: The ID you copied in Step 4.a.

  f. Click Run.

  g. The search results, show that the missing object is the File Storage Area, Sales.

  h. You can ignore this warning. The Sales Application, FileNet P8 assets, use the default storage area that is defined for the destination object store.

 Note

The same steps, which are outlined in Steps 3-4 can be used to investigate all warnings and failures.

---

5. Log out of the administration console and close the browser window.

6. Close the Change impact analysis report.

7. Exit FileNet Deployment Manager.

Exercise review and wrap-up

In this exercise, you completed the following tasks:

- Converted the Sales Application FileNet P8 assets.

- Analyzed the impact of the import on the destination environment.

Exercise 5. Import the application assets

Estimated time

00:30

Overview

In this unit you, complete the migration and deployment of the Sales Application into the destination environment. You import the application assets into the destination environment.

Objectives

After completing this exercise, you should be able to:

- Import the Sales Application assets into the destination environment.

Exercise Introduction

Introduction

In this exercise, you:

- Import the FileNet P8 assets into the destination object store.
- Import the Sales desktop into the destination environment.

Activities

-
-

User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8
Sysadmin	Paula	filenet

Note

Passwords are always case-sensitive.

5.1. Import FileNet P8 assets

Introduction

In this activity, you import the FileNet P8 assets that you exported and converted in Units 3-4.

Procedures

Procedure 1: Import FileNet P8 assets into SalesUAT

1. Start FileNet Deployment Manager.

2. Expand the node, Source-Destination Pairs.

3. Right-click Sales_DevtoSales_UAT and select Import.

4. Options window:

   - Selected Environment: Sales_UAT

   - Select Deploy Data Set:
     `C:\FDM-deploy\Environments\Sales-UAT\Assets\Sales-app-assets.converted`

   - Selected Option Set: Click New

        `C:\FDM-Deploy\Sales-app-Import-options.xml`

     - Click Save.

5. Configure Import Options window:

   a. Leave all the default options.

   b. Click OK.

      - If prompted, save modifications to the options set.

6. Click Finish.

7. The import fails. In the next procedure, you investigate the cause of the failure.

   a. Click OK to close the message.

Procedure 2: Troubleshoot a failed import

1. Review the deployment.log.

    a. In Windows Explorer, open the folder, C:\FDM-Deploy\Temp.

    b. Open the latest Run.*<date and time stamp>* folder.

    c. Open the deployment.log with Notepad++.

    d. Search for the string, `run has started`.

    e. The next entry, flagged as WARN, states: The current import process is attempting to update system properties and the current user does not have the right, "modify certain system properties" on the object store, SalesUAT.

ⓘ **Information**

The import Options Set file includes the option to **Use original create/update timestamps and users** selected. The option requires that the user that is running the import, has the right, "modify certain system properties". You have two options:

• Grant p8admin the right to modify certain system properties.

• Remove the option to Use original create/update timestamps, from the import Options Set.

---

2. Repeat the import and clear the option to Use original create/update timestamps, from the Options Set file:

    a. In FileNet Deployment Manager, right-click Sales_DevtoSales_UAT and select Import.

    b. Options window:

    - Selected Option Set: Click Configure.

    c. Configure Import Options window:

    - Standard Options: Clear the option to use original create/update timestamps.

    - Import Mode: select the option to Import with audit.

    - File Options: Clear the option to delete created files on error.

- Change the Audit file name. For example: `import-audit`.

- Click OK twice.

- Save the changes to the same Options Set file.

d. Click Finish.

