Course Exercises Guide

IBM FileNet Content Manager 5.2.1: Work with Object Metadata

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Exercises description

This course includes the following exercises:

- "Create document and folder classes" on page 1-1
- "Modify classes and properties" on page 2-1
- "Create event subscriptions" on page 3-1

Student system

Exercises in this course require that you have access to a student system on which is installed the software that you are learning.

- If you are taking this course as part of a self-paced online course (SPVC), you must start the student system that is provided by the SPVC provider.
- If you are taking this course as part of an instructor-led training (ILT) program, your instructor can show you how to access your student system.

Conventions used in this course

These guidelines can help you complete the exercises faster.

- Most exercises include required sections which should always be completed. It might be necessary to complete these sections before you can start later exercises. Some exercises might also include optional sections that you might want to complete if you have sufficient time and want an extra challenge.
- `Code font` indicates information that you must type.
- *Italics font* indicates a variable. Substitute a literal value where indicated. In some cases, Italics are also used for emphasis.
- As you progress through the materials, the lesson instructions become less verbose. You can refer back to earlier examples of procedures if you forget the steps.
- Data tables are used throughout this course. After you learn to perform the steps of a procedure, you can complete the exercise by using the data they provide.
- If a value is not specified in a data table, then the value is already correctly configured by default. Do not change it.

Exercise 1. Create document and folder classes

Estimated time

00:30

Overview

This exercise provides practice in creating custom document and folder classes. You also work with property templates and choice lists.

Objectives

After completing this exercise, you should be able to:

- Create a document class.
- Create a folder class.
- Create a property template with a choice list.

Introduction

This exercise provides practice with creating document and folder classes.

Requirements

You must have access to a student system that is configured for these activities. If you are taking this course as a self-paced virtual course (SPVC), ensure that your student system is started.

System start

To start your system:

1. Open the WebSphere Admin folder on your desktop.
2. Double-click Start Server1.bat.
3. Wait for the command window to close.

For more information about starting, stopping, and verifying the system status, refer to "Start and Stop System Components" on page A-1.

Exercise Introduction

Introduction

A property is a characteristic of a class. You must create custom property templates for your classes. As a Solution Builder, you create choice lists and property templates that are based on the needs of your organization and assign them to your custom classes.

Scenario

The Sales team has joined the organization. The Sales team needs some new classes that they can use to represent sales prospects. You create the document class for them.

Activities

- Create a choice list, on page 1-3
- Create property templates, on page 1-7
- Create document and folder classes, on page 1-13

User accounts

Application Name	User ID	Password
IBM Content Navigator	p8admin	IBMFileNetP8
Administration Console for Content Platform Engine	p8admin	IBMFileNetP8

Note

Passwords are always case-sensitive.

1.1. Create a choice list

Introduction

Choice lists help save time and prevent errors during data entry. Choice lists constrain property values to a pre-defined set values. In this activity, you create a choice list that you can later use in a property template.

Procedures

- Procedure 1, "Create a choice list," on page 1-3
- Procedure 2, "Verify the new choice list," on page 1-5

Procedure 1: Create a choice list

In this procedure, you create a choice list in the Administrative Console for Content Platform Engine.

1. Start the Administration Console for Content Platform Engine.
   - In a Firefox browser, go to `http://ecmedu01:9080/acce` or use the ACCE shortcut.
   - Log in as the P8admin user (password: `IBMFileNetP8`)
2. Open the SalesQA object store.
3. Open the New Choice List wizard.
   a. In the SalesQA object store, expand the SalesQA > Data Design node on the left pane and click Choice Lists.
   b. In the Choice Lists tab on the right pane, click New. The New Choice List tab opens.
4. Define Choice Lists.
   a. In the New Choice List tab, enter `Prospect Type` for the Display name field.
   b. Click Next.
5. Select Data Types.
   a. In the New Choice List tab, select String for the Choice list data type field.
   b. Click Next.
6. Add Choice List Items.
   a. In the New Choice List tab, click New Items.
   b. In the New Items window, for each name in the table, type the choice item name in the Display Name field.

Display Name	Value
Reseller	Reseller
End User	End User

c. When you click outside Display Name field, the value is automatically populated in the Value field. Optionally, you can edit the value field.

Important

Verify that the Value field is populated before you click Add.

---

d. Click Add. The choice item is added to the panel.

e. Click OK to close the New Item window.

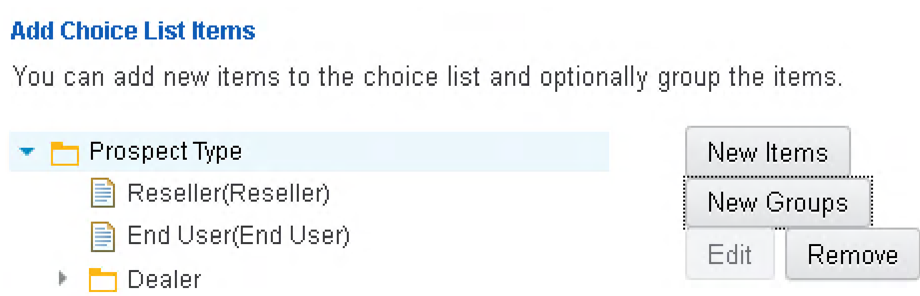
7. Add a group to the choice list.

a. In the New Choice List tab, click New Groups.

b. In the New Groups window, enter `Dealer` in the Display Name field.

c. Click Add. The group name is added to the panel.

d. Click OK.



8. Add choice items to the group.

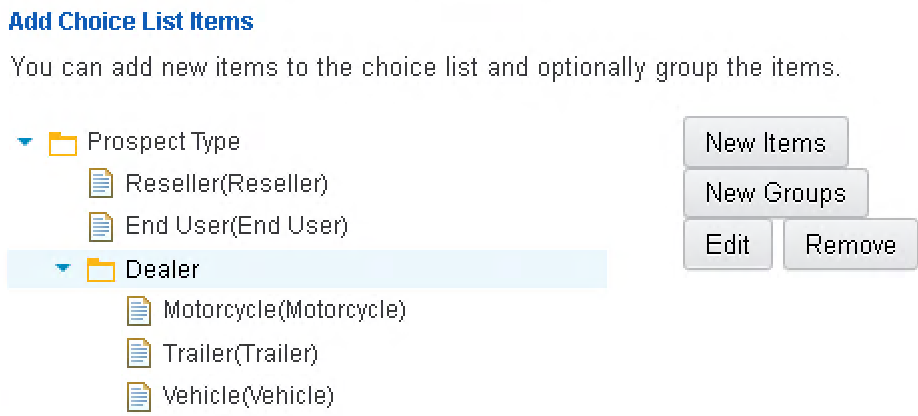
a. In the New Choice List tab, select Dealer.

b. Add choice items to the Dealer group by clicking New Items.

c. In the New Items window, the following items..

Display Name	Value
Motorcycle	Motorcycle
Trailer	Trailer
Vehicle	Vehicle

d. Verify that your completed choice list includes a group with vehicle choice items.



Hint

You can edit the choice items. To edit, select the item and click Edit.

You can also rearrange the choice items. To rearrange, click the item and use the Move Up or Move Down.

e. Click Next.

9. Complete the wizard.

   a. In the Summary page, view the details and click Finish.

   b. In the Success page, click Close.

Procedure 2: Verify the new choice list

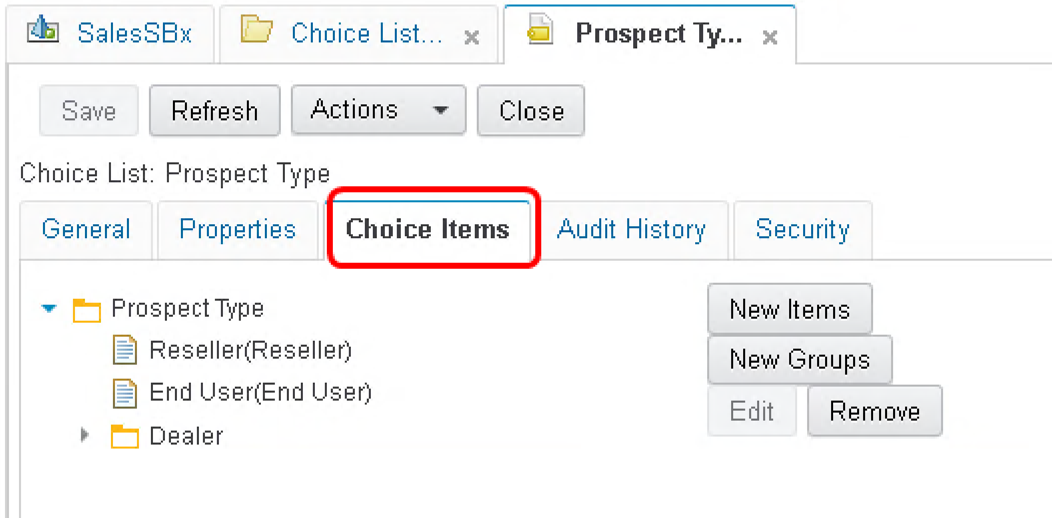
1. Click the Choice Lists tab and click Refresh.

   a. Verify that Prospect Type is shown.

   b. Click Prospect Type.

   c. In the Prospect Type tab, click the Choice Items subtab.

d. Verify that the choice items are listed as you defined.



2. Log out of the administration console and close the browser.

1.2. Create property templates

Introduction

In this activity, you create several property templates for the SalesQA object store in Administration Console for Content Platform Engine. You associate the choice list that you created to a property template. You are going to use these property templates to create Folder and Document classes later.

Procedures

Procedure 1: Create a String Property Template

1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`).
2. Open the New Property Template wizard.
   a. In the administration console, expand the P8Domain > Object Stores node on the left pane and click SalesQA.
   b. In the SalesQA tab, expand the SalesQA > Data Design node on the left pane and click Property Templates.
   c. In the Property Templates tab on the right pane, click New.
   d. The New Property Template tab opens.
3. Name and Describe the Property Template.
   a. In the New Property Template tab, enter `sales_prospect_name` for the Display name field.
   b. Verify that the Symbolic name and Descriptions fields are automatically populated. Click outside of the Display name field.
   c. Optionally edit the Description. Click Next.

Hint

It is sometimes useful to use a name prefix for property templates to track the property templates that are created for a specific application. Optionally, add the prefix to the symbolic name only.

4. Select the data type.
   a. Select `String` from the list for the data type field.
   b. Click Next.
5. Select Choice List or Marking Set: Click Next.
6. Complete the Single or Multi-Value page.
   a. Select the `Single` option for the Single or Multi-Value.
   b. Click Next.
7. Complete the wizard.
   a. In the Summary page, view the details and click Finish.
   b. In the Success page, click Close.
8. Verify that the new property template is listed.
   a. Click the Property Templates tab and click Refresh.
   b. Scroll down and verify that sales_prospect_name is listed.

Hint

You can click the Date Created column heading to sort the properties by the date created. Your new property moves to the top or the bottom of the list.

Procedure 2: Create a Multi-valued Property Template

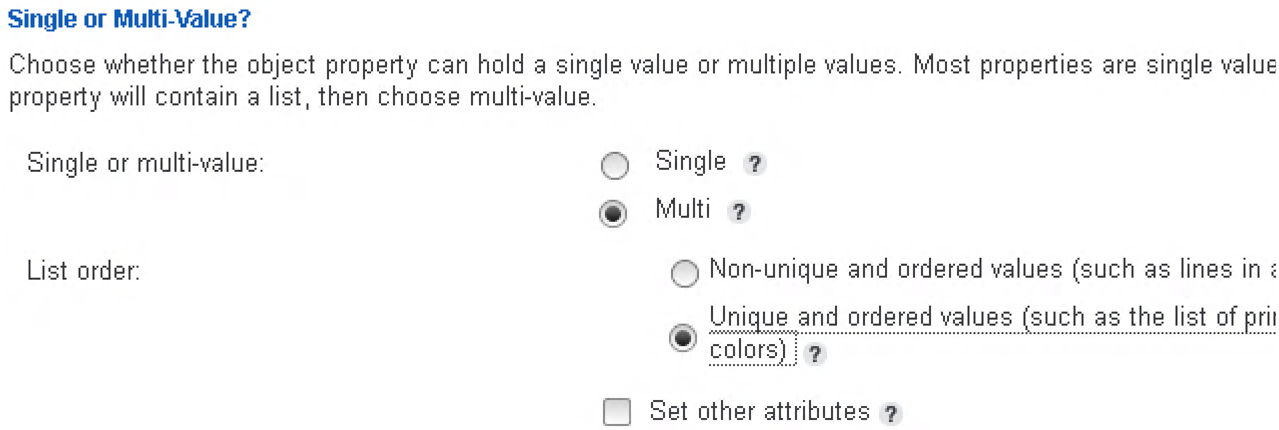
You are on the property templates page of the SalesQA object store.