3. The import completes successfully. You see:
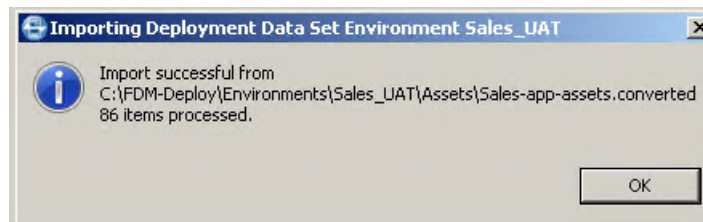
4. Click OK to close the window.

Procedure 3: Generate an audit report

1. Right-click Sales_DevtoSales_UAT and select Generate Audit Report.

2. Generate Audit Report from Audit Files Window:

a. Accept the defaults for all entries, except:

- Select the option to Generate detailed report.

b. Click Finish.

c. In the success confirmation window that is displayed, you see, Successfully generated audit report.

d. Click OK to close the window.

3. Examine the Audit Report.

    The report contains much information.

    a. Expand some of the objects under the Details section.
    b. When you are done examining the report, close the report and close the browser window.

4. Close FileNet Deployment Manager.

5. Close Notepad++.

Procedure 4: Verify the imported FileNet P8 assets

1. Log in to the Administration Console for the Content Platform Engine as a member of the Sysadmins group.

    -   User name: `Paula`

    -   Password: `filenet`

2. Open the SalesUAT object store.

3. Expand the Browse > Root Folder.

4. Verify that the Root Folder contains the two subfolders:

    -   Customers

    -   Orders

5. Open the folders and verify that they contain the expected documents.

6. Verify the class types and the property definitions.

7. Logout when you are done verifying the imported assets.

8. Close the browser window.

5.2. Import other IBM Assets

Introduction

In this activity, you import the Sales desktop that the Solution Builder provided in the Sales Application package.

Procedures

Procedure 1: Import the Sales desktop

In this procedure, you use the IBM Content Navigator administration tool to import the Sales desktop that the Solution Builder provided in the Sales Application package.

1. Start the IBM Content Navigator administration tool:

    a. Open a Mozilla Firefox window.
    b. Go to the bookmark, Content Navigator Administration.
    c. Log in with a Content Navigator administrator account.

        • User name: `P8Admin`

        • Password: `IBMFileNetP8`

    d. The administration tool opens to the Desktops tab.

2. On the menu bar, click **Import**.

    a. Browse to:

    `C:\Labs\FileNet Content Manager 5.2.1 Administration\Sales Application\Other IBM assets\`
    `SalesDesktopExport.properties`

    b. Ignore the warning that items exist, and click **Import**, on the lower right (you might need to scroll down to see Import).
    c. The Desktop Import Summary is displayed.

        • If you want, you can choose to download the report.

    d. Click Close.

3. The desktop **Sales** is listed on the Desktops tab:
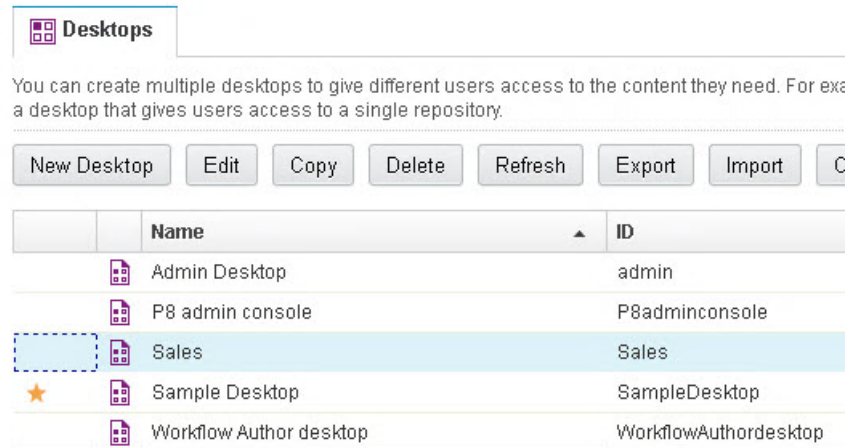
Procedure 2: Configure the imported Sales desktop

In this procedure, you modify the imported desktop configuration so that it works in the destination environment. Modifying the desktop configuration is an example of a post-deployment task that falls under the category of additional configuration tasks.