1. Open the New Property Template wizard. In the Property Templates tab on the right pane, click New.
2. Name and Describe the Property Template.
   a. In the New Property Template tab, enter `sales_ contact_methods` for the Display name.
   b. Verify that the Symbolic name and Descriptions fields are automatically populated. Click outside of the Display name field.
   c. Optionally edit the Description. Click Next.
3. Select the data type.
   a. Select `String` from the list for the Data type field. Click Next.
4. Select Choice List or Marking Set. Click Next.

5. Complete the Single or Multi-Value page.

   a. Select `Multi` for the Single or Multi-Value.

   b. Select Unique and ordered values for the List order option.



   c. Click Next.

6. Complete the wizard.

   a. In the Summary page, view the details and click Finish.

   b. In the Success page, click Close.

7. Verify that the new property template is listed.

   a. Click the Property Templates tab and click Refresh.

   b. Verify that sales_contact_methods is listed.

Procedure 3: Create a Value-required Property Template

1. In the administration console, create a property template called `sales_prospect_id`.

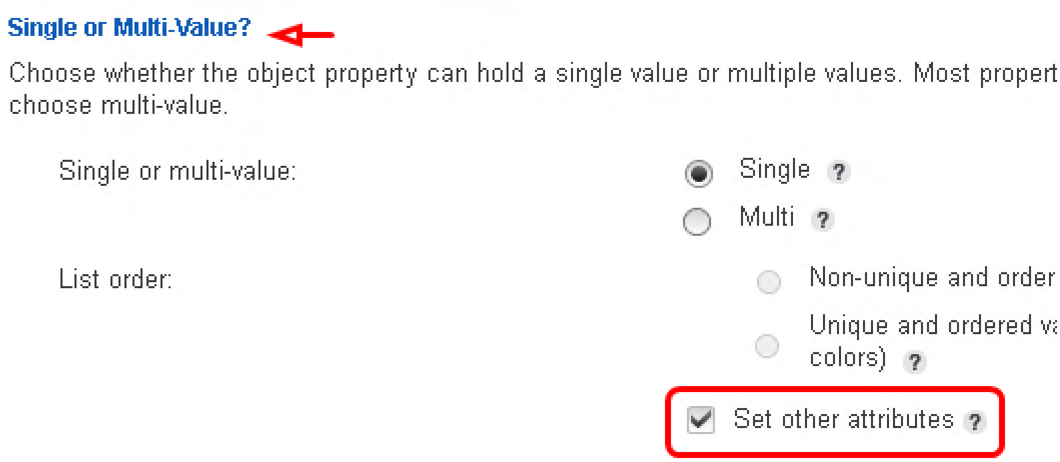
   a. Follow the steps in Procedure 1 to complete this task. Use the following data table.

Page	Field	Value
Name and Describe The Property Template	Name Symbolic Name Description	sales_prospect_id sales_prospect_id sales_prospect_id
Select the Data Type	Data type	String
Select a Choice List Or Marking Set	Assign a choice list Assign marking set	<None> <None>
Single or Multi-value?	Single	Selected
	Set other attributes	Selected
Additional Property Template Attributes	Value required	Selected

   b. Accept the default values for the other fields that are not listed in the table.

Hint

When you select the `Set other attributes` option in the Single or Multi-Value page, the wizard opens with more pages to set other attributes for the property template.



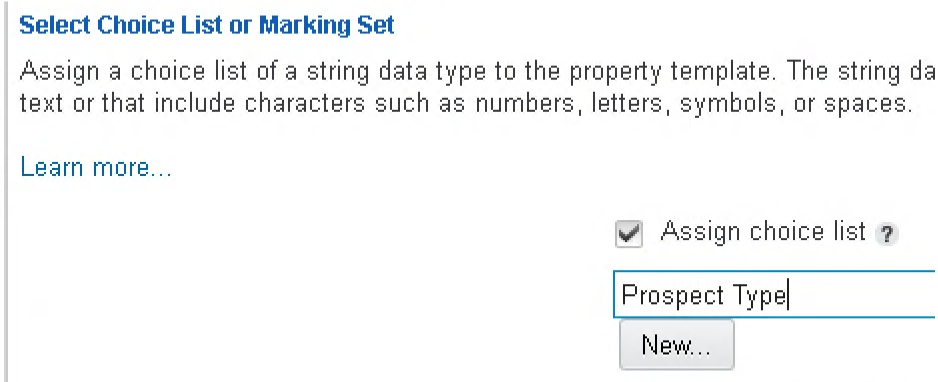
2. Verify that the new property template is listed.
   a. Click the Property Templates tab and click Refresh.
   b. Verify that sales_ prospect_id is listed.

Procedure 4: Create a Property Template with Choice List

1. In the administration console, create a property template called sales_prospect_category.
2. Use the following data table to set the initial property attributes.

Page	Field	Value
Name and Describe The Property Template	Name	sales_prospect_category
	Symbolic Name	sales_prospect_category
	Description	sales_prospect_category
Select the Data Type	Data type	String

3. In the Select Choice List or Marking Set window, select `Assign choice list`.
   a. Select the `Prospect Type` choice list that you created in the earlier activity.



   b. Click Next.
   c. Select `Single` on the Single or Multi-Value page and click Next.
   d. In the Summary page, click Finish.
   e. Click Close in the confirmation page.
4. Verify that the new property template is listed.
   a. Click the Property Templates tab and click Refresh.
   b. Verify that sales_prospect_category is listed.

Procedure 5: Create a Date Time Type Property Template

1. In the administration console, create a property template called `sales_last_contact_date`.
2. Follow the steps in Procedure 1 to complete this task.
   a. Use the following data table. Accept the default values for the other fields that are not listed in the table.

Page	Field	Value
Name and Describe the Property Template	Name	sales_last_contact_date
	Symbolic Name	sales_last_contact_date
	Description	sales_last_contact_date
Select the Data Type	Data type	Date Time
Single or Multi-Value?	Single	Selected

3. Verify that the new property template is listed.
   a. Click the Property Templates tab and click Refresh.
   b. Verify that sales_last_contact_date is listed.

Procedure 6: Create an Integer type Property Template

1. In the administration console, create a property template called `sales_times_contacted`.

2. Follow the steps in Procedure 1 to complete this task. Use the following data table.

   a. Accept the default values for the other fields that are not listed in the table.

Page	Field	Value
Name and Describe the Property Template	Name	sales_times_contacted
	Symbolic Name	sales_times_contacted
	Description	sales_times_contacted
Select the Data Type	Data type	Integer
Single or Multi-value?	Single	Selected

3. Verify that the new property template is listed.

   a. Click the Property Templates tab and click Refresh.

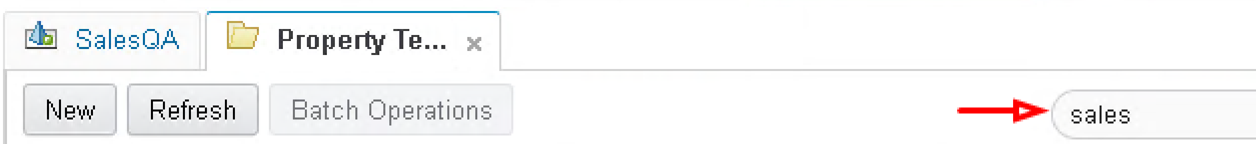
   b. Verify that sales_times_contacted is listed.

4. Review the Property Templates.

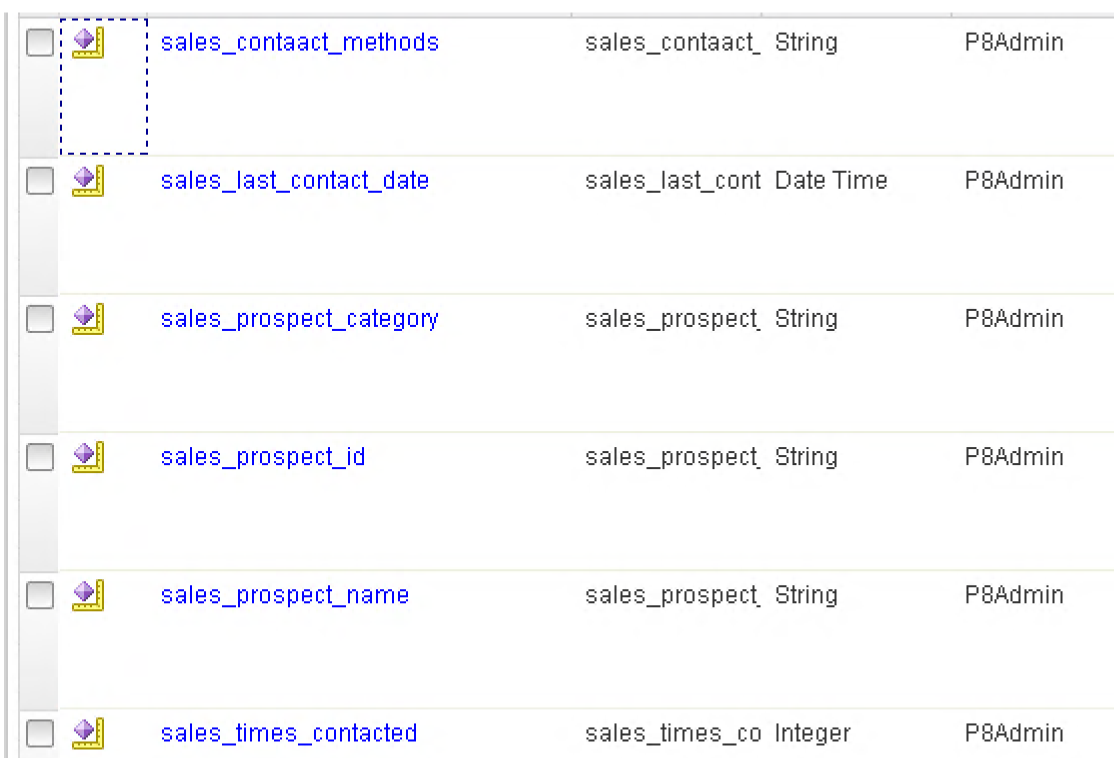
   a. Select the Property Templates node.

   b. Click Refresh.

   c. Type “sales” in the filter. Only the property templates that include sales are displayed..



   d. Verify that your property templates and data types are correct.



5. Log out of the Administration Console for Content Platform Engine and close the browser.

1.3. Create document and folder classes

Introduction

Documents that are checked into Content Platform Engine require a class. You can organize the documents and other objects into folders. You must define the Document and Folder classes that are based on the needs of your organization before you can add documents or other objects to an object store.

Procedures

Procedure 1: Create a Folder Class

1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`)
2. Open the New Folder Class wizard.
   a. In the administration console, expand the P8Domain > Object Stores node on the left pane and click SalesQA.
   b. In the SalesQA tab, expand the SalesQA > Data Design > Classes node on the left pane.
   c. Right-click Folder and select New Class from the list.
   d. The New Folder Class tab opens.
3. Name and Describe the Class.
   a. In the New Folder Class tab, enter `sales_ProspectsFolder` for the Display name.
   b. Verify that the Symbolic name and Descriptions fields are automatically populated. Click outside of the Display name field.
   c. Optionally edit the Description. Click Next.
4. Complete the wizard.
   a. In the Summary page, click Finish.
   b. In the Success page, click Close.
5. Verify that the new Folder subclass is listed.
   a. In the SalesQA tab, click Refresh.
   b. If needed, expand the SalesQA > Data Design > Classes > Folder node.
   c. Verify that the sales_ProspectsFolder class is listed.

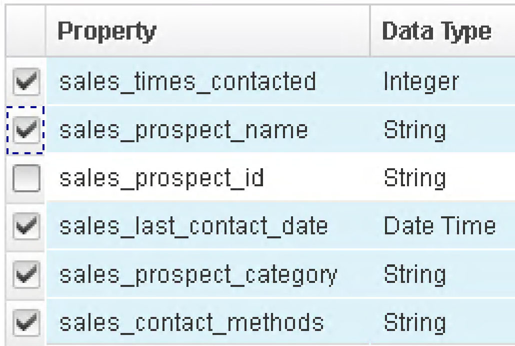
6. Click sales_ProspectsFolder in the left pane. The sales_ProspectsFolder tab opens in the right pane.
7. Add Property Definitions to the class.
   a. Select the Property Definitions subtab. Click Add.
   b. In the Add Properties page, scroll down and select the following properties that you want to add to this class.
      - sales_prospect_category
      - sales_prospect_id
   c. Click OK to close the Add Properties page.
8. Verify that the properties are listed.
   a. Click Save. Click Close to close the sales_ProspectsFolder tab.
9. Leave the administration console opened for the next procedure.

Procedure 2: Create a Document Class

1. Open the New Document Class wizard.
   a. Expand the SalesQA > Data Design > Classes node on the left pane.
   b. Right-click Document and select New Class from the list.
   c. The New Document Class tab opens.
2. Name and Describe the Class.
   a. In the New Document Class tab, enter `sales_Prospect` for the Display name field.
   b. Verify that the Symbolic name and Descriptions fields are automatically populated. Click outside of the Display name field.
   c. Optionally edit the Description. Click Next.
3. Complete the wizard.
   a. In the Summary page, click Finish.
   b. In the Success page, click Close.
4. Verify that the new Document subclass is listed.
   a. In the SalesQA tab, click Refresh.
   b. If needed, expand the SalesQA > Data Design > Classes > Document node.
   c. Verify that the sales_Prospect class is listed.
5. Add Property Definitions to the class.
   a. Click sales_Prospect in the left pane. The Prospect tab opens in the right pane.
   b. Select the Property Definitions subtab. Click Add.
   c. Type `sales` in the filter to show sales-related property templates only.

d. In the Add Properties page, select the following properties to add.

- sales_times_contacted
- sales_prospect_name
- sales_last_contact_date
- sales_prospect_category,
- sales_contact_methods,



	Property	Data Type
☑	sales_times_contacted	Integer
☑	sales_prospect_name	String
☐	sales_prospect_id	String
☑	sales_last_contact_date	Date Time
☑	sales_prospect_category	String
☑	sales_contact_methods	String

e. Click OK. Verify that all the properties are listed.

f. Click Save and then Close.

6. Log out of Administration Console for Content Platform Engine.

Procedure 3: Test your Folder class

In this activity, you create an instance of your Folder class in IBM Content Navigator. You verify that the instance has the metadata as specified in the class specification.

1. Start the IBM Content Navigator.

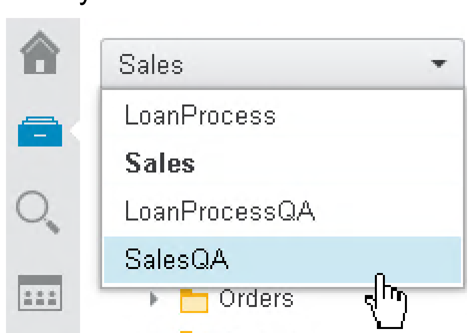
   a. In your browser, go to `http://ecmedu01:9080/navigator/`

      The URL value is case-sensitive.

   b. Enter the logon credentials for an administrator (user name: `P8admin`, password: `IBMFileNetP8`).

   c. The Content Navigator Sample Desktop opens in Browse view.

   d. Select the SalesQA repository from the list.



2. Click New Folder to create a folder of the class that you created.

3. Select your Folder class.
   a. In the New Folder window > Properties section, select `sales_ProspectsFolder` from the list for the Class field.
   b. Click OK.
   c. Enter `NYB Company` for the Folder Name.
   d. Select `Reseller` for the sales_prospect_category from the list.
   e. Click OK.
   f. Enter `NYBC` for the sales_prospect_id. The value for the field is required as you specified.
4. Click Add (in the lower right corner) to create the folder.
5. Verify that your new folder is listed.

Procedure 4: Test your Document class

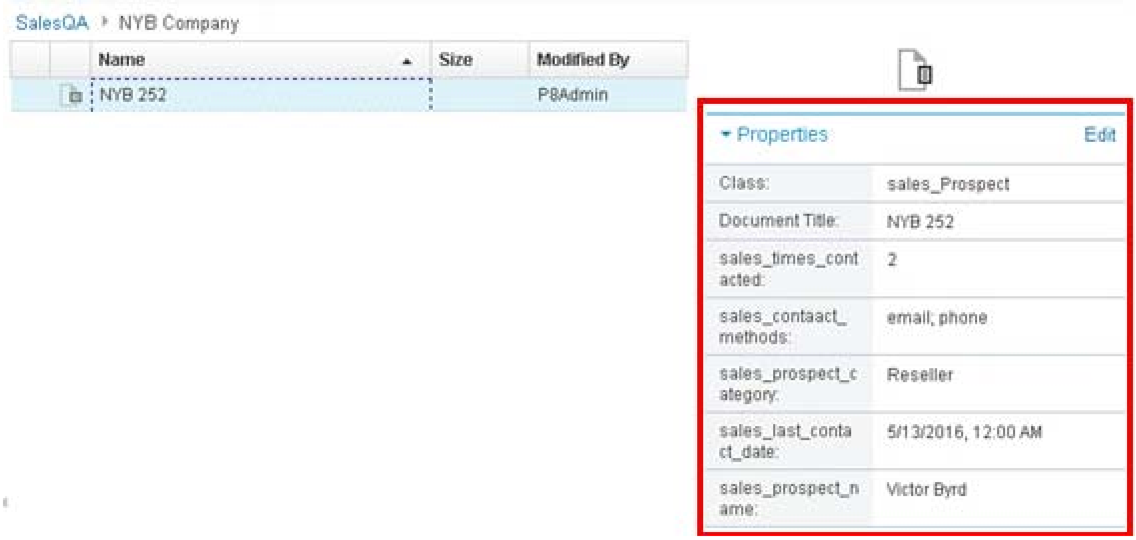
In this activity, you create an instance of your Document class in IBM Content Navigator. You verify that the instance has the metadata as specified by the class. You can add documents to the folder that you created.

1. Double-click the `NYB Company` folder to open.
2. Click Add Document to add a document to this folder.
3. Enter the properties for your class.
   a. In Add Document page, select “Information about the document” for the “What do you want to save?” field.
   b. In the Properties section, select sales_Prospect from the list for the Class field. Click OK.
   c. Enter the values for the other fields from the following table.

Field	Value
Document Title	NYB 252
sales_contact_methods	Email, phone call
sales_last_contact_date	Five days before the current date
sales_prospect_category	Reseller (Select from the choice list)
sales_prospect_name	Victor Byrd
sales_times_contacted	2

   d. For the contact_methods, click the field. A new window opens. Enter each value in the New field and click Add, then click OK.
   e. Click Add in the lower right corner.
4. Verify that your new document is listed in the folder.

5. Click the document. Verify that the properties and their values are shown in the rightmost pane.



6. Log out of IBM Content Navigator and close the window.

Create a Folder Class: Practice

Complete the following exercise scenario to practice the procedures that you learned in this unit.

Scenario: Create a Folder class to organize Vendor information

Your Solution Designer sends you the specification for a Folder class to organize the Vendor-related information.

Challenge

- Create two property templates in the Administration Console.
- Create a Folder class in the Administration Console.
- Verify the class by creating an instance of that class in the IBM Content Navigator.
- Use the default values for the fields that are not specified in the tables.

Data

Field	Value
Administration Console for Content Platform Engine account (logon/password)	p8admin/IBMFileNetP8
Object Store name	SalesQA

Data for the property template - 1

Field	Value
Name Symbolic Name Description	sales_vendor_name sales_vendor_name sales_vendor_name
Data type	String
Assign a choice list	<none>
Single or Multi-Value	Single

Data for the property template - 2

Field	Value
Name Symbolic Name Description	sales_vendor_ID sales_vendor_ID sales_vendor_ID
Data type	String
Assign a choice list	<none>
Single or Multi-Value	Single

Data for creating a Folder class

Field	Value
Name Symbolic Name Description	sales_Vendor sales_Vendor sales_Vendor Folder
Property definitions	sales_vendor_name sales_vendor_ID

Data for creating an instance of a Folder

Field	Value
IBM Content Navigator client account (logon/password)	p8admin/IBMFileNetP8
Object Store name	SalesQA
Folder class	sales_vendor
Name of the Folder	PC Paper
vendor_name	Pretty Cool Paper
vendor_id	1001

Hint

Remember to switch to the SalesQA object store.

Verification

- Verify that the property templates are available to add to the Folder class.
- Verify that the new Folder class is listed under the Folder class node on the left pane.
- Verify that you are able to create an instance of this Folder class.

Create a Document Class: Practice

Complete the following exercise scenario to practice the procedures that you learned in the two lessons.

Scenario: Create a Document class for the Quotes information

Your Solution Designer sends you the specification for a Document class to store the Quotes information.

Challenge

- Create two property templates in the Administration Console.
- Create a Document class in the Administration Console.
- Verify the class by creating an instance of that class in the IBM Content Navigator.
- Use the default values for the fields that are not specified in the tables.

Data

Item	Value
Administration Console for Content Platform Engine account (logon/password)	p8admin/IBMFileNetP8
Object store	SalesQA

Data for the property template - 1

Field	Value
Name Symbolic Name Description	sales_person_name sales_person_name Sales person name
What do you want to save?	Information about a document
Data type	String
Assign a choice list	<none>
Single or Multi-Value	Single

Data for the property template - 2

Field	Value
Name Symbolic Name Description	sales_person_ID sales_person_ID Sales person ID
Data type	Integer
Assign a choice list	<none>
Single or Multi-Value	Single

Data for creating a Document class

Field	Value
Name Symbolic Name Description	sales_Quote sales_Quote Sales Quote
Add Properties	sales_person_name sales_person_ID

Data for creating an instance of a Document

Field	Value
IBM Content Navigator client account (logon/password)	p8admin/IBMFileNetP8
Object store	SalesQA
Folder	PC Paper
Document class	sales_Quote
Document Title	TestPriceQuote
sales_person_name	Mary Williams
sales_person_ID	1

Hint

Remember to switch to the SalesQA object store.

Verification

- Verify that the property templates are available to add to the Document class.
- Verify that the new Document class is listed under the Document class node on the left pane.
- Verify that you are able to create an instance of this Document class.
- Verify that the properties have the value that you entered.

End of exercise

Exercise review and wrap-up

In this exercise, you did the following tasks:

- Create a document class.
- Create a folder class.
- Create a property template with a choice list.

Exercise 2. Modify classes and properties

Estimated time

00:30

Overview

This exercise provides practice in modifying classes and properties. You learn to work with metadata dependencies to change or remove properties and choice lists on classes.

Objectives

After completing this exercise, you should be able to:

- Change a property template name.
- Modify a choice list.
- Change the class of an object.
- Remove a choice list from a class.

Introduction

This exercise provides practice with modifying classes and properties.

Requirements

You must have access to a student system that is configured for these activities. If you are taking this course as a self-paced virtual course (SPVC), ensure that your student system is started.

System start

To start your system:

1. Open the WebSphere Admin folder on your desktop.
2. Double-click Start Server1.bat.
3. Wait for the command window to close.

For more information about starting, stopping, and verifying the system status, refer to "Start and Stop System Components" on page A-1.