1. Modify the imported repository.

   a. In the IBM Content Navigator administration tool, open the Repositories node.
   b. Add a repository for the object store, SalesUAT:

      - Type: FileNet Content Manager

      - Display name: `SalesUAT`

      - Server URL: `iiop://ecmedu01:2809/FileNet/Engine`

      - Object store symbolic name: `SalesUAT`

      - Object store display name: `SalesUAT`

   c. Click Connect.

   d. Log in as:

      - User name: `Paula`

      - Password: `filenet`

   e. Click Save and Close.

   f. Close the Repositories tab.

2. Modify the imported desktop.

   a. On the Desktop tab, select the desktop, **Sales**, and click Edit.
   b. Under Authentication > Repository, use the menu to select, SalesUAT.
   c. Select the Layout tab. Clear the Teamspaces feature.
   d. Click Save and Close.

3. Log out of the IBM Content Navigator administration tool.

   a. Leave the browser window open for the next procedure.

Procedure 3: Test the desktop and validate the Sales Application

1. Open the Sales desktop.

    a. In the browser window that is open, change the last part of the URL:

        -   From: ?desktop=admin

        -   To: `?desktop=Sales` (Note: The desktop name is case-sensitive).

        -   Click return.

    b. Note the change in the theme colors. The Sales desktop contains a custom theme.

    c. Log in with an account that is a member of the group, Sysadmins.

        -   User name: `Paula`

        -   Password: `filenet`

2. On the left, select the repository, SalesUAT.

3. Under SalesUAT, click Orders to open the folder.

4. On the right, select one of the Orders. For example, Order Basic 200.

    a. Look at the Properties pane on the right.

    b. Verify that the class is, Order.

    c. Verify that six properties are listed after Document Title.

5. Select one of the Service Orders. For example, SO21345.

    a. Look at the Properties pane on the right.

    b. Verify that the class is, ServiceOrder.

    c. Verify that eight properties are listed after Document Title.

6. Add a document of class, Product Order.

    a. Click Add Document.

        -   File name: Libraries\Documents\sample documents\claim form.jpg

        -   Class: Order > ProductOrder

        -   If you want, add values for the properties.

        -   Click Add.

7. Verify that the document is added with the class, ProductOrder.

8. Log out of the Sales desktop and close the browser window.

Exercise review and wrap-up

In this exercise, you completed the following tasks:

- Import the FileNet P8 assets into the destination object store.
- Import the Sales desktop into the destination environment.

Exercise 6. Automate FileNet P8 asset migration

Estimated time

00:35

Overview

In this unit you, learn how to use the FileNet Deployment Manager command line interface to script the migration of the FileNet P8 assets of an IBM FileNet Content Manager application.

Objectives

After completing this exercise, you should be able to:

• Automate FileNet P8 asset migration with the FileNet Deployment Manager command line.

Exercise Introduction

Introduction

In this exercise, you use the FileNet Deployment Manager command line interface to:

- Run a change impact analysis.

- Expand a deploy package to a new environment.

Activities

User accounts

Type	User ID	Password
Administrator	p8admin	IBMFileNetP8

6.1. Run a change impact analysis

Introduction

In this activity, you run an AnalyzeDeployDataSet operation with the command line interface. You repeat the operation that you ran in Exercise 4.2, but you use the command line interface instead of the GUI.

Procedures

Procedure 1: Find for the deployment operation file

In this procedure, you find the Change Impact Analysis report, that you created in Exercise 4, activity 4.2. You use the date and time stamp of the report to locate the folder, C:\FDM-Deploy\Temp\Run<*date+time*>, and find the correct DeploymentOperation.xml file.

1. Search for the AnalyzeDeployDataSet operation:

   a. In Windows Explorer, go to the deployment tree, open the Sales_UAT environment, and go to where the converted assets are stored:

      ```
      -Sales_UAT\Assets\Sales-app-asset.converted
      ```

   b. Get the date and time stamp of the file, ChangeImpactReport.xml.