Exercise Introduction

Introduction

In a development environment you continually design, test and refine your design. In some instances, you might have an application design that is a large investment in time that just needs a few minor changes. To make metadata changes, though, you must be aware of the metadata dependencies, and how to work around them. In this exercise, you practice working around these issues by modifying some metadata.

Scenario

Your Solution Designer identifies the aspects of your business solution that require changes to existing content data structures. As the Solution Builder, you must implement the required changes.

Activities

- Change the Property Template Name, on page 2-3
- Modify a Choice List, on page 2-9
- Change the Class for an Object, on page 2-13
- Work with Metadata Dependencies, on page 2-17

User accounts

Application Name	User ID	Password
IBM Content Navigator	p8admin	IBMFileNetP8
Administration Console for Content Platform Engine	p8admin	IBMFileNetP8

Note

Passwords are always case-sensitive.

2.1. Change the Property Template Name

Introduction

In this activity, you modify the display name of a property template. The effect of this change is to change how the system displays the property name to users.

Scenario

The Sales team wants simplified display names for the properties. You must change the display names on the property templates.

Procedures

- Procedure 1, "View the property template display name," on page 2-3
- Procedure 2, "Change the property template display name," on page 2-5

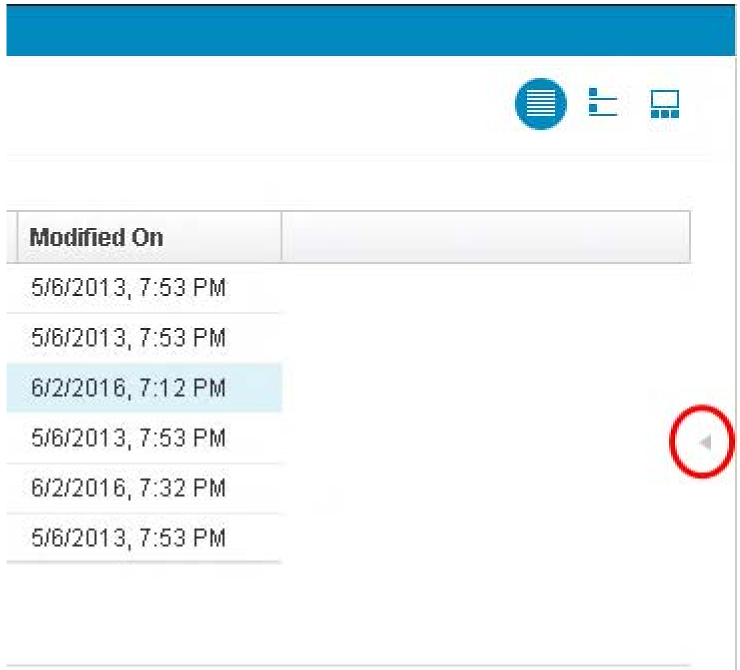
Procedure 1: View the property template display name

1. Start the IBM Content Navigator.
   a. In a Firefox browser, go to `http://ecmedu01:9080/navigator/`

      The URL value is case-sensitive.
   b. Enter the logon credentials for an administrator (user name: `P8admin`, password: `IBMFileNetP8`).
   c. The Content Navigator Sample Desktop opens in Browse view.
   d. Select the SalesQA repository from the list. The Browser view now displays SalesQA.
2. View the display name of the sales_prospect_id property definition.
   a. Click SalesQA in the left pane.
   b. Select the NYB Company folder in the middle pane.
   c. Expand Properties on the right pane if they are not expanded.

Hint

If you do not see the right pane, click the small arrow to open the right pane.



d. Observe the property display name sales_prospect_id.

e. You are going to change this display name to Prospect ID.

f. Log out of the Content Navigator.

Procedure 2: Change the property template display name

In this procedure, you change the display name of the sales_prospect_id property template to Prospect ID.

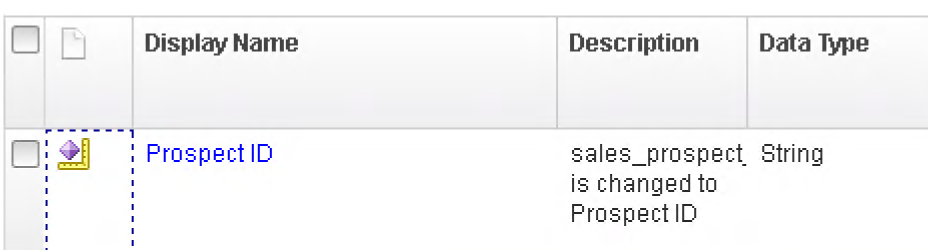
1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`)
2. Open the property definition.
   a. In the administration console, expand the P8Domain > Object Stores node on the left pane and click SalesQA.
   b. In the SalesQA tab, expand the SalesQA > Data Design > Property Templates node on the left pane.

Hint

Type `prospect` in the property filter to make the property easier to find.

   c. Click sales_prospect_id.
3. Change the display name for the property definition.
   a. In the prospect_id tab > General subtab, delete the existing Display name value and enter `Prospect ID` in the Display name field.
   b. Observe that the Symbolic Name field and Description field continues to display sales_prospect_id.
   c. Optionally change the Description field value to `Prospect ID.`
   d. Click Save to save the changes and then Close.

      The Properties page closes.
4. In the SalesQA tab, click Refresh.
5. Verify the name change.
   a. If needed, expand the SalesQA > Data Design > Property Templates node on the left pane.
   b. Verify that the property template is listed as `Prospect ID` in the right pane.



		Display Name	Description	Data Type
		Prospect ID	sales_prospect_ is changed to Prospect ID	String

6. Verify the name change in your Folder class.

   a. Expand the SalesQA > Data Design > Classes > Folder node on the left pane and click sales_PropspectsFolder.

   b. In the sales_PropspectsFolder tab > Property Definitions subtab, verify that the value is displayed as `Prospect ID`.

7. Log out of the administration console and close the browser.

8. Verify the new display name for the property definition in the IBM Content Navigator.

   a. In a Firefox browser, clear the cache by clicking History > Clear Recent History from the top menu.

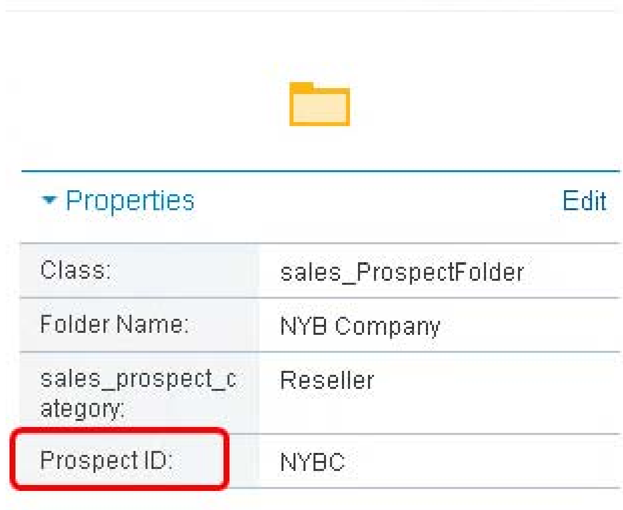
   b. In the Clear All History window, click Clear Now.

   c. Log in to IBM Content Navigator as `p8admin` (password: `IBMFileNetP8`).

   d. Open the SalesQA object store.

   e. Click the NYB Company folder to view its properties in the right pane.

   f. Verify that the property display name now shows as Prospect ID.



   g. Verify that the value of the property was retained.

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

Note

The name change to the property template was automatically propagated to the property definition based on the property template.

Only name changes to a property template are automatically propagated to property definitions.

Procedure 3: Update the remaining property display names

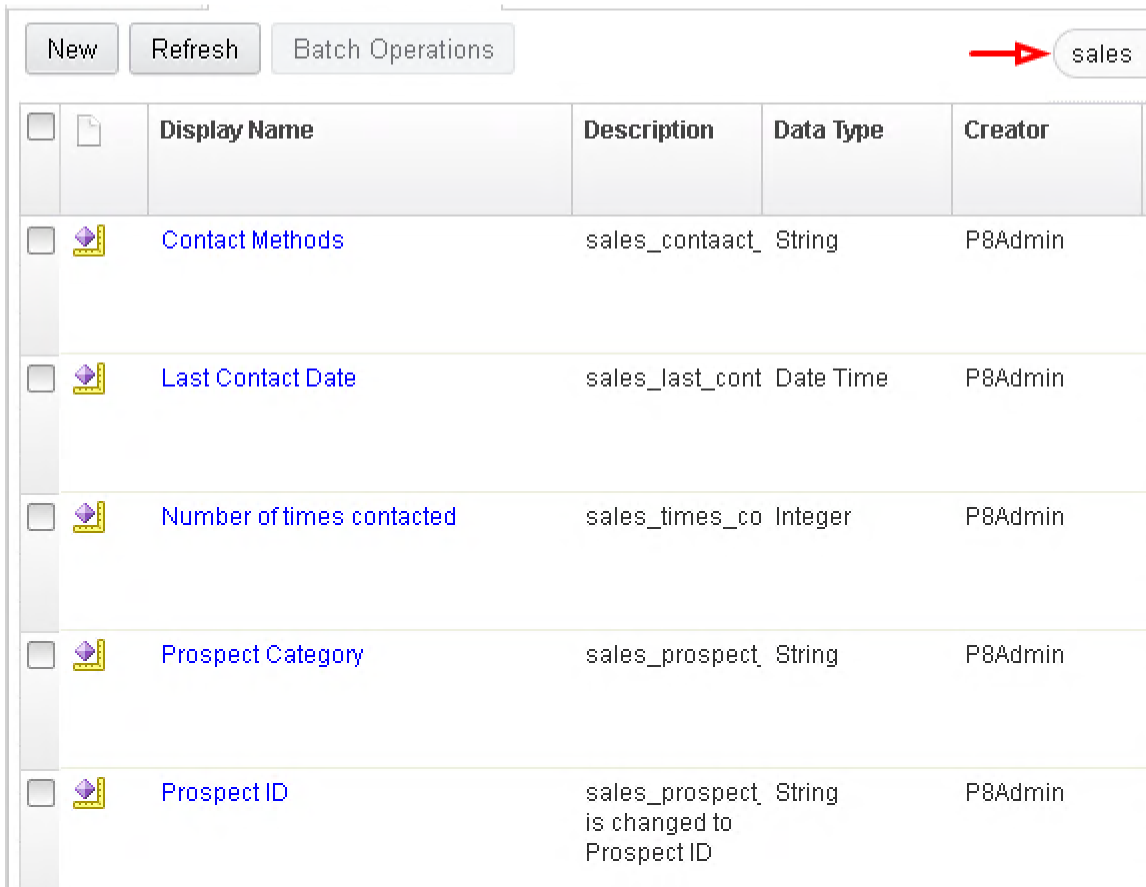
You want the display names that users see to be more elegant. Now that you know how, you can update the display names quickly.

1. Log into Administration Console as `p8admin` (password: `IBMFileNetP8`).
2. In Administration Console, open each of the new property templates and edit the Display name as shown in the table.

Old display name	New display name
sales_contact_methods	Contact Methods
sales_last_contact_date	Last Contact Date
sales_person_ID	Salesperson ID
sales_person_name	Salesperson Name
sales_prospect_category	Prospect Category
sales_prospect_name	Prospect Name
sales_times_contacted	Number of times contacted
sales_vendor_ID	Vendor ID
sales_vendor_name	Vendor Name

3. Click Refresh to see the updated metadata.
4. Type sales in the property filter.

5. Verify that the property display names are updated and that the property name filter continues to function as before.



6. Log out of Administration Console.

2.2. Modify a Choice List

Introduction

In this activity, you modify a choice list by adding a group and some choice list items.

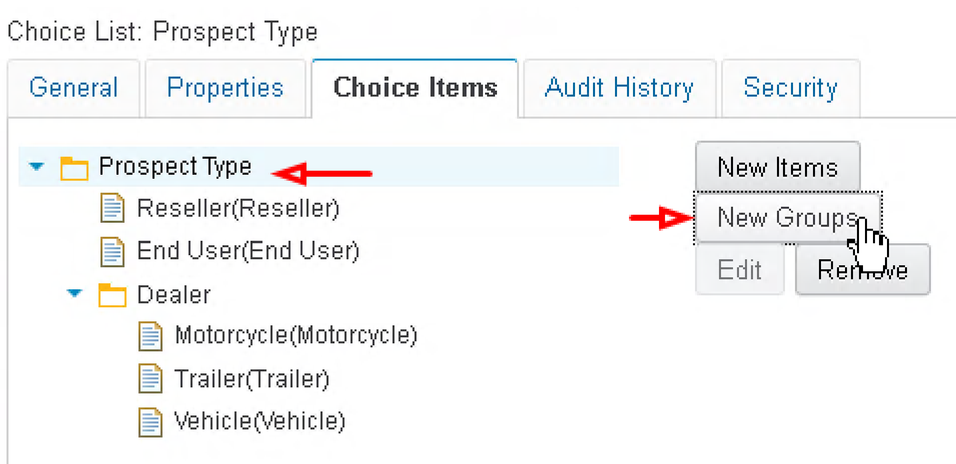
Procedures

- Procedure 1, "Add a group to a choice list," on page 2-9
- Procedure 2, "Verify the modified choice list," on page 2-11

Procedure 1: Add a group to a choice list

In this procedure, you add a group to an existing choice list.

1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`)
2. Open the choice list.
   a. In the administration console, expand the P8Domain > Object Stores node on the left pane and click SalesQA.
   b. In the SalesQA tab, expand the SalesQA > Data Design > Choice List node on the left pane and click Prospect Type.
3. Open the Choice Items tab.
4. Add a group to the choice list.
   a. Select the Prospect Type node in the Choice Items tab.
   b. Click New Groups.



   c. In the New Groups window, enter `Manufacturer` in the Display name field.
   d. Click Add. The group name is added to the panel.
   e. Click OK.

5. Add choice items to the group.
   a. In the Choice Items tab, select Manufacturer.
   b. Add choice items to the Manufacturer group by clicking New Items.
   c. In the New Items window, for each name in the table, type the choice item name in the Display name field.

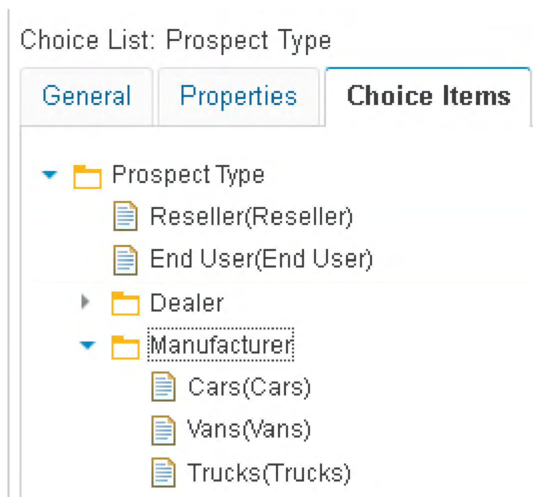
Display Name	Value
Cars	Cars
Vans	Vans
Trucks	Trucks

   d. When you click outside Display name field, the value is automatically populated in the Value field. Optionally, you can edit the value field.

Important

Verify that the Value field is populated before you click Add.

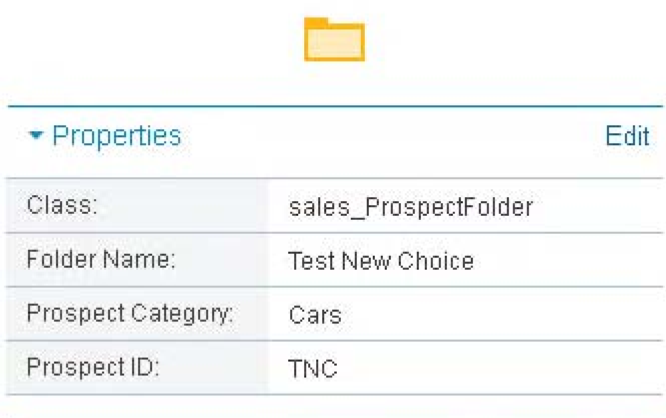
   e. Click Add. The choice item is added to the panel.
   f. Click OK to close the New Item window.
6. Click Save to save the choice list changes.
7. Verify that your completed choice list includes the new group.



8. Refresh the object store.
   a. In the Prospect Type tab, click Close.
   b. In the SalesQA tab, click Refresh.
9. Log out of the administration console and close the browser.

Procedure 2: Verify the modified choice list

1. Start the IBM Content Navigator.
   a. In your browser, go to `http://ecmedu01:9080/navigator/`
   b. Enter the logon credentials for an administrator (user name: `P8admin`, password: `IBMFileNetP8`).
   c. Select the SalesQA repository from the list.
2. Create a folder.
   a. Click New Folder.
   b. In the New Folder window > Properties section, select sales_ProspectsFolder from the list for the Class field.
   c. Click OK.
   d. Enter `Test New Choice` for the Folder Name.
3. Verify that you are able view and select a choice item from your new choice group.
   a. Select Manufacturer > Cars from the Prospect Category list.
   b. Click OK.
   c. Enter `TNC` for the Prospect ID. The value for the field is required.
4. Click Add to create the folder.
5. Verify that your new folder is listed.
6. Click the Test New Choice folder. Verify that the properties are shown in the rightmost pane.



7. Optional: Examine an existing folder (that was created before you added the new choice item) to verify the new choice group.
   a. Right-click the NYB Company folder and click Properties.
   b. In the Properties window, verify that you are able view and select a choice item from you new choice group.
   c. Select Vans for the Prospect Category from the list.
   d. Click OK.

e. Click Save.

f. Right-click the NYB Company folder and click Properties. Verify that the properties are shown.

g. Click Cancel.

8. Log out of the IBM Content Navigator and close the browser.

2.3. Change the Class for an Object

Introduction

In this activity, you create a Document class and use it to change the class for an existing document (that belongs to a different class).

Procedures

- Procedure 1, "Create a Document class," on page 2-13
- Procedure 2, "Examine the properties of a document," on page 2-14
- Procedure 3, "Change the class of an object," on page 2-14

Procedure 1: Create a Document class

1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`)
2. Open the SalesQA object store.
3. Open the New Document Class wizard.
4. Complete the wizard and create a Document class with the data in the table.

Field	Value
Name	ProspectUpdated
Symbolic Name	ProspectUpdated
Description	ProspectUpdated

5. Add Property Definitions to the ProspectUpdated class.
   a. Click Document > ProspectUpdated in the left pane. The ProspectUpdated tab opens in the right pane.
   b. Select the Property Definitions subtab. Click Add.
   c. In the Add Properties page, scroll down and select the following properties that you want to add.
      - Contact Methods
      - Prospect ID
      - Prospect Category
      - Prospect Name
   d. Click OK. Verify that all the properties are listed.
   e. Click Save and then Close.
6. Log out of Administration Console.

Procedure 2: Examine the properties of a document

In this procedure, you examine the properties of the document (Class: Prospect) for which you are going to change the class to ProspectUpdated. You added a document (Name: `NYB252`) to the SalesQA object store > NYB Company folder.

1. Log on to IBM Content Navigator as `p8admin`, password `IBMFileNetP8`.
2. Open the SalesQA object store.
3. Open the NYB Company folder.
4. Select the NYB 252 document to see the properties in the right panel.
5. Observe that the object class is sales_Prospect.
6. Verify that the document has the following properties:
   - Number of times contacted
   - Last Contact Date

Note

These properties are removed from this instantiated object when you change the class of this object.

---

7. Verify that the document does not have Prospect ID property. This property is added to this instantiated object when you change the class of this object.
8. Log out of IBM Content Navigator.

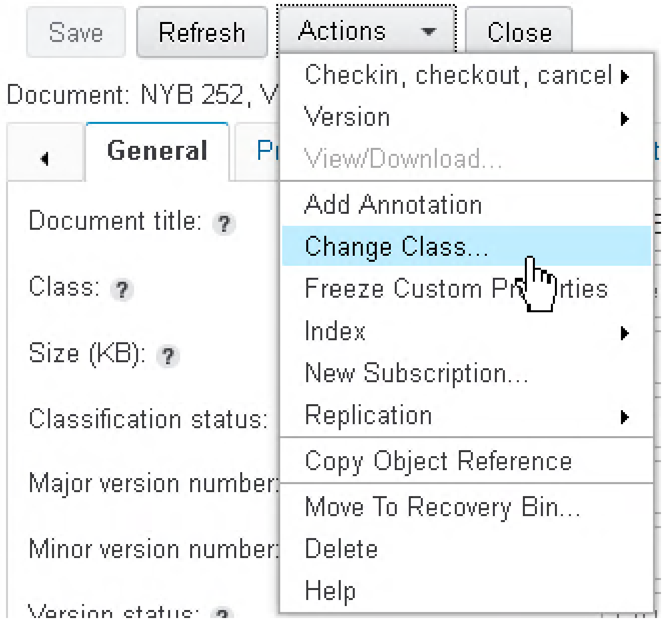
Procedure 3: Change the class of an object

1. Log in to Administration Console with user name `p8admin` and password `IBMFileNetP8`.
2. Open the document.
   a. In the administration console, expand the SalesQA > Browse > Root Folder node.
   b. Click the NYB Company folder.

      The NYB Company tab opens in the right pane.
   c. In the NYB Company tab, click NYB 252.

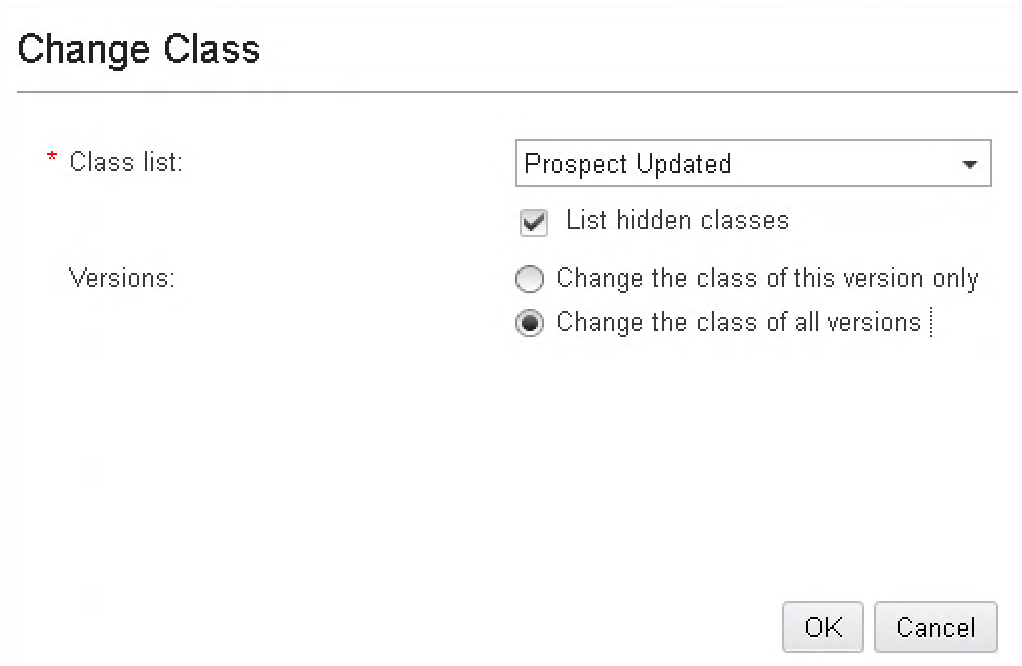
3. Change the class of a document from Prospect to ProspectUpdated.

   a. In the NYB 252 tab, click Actions > Change Class.



   b. In the Change Class window, select `ProspectUpdated` from the list of classes in Class List.

   c. Select the "Change the class of all versions" option.



   d. Click OK.