2. Get the DeploymentOperation.xml file for the Run<*date+time*> folder with the matching date and time stamp:

   a. In another Windows Explorer window, go to C:\FDM-Deploy\Temp\Run<*date+time*>, where the date and time matches the date and time of the file, ChangeImpactReport.xml. The hours and minutes match, but the seconds might be slightly different.

   b. Verify that you have the correct DeploymentOperation.xml file:

      - Edit DeploymentOperation.xml with a text editor.

      - Make sure that you see the tag, <AnalyzeDeployDataSet>.

      ```
      <DeploymentOperation deploymentTreeLocation="C:\FDM-Deploy" version="5.2.1">
          <AnalyzeDeployDataSet>
              <Environment>Sales_UAT</Environment>
      ```

   c. Close the text editor.

    d.   Copy the file, DeploymentOperation.xml, to a new folder, for example:

       `C:\scripts`

---

i Information

If you choose a path that includes spaces, you need to specify the path in quotes when you run the command.

---

    e.   Rename the file to Analyze_DeploymentOperation.xml

    f.   Leave the Windows Explorer windows open for the next procedure.

Procedure 2: Run the operation

In this procedure, you run the analyze deployment operation with the command line.

1. Open a command prompt window and change the Layout properties to a larger Window size, for example, Width: 100, Height: 50.

2. Change directories to the *<FDM_Install_Path>*:

   `C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy`

💡 Hint

You can open a Windows Explorer window and browse to the path. In the command prompt window, type `cd`, then copy and paste the path.

---

3. Run the command:

   `DeploymentManagerCMD.bat --operation C:\scripts\Analyze_DeploymentOperation.xml`

   ```
   Microsoft Windows [Version 6.1.7601]
   Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

   C:\Users\Administrator>cd C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy

   C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy>DeploymentManagerCMD.bat --operation C:\scri
   pts\Analyze_DeploymentOperation.xml
   ```

   a.   The information that is normally written to the deployment.log is displayed in the command window and also saved in the deployment.log.

   b.   Minimize the command window.

Procedure 3: Verify the operation

In this procedure, you verify that the command line operation ran successfully.

1. In Windows Explorer, go to the path where you stored the Analyze_DeploymentOperation.xml file.

   c.   Notice that a deployment.log is created in that directory.

    d. Edit the deployment.log with a text editor and scroll to the bottom of the file. You should see, **Validation for import started** and **All (86) assets passed validation**.

```
-----------------------------------------
2016-06-13 13:05:34,050  INFO [main] com.filenet.deployment.common.operations.AnalyzeDeployDataSet  - Validation for
import started.  Scanning Workflow System config file...
2016-06-13 13:05:34,050  INFO [main] com.filenet.deployment.common.operations.AnalyzeDeployDataSet  - All (86) assets
passed validation.
2016-06-13 13:05:34,081  INFO [main] com.filenet.deployment.common.Util  - Done extracting the resource file:
ChangeImpactReport.xsl
2016-06-13 13:05:34,081  INFO [main] com.filenet.deployment.common.Executor  - VALIDATE_FOR_IMPORT completed
successfully.  86 items processed.
```

    e. Close the text editor.

2. Open the Change Impact Analysis Report.

    a. In Windows Explorer, go to the path:

`C:\FDM-Deploy\Environments\SalesUAT\Assets\Sales-app-assets.converted`

    b. Notice the files ChangeImpactReport.xml ChangeImpactReport.xsl are modified. The date and time stamp is the time that you ran the operation in Procedure 2.

    c. Open the ChangeImpactReport.xml file with Internet Explorer.

    d. Review the report.

    e. Close the report when you are finished.

Procedure 4: Compare deployment operation files

In this procedure, you use FileNet Deployment Manager to create sample deployment files and you compare the sample AnalyzeDeployDataSet.xml with the Analyze_DeploymentOperation.xml file you created in Procedure 1.