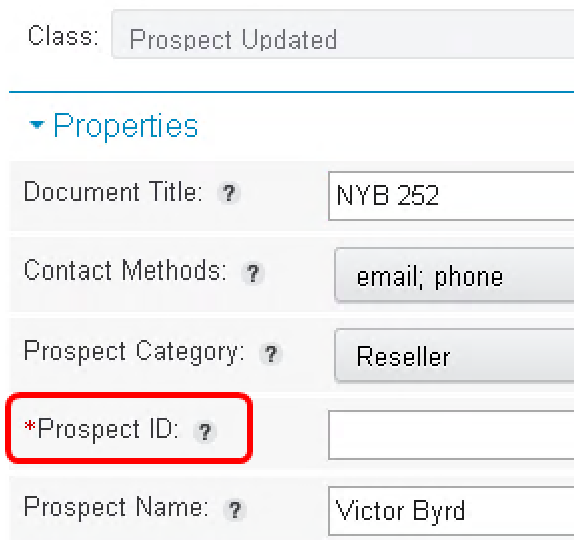
   e. Click Close to close the document tab.

   f. In the SalesQA object store tab, click Refresh.

4. Log out of Administration Console.

Procedure 4: Verify the class change

1. Log on to IBM Content Navigator as `p8admin` with password `IBMFileNetP8`.
2. Open the SalesQA object store.
3. Open the NYB Company folder.
4. Right-click the NYB 252 document and select Properties.
5. Verify the Properties for the document.
   a. Verify that Prospect ID property is listed. Recall that this document did not have this property you changed the class.



   b. Observe that the Class Description has the new class name (ProspectUpdated).
   c. The *Last contact date* and *Number of times contacted* properties are removed from the document.

Note

The Prospect ID property has a required value (indicated by the red asterisk). You cannot update and save the document properties until you supply a value for this property.

---

6. Click Cancel.
7. Log out of the admin console and close the browser.

2.4. Work with Metadata Dependencies

Introduction

In this activity, you replace a choice list with a data entry value for a property template. The updates to a property template do not automatically update the existing property definitions of a class. You must apply this change to a class definition. You must remove the original property definition from the class and add the updated one.

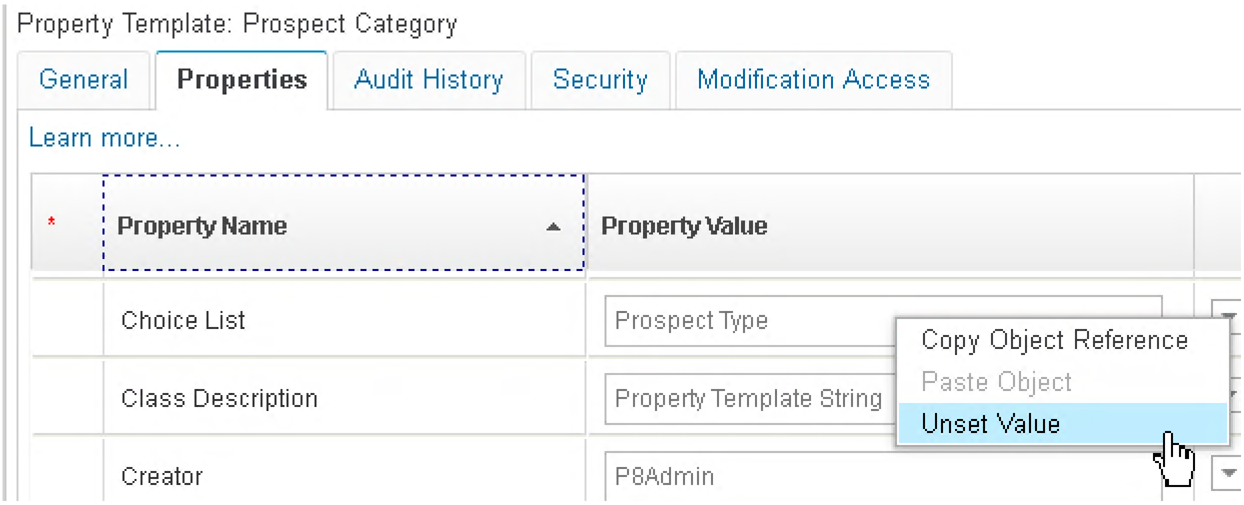
Procedures

Procedure 1: Remove the choice list

In this procedure, you remove the association of a choice list from a property template and make the template as a data entry value.

1. Start the Administration Console for Content Platform Engine.
   a. In a Firefox browser, go to `http://ecmedu01:9080/acce`
   b. Log in as the `P8admin` user (password: `IBMFileNetP8`)
2. Open the SalesQA object store.
3. Open the Prospect Category property template.
   a. Select the SalesQA > Data Design > Property Templates node on the left pane.
   b. Type `prospect` in the filter.
   c. Select Prospect Category
4. Remove the Prospect Type choice list from the property template.
   a. Open the Properties tab of the Prospect Category property template.
   b. Click the Property Name column to list the items in alphabetical order.
   c. Scroll down and find the Choice List property.
   d. Observe that this property template is associated with the Prospect Type choice list.

e. To remove the association of the choice list, click the arrow next to it and select Unset Value.



f. Verify that the Choice List field has no value.

g. Click Save to save the changes.

h. This change makes the Prospect Category as a data entry property template.

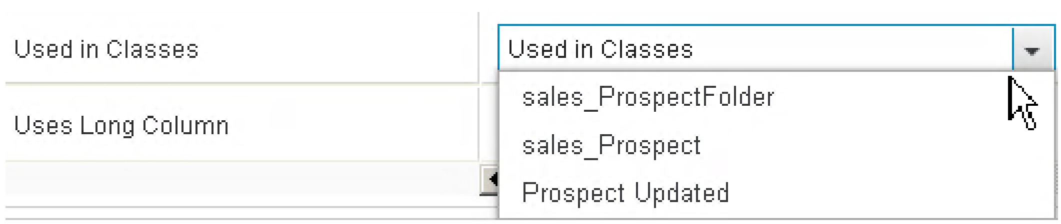
Procedure 2: Remove a property definition from a class

1. Check the classes that use the Prospect Category property template.

   a. In the Prospect Category property template > Properties tab, click the Property Name column to list the items in alphabetical order.

   b. Scroll down and find the Used in Classes property.

   c. Click the arrow to see the list. Observe that the classes that use this property template is listed.



   d. Close the Prospect Category tab.

2. Remove the unmodified Prospect Category property definition from the ProspectUpdated class definition.

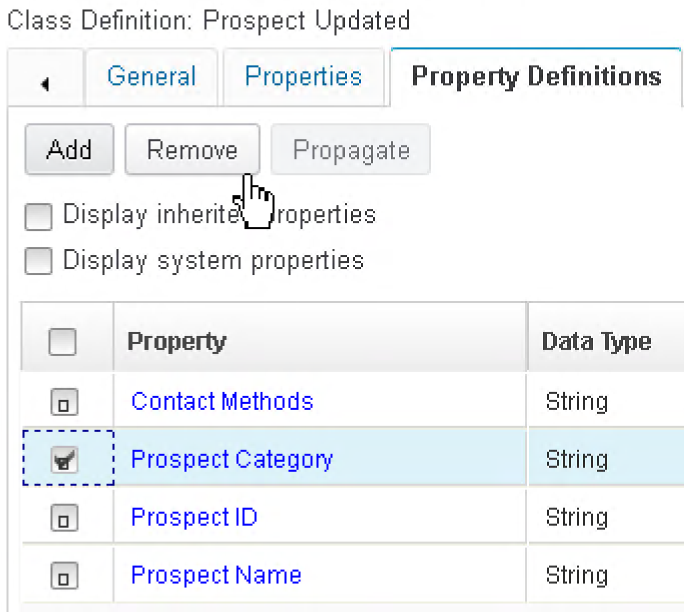
   a. In the SalesQA tab, expand the SalesQA > Data Design > Classes > Document node on the left pane.

   b. Click ProspectUpdated.

   c. In the ProspectUpdated tab, click the Property Definitions tab.

   d. Select the Prospect Category property definition.

e. Click Remove.



f. Verify that the property is removed from the list.

g. Click Save.

h. Click Close to close the tab.

i. In the SalesQA tab, click Refresh.

Procedure 3: Assign the property definition to the class

In this procedure, you assign the modified Prospect Category property (without the choice list) to the PropspectUpdated class.

1. Open the PropspectUpdated class.

   a. In the administration console > SalesQA tab, expand the SalesQA > Data Design > Classes > Document node.

   b. Click the ProspectUpdated class.

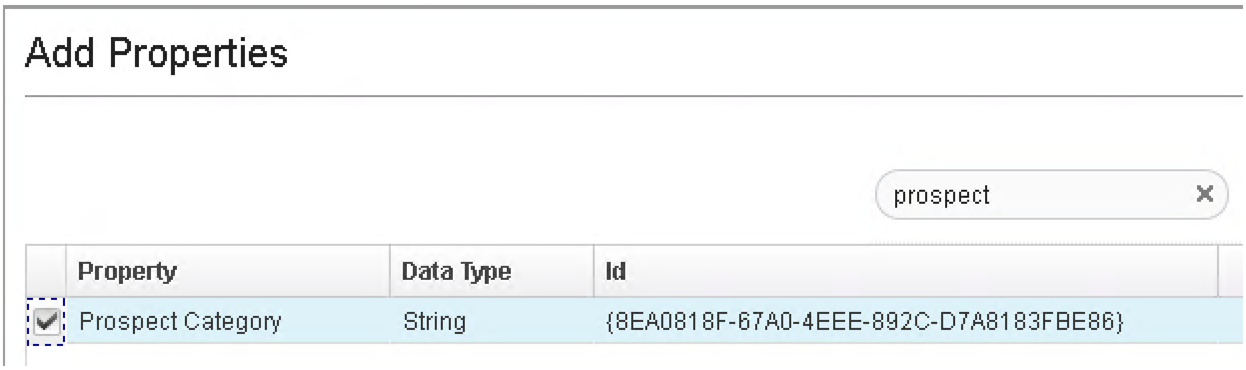
   c. For the ProspectUpdated class, open the Property Definitions tab.

2. Assign the property.

   a. Click Add.

   b. In the Add Properties window, type `prospect` into the filter.

c. Select Prospect Category.



d. Click OK.

e. Verify that the property is added to the list.

f. Click Save to save your changes.

g. Click Close to close the tab.

h. In the SalesQA tab, click Refresh.

3. Log out of Administration Console.

Procedure 4: Verify the modifications

In this procedure, you create a document of the PropspectUpdated class and verify the change in property definition. IBM Content Navigator has a metadata cache that retains metadata in the application for an interval. To refresh the metadata within that interval, you are going to recycle the IBM Content Navigator application.

1. Open the WebSphere Integrated Solutions Console:

   a. In a Firefox browser, go to `https://ecmedu01:9043/ibm/console/logon.jsp`

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

2. Restart the Content Navigator application.

   a. Expand the Applications > Application Types.

   b. Click the WebSphere enterprise applications node in the left pane.

   c. Select navigator from the list on the right pane.

   d. Click Stop. Wait until the message is shown.

   e. Select navigator and click Start. Wait until the message is shown.

   f. Log out of the WebSphere Integrated Solutions Console.

Important

For the property template changes to show in the IBM Content Navigator, you must restart the Content Navigator in the WebSphere Application Server.

3. Start the IBM Content Navigator.
   a. In a Firefox browser, go to `http://ecmedu01:9080/navigator/`
   b. Enter the logon credentials for an administrator.
   c. Log in as the `P8admin` user (password: `IBMFileNetP8`)
   d. The Content Navigator Sample Desktop opens in Browse view.
   e. Select the SalesQA repository from the list. The Browser view now displays SalesQA.
4. Add a document.
   a. Click the SalesQA > NYB Company folder in the left pane.
   b. Click Add Document in the tool bar.
5. Enter the properties.
   a. In Add Document page, select “Information about the document” for the “What do you want to save?” field.
   b. In the Properties section, select PropspectUpdated from the list for the Class field.
   c. Click OK.
   d. Enter the values for the other fields from the following table.

Field	Value
Document Title	Test Prop
Prospect ID	TP724
Prospect Name	Gloria Stanton

   e. For the Prospect Category, notice that there is no choice list. Enter Dealer as the value.
   f. Click Add.
6. Verify that your new document is listed in the folder.