1. Run the command to create the sample files.

    a. Maximize the command prompt window and run the command:

`DeploymentManagerCMD.bat --samples`

2. Examine the sample files created.

    b. In Windows Explorer, go to the path:

`C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy\Samples`

    c. Examine the files created.

    d. Open the file, **DeploymentOperation_AnalyzeDeployDataSet.xml** with Notepad++.

    e. Compare the sample file with the Analyze_DeploymentOperation.xml that you created in Procedure 1.

       • Note the values that are updated in the deployment operation file that you created.

3. Close all the files in Notepad++.

4. Exit Notepad++.

5. Leave the Windows Explorer windows open for the next activity.

6.2. Expand a deploy package to a new environment

Introduction

In this activity, you use the command line interface to run the operation, ExpandDeployPackage, to expand the deploy package to a new environment.

⚠ **Important**

This activity requires that you successfully complete Exercise 3.

Procedures

Procedure 1: Create the deployment operation file from a sample

In this procedure, you copy the sample file, DeploymentOperation_ExpandDeployPackage, and edit it.

1. Copy the sample file, DeploymentOperation_ExpandDeployPackage:

   a. Open the Windows Explorer window that is open to the path:

      `C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy\Samples`

   b. Copy the file, DeploymentOperation_ExpandDeployPackage.xml, to the folder you created in activity 6.1. For example, C:\scripts.

2. Edit the file, DeploymentOperation_ExpandDeployPackage.xml, in Notepad++.

3. Use the data in the table to update the file:

Item	Value
deploymentTreeLocation	`"C:\FDM-Deploy"`
createEnvironment	`"true"`
Environment	`Sales_test`
DeployDataSet	`\FDM-Deploy\Environments\Sales_test\Assets\Sales-app-assets`
DeployPackage	`\FDM-Deploy\Environments\Sales_Dev\Assets\Sales-app-assets.zip`

4. Save the file.

5. The edited file should look like:

```
The parameters in this operation file are documented in the "Deployment operation formats" topic in the o

For information on valid syntax, please refer to the XML schema in DeploymentOperation.xsd.
-->
<DeploymentOperation deploymentTreeLocation="C:\FDM-Deploy" version="5.2.0">
    <ExpandDeployPackage createEnvironment="true" halfMapMode="merge">
        <Environment>Sales_test</Environment>
        <DeployDataSet>C:\FDM-Deploy\Environments\Sales_test\Assets\Sales-app-assets</DeployDataSet>
        <DeployPackage>C:\FDM-Deploy\Environments\Sales_Dev\Assets\Sales-app-assets.zip</DeployPackage>
    </ExpandDeployPackage>
</DeploymentOperation>
```

Hint

The DeployDataSet tag uses the new environment that you create. The DeployPackage tag uses the source environment.

Procedure 2: Run the operation

1. Maximize the command prompt window and run the command. For example:

```
DeploymentManagerCMD.bat --operation
C:\scripts\DeploymentOperation_ExpandDeployPackage.xml
```

```
C:\Program Files\IBM\FileNet\ContentEngine\tools\deploy>DeploymentManagerCMD.bat --operation C:\scri
pts\DeploymentOperation_ExpandDeployPackage.xml
```

Important

If you created a different folder, then replace the path, C:\scripts\DeploymentOperation_ExpandDeployPackage.xml with the correct path.

   a. Click return.

2. Verify that the environment, Sales_test was created:

   a. Open FileNet Deployment Manager.

   b. Expand environments. Make sure that you see the new environment listed, Sales_test.

3. Verify the object store and security principal half maps.

   a. Expand the environment, Sales_test.

   b. Open the Object Store Data. It should match the object store data for the environment, Sales_Dev.

   c. Open the Security Principal Data. It should match the security principal data for the environment, Sales_Dev.