Procedure 5: Examine the ProspectsFolder class

Recall that you created a ProspectsFolder class that also uses the Prospect Category property template. This class still retains the choice list, because this property definition for the folder class is not updated after you removed the choice list from the template. The change in the property template is not automatically propagated to the Classes.

In this procedure, you verify the Prospect Category property of the folder class.

7. Open the folder properties:
   a. In the Content Navigator, click SalesQA in the left pane.
   b. Select the NYB Company folder in the middle pane.
   c. Click Action > Properties from the toolbar.
8. Observe the Prospect Category property.
   a. Verify that if you edit the Prospect Category property, the choice list is available.
   b. Click Cancel to close the Properties page.

9. Log out of the Content Navigator and close the browser.

End of exercise

Exercise review and wrap-up

In this exercise, you completed the following tasks.

- Change a property template name.
- Modify a choice list.
- Change the class of an object.
- Remove a choice list from a class.

Exercise 3. Create event subscriptions

Estimated time

00:30

Overview

This exercise provides practice in creating and modifying event subscriptions.

Objectives

After completing this exercise, you should be able to:

- Create a subscription with an event action.
- Update an event action with a new code module.
- Examine a workflow subscription.

Introduction

A subscription is a device for starting a user-implemented server-side component that extends the core functionality of the Content Platform Engine. When an event is triggered on the target object, the event action is run.

Requirements

You must have access to a student system that is configured for these activities. If you are taking this course as a self-paced virtual course (SPVC), ensure that your student system is started.

System start

To start your system:

1. Open the WebSphere Admin folder on your desktop.
2. Double-click Start Server1.bat.
3. Wait for the command window to close.

For more information about starting, stopping, and verifying the system status, refer to "Start and Stop System Components" on page A-1.

Exercise Introduction

Introduction

With event subscriptions, you can automatically launch custom code to streamline your business application. For example, you can use a script to automatically launch a workflow or to create subfolders, or send notifications when documents are added to the system.

Scenario

You are working with a developer for the Sales team to develop and test some event subscriptions. These event subscriptions automatically perform operations when certain documents or folders are created. The developer has provided the code modules. You must create the event subscriptions.

Activities

- Create a Subscription with an Event Action, on page 3-3
- Update the Event Action with new Code Module, on page 3-9
- Examine a Workflow Subscription, on page 3-14
- Create a Subscription with an Event Action, on page 3-19

User accounts

Application Name	User ID	Password
IBM Content Navigator	p8admin	IBMFileNetP8
Administration Console for Content Platform Engine	p8admin	IBMFileNetP8

Note

Passwords are always case-sensitive.

3.1. Create a Subscription with an Event Action

Introduction

In this activity, you create a code module with prewritten Java code, an event action, and a subscription for the Order document subclass. You associate the event action with the subscription and test it by creating an Order document. Document creation triggers the subscription and the code is executed which creates an entry in a log file.

Scenario

Whenever a new Order document is created, you want a notification to be sent to the product sales manager. A developer created a simple Java class for you to test with. You must create an event action and a subscription that triggers the action when a new Order document is added to the repository.

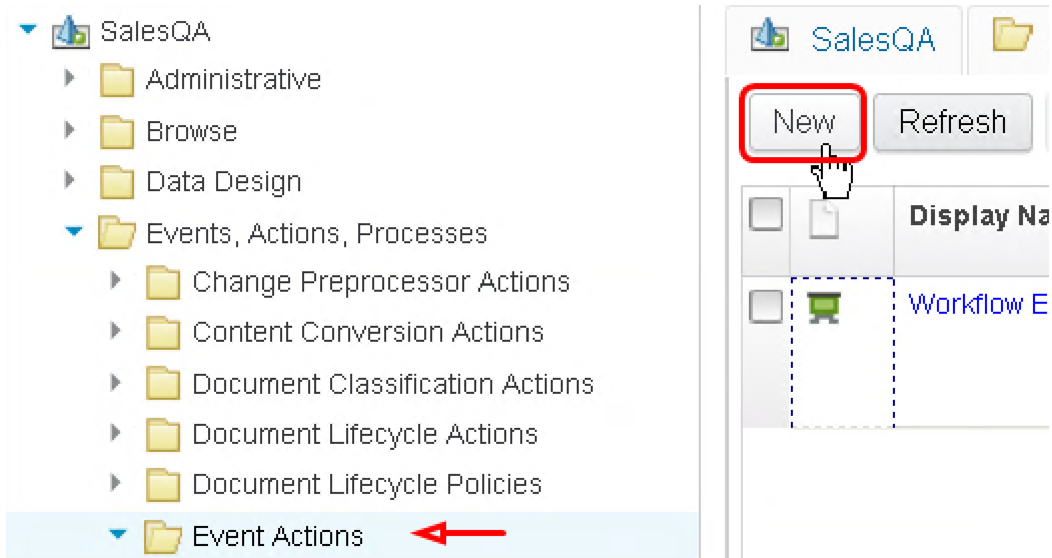
Procedures

- Procedure 1, "Create an Event Action," on page 3-3
- Procedure 2, "Create a Subscription," on page 3-5
- Procedure 3, "Test the Subscription and Event Action," on page 3-7
- Procedure 4, "Examine the EventLog.txt file," on page 3-8

Procedure 1: Create an Event Action

1. Log on to Administration Console for Content Platform Engine.
   a. Go to http://ecmedu01:9080/acce and log on as `p8admin` with password: `IBMFileNetP8`.
2. Open the SalesQA object store.
3. Create an event action.
   a. Expand SalesQA > Events, Actions, Processes.
   b. Select Event Actions.

c. Click New.



d. Create Event Action wizard opens.

4. Name and Describe the Event Action.

a. Enter `Log Event Action` in the Display Name field.

b. Click Next.

5. Specify the Type of Event Action.

a. Leave the Enabled checked for the Initial Status field.

b. Select the Class option.

c. For the Java Class Handler field, type the following text:

`com.ibm.filenet.edu.LogEventActionEDU`

Note

Type the Java class name exactly as shown because it is case-sensitive.

---

d. Select the Configure Code Module option.

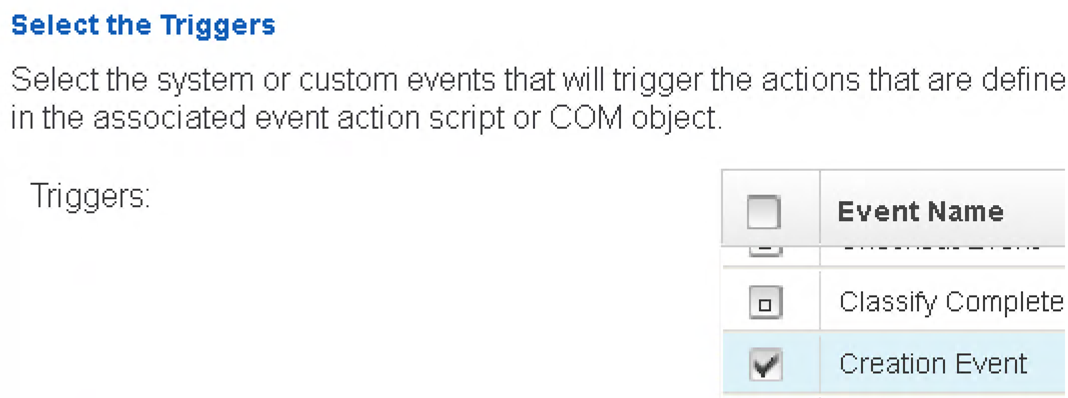
e. Click Next.

6. Specify the Code Module to be configured.
   a. Click Browse.
   b. In the Open window, go to `Documents\Lab Files\Event Subscriptions.`
   c. Select `EDULog.jar` and then click Open.
   d. For the Code Module title, type `Log Event Action`.
   e. Click Next.
   f. Note the entries in the Create an Event Action wizard and click Finish.
   g. Click OK when it prompts with the confirmation message that you successfully created the Log Event Action.
   h. Click Close.
7. Verify that the event action was created.
   a. Select the Event Actions node.
   b. Click Refresh.
   c. Verify that the Event Action that you created is listed on the right pane. zzz

Procedure 2: Create a Subscription

1. Create a subscription.
   a. In the SalesQA tab, expand SalesQA > Data Design > Classes > Document > Order on the left pane.
   b. Right-click Order and then click New Subscription from the list.
2. Name and Describe the Subscription.
   a. In the New Subscription tab, enter `Log Subscription` in the Display name field.
   b. Optionally enter a description and click Next.
3. Specify the Subscription Behavior.
   a. Leave the default option of “Applies to all objects of this class” for the Scope field.
   b. Click Next.
4. Select the Triggers.
   a. Select Creation Event in the Event Name list.

b. Click Next.



5. Select an Event Action.
   a. Select `Log Event Action` from the list.
   b. Click Next.
6. Specify Additional Options.
   a. Select Enable this subscription.
   b. Optionally, select Include subclasses.
   c. For the filter expression field, enter the following text:

      `(MajorVersionNumber=1 and MinorVersionNumber=0) OR (MajorVersionNumber=0 and MinorVersionNumber=1)`

   d. Click Next.

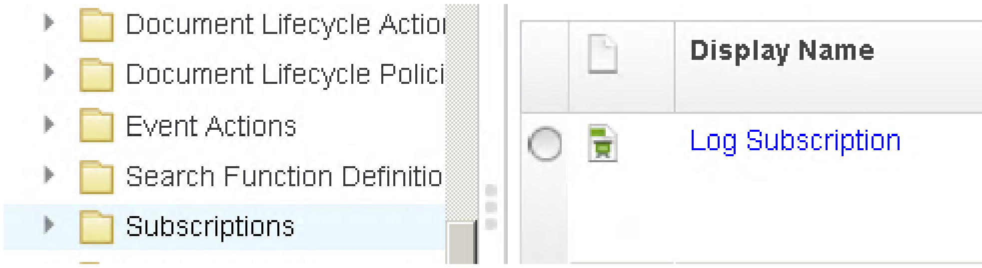
Note

The filter expression ensures that the triggering event occurs only when the document is first added to the repository.

---

7. Review the summary and click Finish.
8. Click Close when you receive the confirmation message that you successfully created the Log Subscription.
9. View the subscription that you created.
   a. Select the SalesQA tab, and click Refresh.
   b. Expand SalesQA > Events, Actions, Processes > Subscriptions on the left pane.

c. Click Subscriptions and verify that `Log Subscription` is listed on the right pane.



Procedure 3: Test the Subscription and Event Action

Note

The Java Code Module contains instructions to write an entry into a log file each time a document of the class that is subscribed to is created.

1. Create a folder.
    a. In the SalesQA object store tab, expand the SalesQA > Browse > Root Folder node on the left pane.
    b. Right-click the Root Folder and click New Folder.
    c. Enter `Test Events Folder` for the folder name.
    d. Leave the default value (Folder) for the Class field.
    e. Click Next and leave the default values for all other fields.
    f. Click Next and click Finish.
    g. Click Close to close the New Folder tab.
    h. In the SalesQA object store tab, click Refresh to refresh the Object store.
2. Add a document.
    a. In the SalesQA object store tab, expand the SalesQA > Browse > Root Folder > Test Events Folder node on the left pane.
    b. Right-click Test Events Folder and click New Document.
    c. Enter `Log Test` as the Document title.
    d. Select Order from the list for the Class field.
    e. Clear the *With Content* check box.
    f. Complete the wizard by clicking Next several times. Leave the default values for all the fields.
    g. In the final page, view the summary and click Finish.
    h. When the page displays that the Log Test document is created, click Close to close the New Document tab.

3. In the Test Events Folder tab, click Refresh.
   a. Verify that the new document is listed.
4. Log out of Administration Console for Content Platform Engine.
   a. Close the Browser.

Procedure 4: Examine the EventLog.txt file

1. Verify that the file EventLog.txt was created.
   a. In Windows Explorer, open the following folder and locate the file:

      `C:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01`.
   b. Verify that the `EventLog.txt` file has the current date and time.