4. Verify the deploy data set:

    a. In Windows Explorer, browse to the path:

        `C:\FDM-Deploy\Environments\Sales_test\Assets`

    b. You should see the folder, Sales-app-assets:

5. Close all Windows Explorer windows.

6. Close FileNet Deployment Manager.

7. Close the command prompt window.

8. Close Notepad++ and the command window.

ℹ️ Information

In this activity, you created the DeploymentOperation file from the sample files that FileNet Deployment Manager created. You can also use the FileNet Deployment Manager GUI to expand the deploy package then save the DeploymentOperation file created by FileNet Deployment Manager.

Exercise review and wrap-up

In this exercise, you Used the command line interface to complete the following tasks:

- Run a change impact analysis.
- Expand a deploy package to a new environment.

Appendix A. Start and Stop System Components

Appendix Overview

This image contains three WebSphere Application Server profiles. For this unit, you use the profile for server1, which hosts the following applications:

- Tivoli Directory Server Administration tool
- Content Platform Engine
- IBM Content Navigator
- Administration Console for Content Platform Engine

List of procedures:

Procedure 1: Start system components

There are start scripts to make starting the WebSphere Application Server profiles easier. The scripts are in the folder WebSphere Admin on the desktop.

(!) Important

If you just started the student system, ensure that the Windows 7 Operating System completes starting all the services before starting the WebSphere Application Server profile. Launch the Windows Task Manager and ensure that CPU usage is down to 0-1% CPU usage. It can take several minutes.

---

1. Open the WebSphere Admin folder on the desktop.
2. Double-click the *Start Server1.bat* to run the script.
3. Wait for the command window to disappear. (Can take several minutes).

Note

For your convenience, the WebSphere Admin folder also contains:

- A link to launch the WebSphere administrative console for each server profile.

- A shortcut to the location of the WebSphere Application Server logs for each profile.

- Minimize the WebSphere Admin folder.

Information

The Start Server1.bat, starts the WebSphere Application Server, *server1*, which starts the following applications:

- Tivoli Directory Server Administration tool

- Content Platform Engine

- IBM Content Navigator

- Administration Console for Content Platform Engine

Procedure 2: Check system components

An IBM FileNet P8 Workflow system consists of one main engine, the Content Platform Engine, with two primary services, content and process services. In addition to the Content Platform Engine, a client application is required for the users and databases are required to store configuration information and the object stores. The client that you use for these activities is IBM Content Navigator. You work with two IBM Content Navigator desktops that are configured for the workflow system administrator and for the workflow author. You need to verify that the Content Platform Engine and the IBM Content Navigator desktops are fully functional before you start your student exercises. Because these two applications rely on more software, testing the two applications also ensures that the underlying software is also functioning properly within your system.

1. Verify that the Content Platform Engine, content services are functioning properly by opening the Content Engine Startup Context (Ping Page).

    a. Open a Mozilla Firefox browser window.
    b. Go to the URL: `http//ecmedu01:9080/FileNet/Engine`

Hint

There is a bookmark in the Bookmarks menu under:

      - *System Health > CE ping*

Because the Content Platform Engine is running as an application inside the IBM WebSphere Application Server, successfully viewing the Content Platform Engine Ping Page indicates that the web application server is also running on your student system.

2. Verify that the Content Platform Engine process Services are functioning properly.

   a. Open a new browser tab.
   b. Go to the URL: `http//ecmedu01:9080/peengine/IOR/ping`

Hint

There is a bookmark in the Bookmarks menu under:

   - *System Health > PE ping*

---

   c. Log in as the P8 administrator.

      - Username: p8admin

      - Password: IBMFileNetP8

   d. If both ping pages display successfully, close the browser and all the tabs.

Procedure 3: Stop system components

1. Open the WebSphere Admin folder on the desktop.

2. Double-click the Stop Server1.bat to run the script.

   a. Wait for the command window to disappear (Can take several minutes).

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