Note

The code for the Log Action adds a text line to the EventLog.txt file each time that the event action executes. This line consists of the following statement:

`A new document is created on:` *Day Mon DD HH:MM:SS EDT YYYY*`. Document class name = Order, Document id = {GUID}`

---

2. Verify that the log file has an entry for the Order document that you created.
   a. Open the EventLog.txt file with the text editor. Example: Notepad
   b. Verify that it includes a line that identifies the date and time that your new document was created in the object store.
   c. Close the EventLog.txt file.

3.2. Update the Event Action with new Code Module

Introduction

Your Management wants to include the user who creates the document in the event log every time a document is added. The Developer provides the new JAR file that contains the updated code to the Administrator.

In this activity, you are going to modify the Code Module to use the new JAR file. You also update the Event Action that references the Code Module and test it.

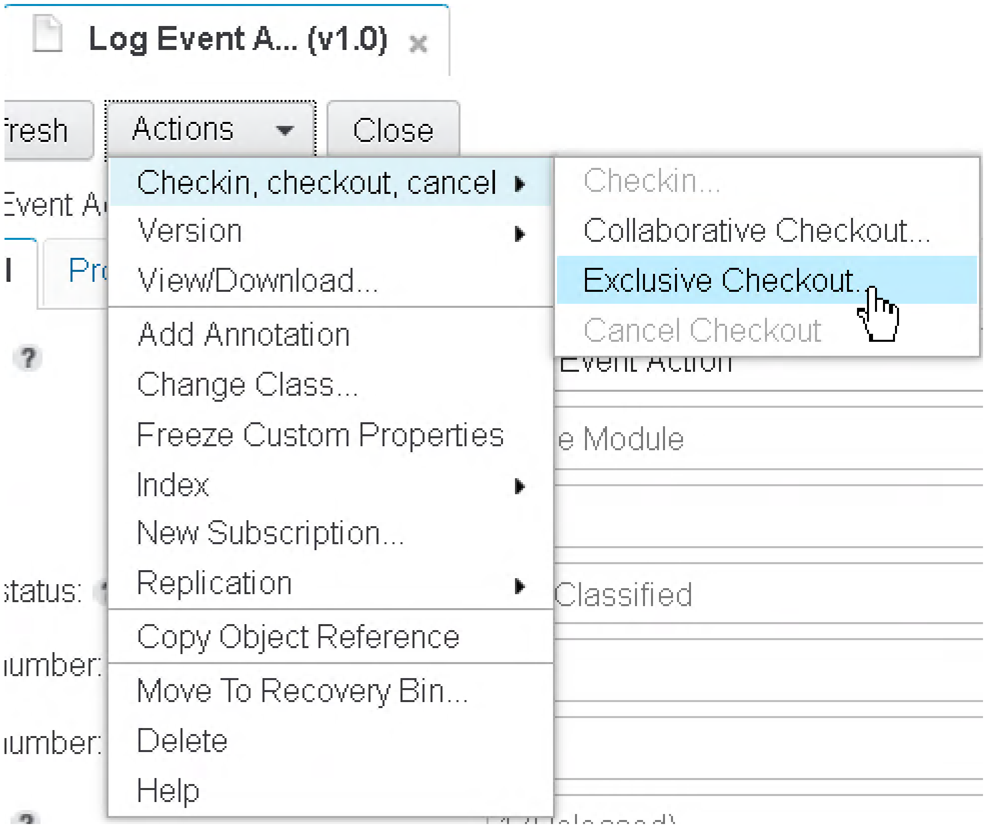
Procedures

Procedure 1: Update the Code Module

In this procedure, you check in a new version of code module that contains more line code.

1. Log on to Administration Console for Content Platform Engine.
   a. Go to http://ecmedu01:9080/acce and log on as `p8admin` with password: `IBMFileNetP8`.
2. Open the SalesQA object store.
3. Go to Browse > Root Folder > Code Modules.
4. Check out the code module:
   a. Select the Log Event Action code module on the right pane.

b. In the menu bar, select Action > *Checkin, checkout, cancel* > *Exclusive Check Out*.



c. On the Exclusive Checkout window, select the content element.

d. Click Checkout.

5. Check in the new version of the code module.

a. Click Action > *Checkin, checkout, cancel* > *Checkin*.

b. In *Content Elements* window, click Add.

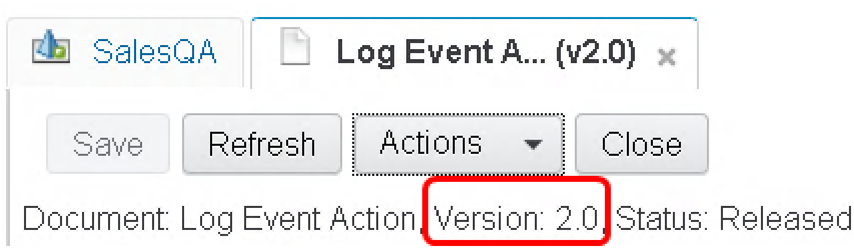
c. Browse to C:\Users\Administrator\Documents\Lab Files\Event Subscriptions.

d. Select *EDULogv2.jar* and click Open.

e. Click Add Content.

f. Click Check In Major Version.

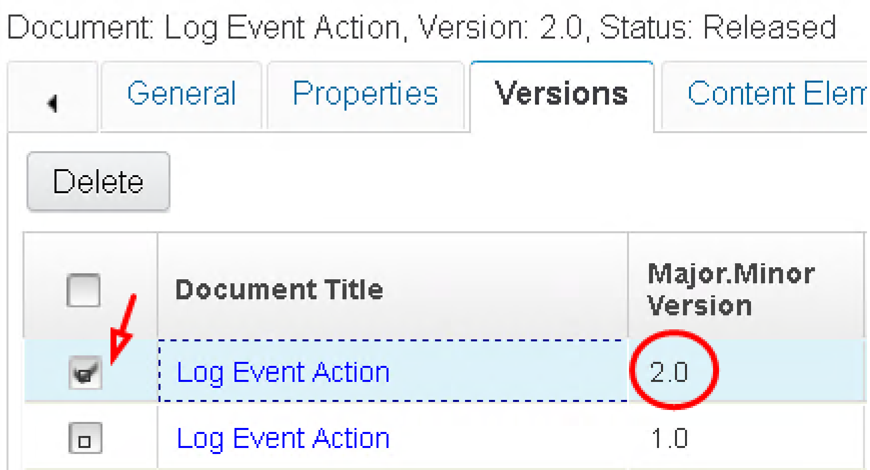
6. Verify that the new version was created. The title under the row of buttons now shows that the document is version 2.0..



Procedure 2: Update the Event Action

In this procedure, you edit the event action to associate it with the new version of code module. The Log Event Action tab is open in the Administration Console.

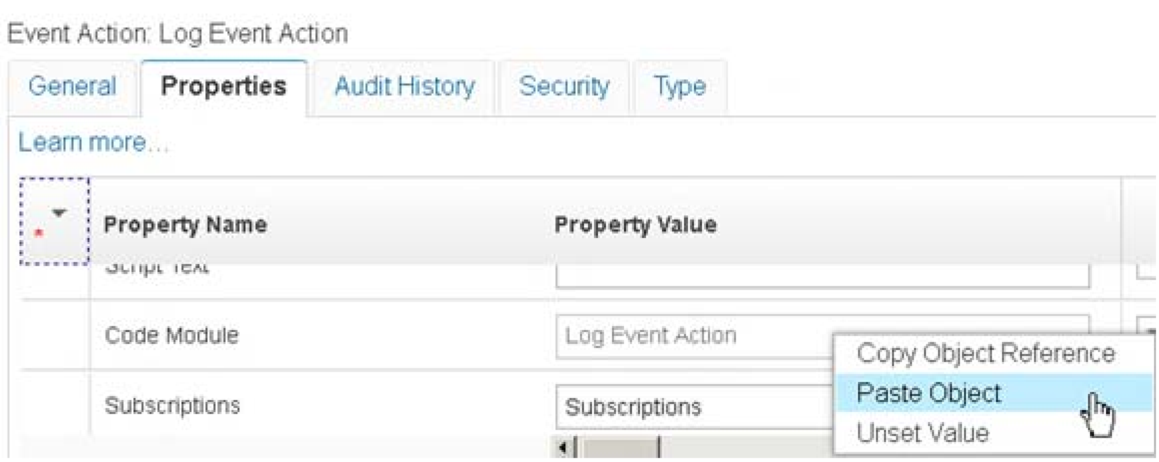
1. Copy the object reference for the new code module version.
    a. Select the Log Event Action code module.
    b. Open the Versions tab.
    c. Select Version 2.



    d. From the menu bar, click Action > *Copy Object Reference*.

    No visible change occurs.

2. Select the event action to update:
    a. Expand SalesQA > Events, Actions, Processes > Event Action.
    b. Click Log Event Action.
    c. Open the Properties tab of the Log Event Action.
3. Update the event action with the new code module version:
    a. Scroll down to the Code Module property at the bottom of the window.
    b. Click the menu arrow to the right of the Code Module field, then click *Paste Object*.



No visible change occurs.

c. Click Save to save your change to the event action.

d. Click Close.

Procedure 3: Test the new Code Module

You are in Administration Console. The SalesQA object store is open.

1. Add a document.

   a. Expand the SalesQA > Browse > Root Folder > Test Events Folder node on the left pane.

   b. Right-click the Test Events Folder and click New Document.

   c. Enter `Log Update` as the Document title.

   d. Select Order from the list for the Class field.

   e. Clear the With Content check box.

   f. Complete the wizard by clicking Next several times. Leave the default values for all the fields.

   g. In the final page, view the summary and click Finish.

   h. When the page displays that the document is created, click Close to close the New Document tab.

2. In the Test folder tab, click Refresh.

3. Verify that the new document is listed.

4. Verify that the file EventLog.txt was updated.

   a. In Windows Explorer, open the following folder and locate the file:

   `C:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01`.

   b. Verify that the `EventLog.txt` file has the current date and time.

Note

The updated Code Module generates an event log entry that also includes the name of user that added the document:

The entry consists of the following statement:

`A new document is created on:` *`Day Mon DD HH:MM:SS EDT YYYY`*`. Document class name = Order, Document id = {GUID}`

`Added by: P8Admin`

---

5. Verify that the log file has an entry for the Order document that you created.

   a. Open the EventLog.txt file with the text editor. Example: Notepad

   b. Verify that it includes a line that identifies the user who created it.

c. Close the EventLog.txt file.

d. Log out of the Administration Console for Content Platform Engine and close the browser.

3.3. Examine a Workflow Subscription

Introduction

In response to a fired event on an object, a Workflow Subscription launches a workflow. In this activity, you examine a Subscription that is already configured on your student system.

Information

You can create a subscription that launches a workflow as well as executes an event action handler.

Procedures

- Procedure 1, "Open a Workflow Subscription," on page 3-14
- Procedure 2, "Explore the Workflow Subscription," on page 3-15
- Procedure 3, "Test the Workflow Subscription," on page 3-16

Procedure 1: Open a Workflow Subscription

In this procedure, you inspect a workflow subscription on the Sales object store.

Note

The Sales object store has a workflow subscription that the SalesQA object store does not. In the following procedures, ensure that you are viewing the correct object store.

1. Start the Administration Console for Content Platform Engine.
   a. Go to the http://ecmedu01:9080/acce
   b. Log in as theP8admin user (password: IBMFileNetP8)
2. Open a workflow subscription.
   a. Open the Sales object store.
   b. In the Sales object store tab, expand the Sales > Events, Actions, Processes node and click the Subscriptions on the left pane.
   c. In the Subscriptions tab, observe that Test Workflow Subscription is listed.

d. Verify that the subscription is enabled. The Enabled column has the value as `True`.

		Display Name	Enabled	Description
		Test Workflow Subscription	True	Test Workflow Subscription launches a workflow when a document (Product document class) is created.

e. Click Test Workflow Subscription to open the Properties page.

Procedure 2: Explore the Workflow Subscription

1. Open the General tab:
    a. Verify that the Description field identifies it as a workflow subscription.
    b. The Target ID is Product, indicating that the subscription monitors this object class.
2. Examine the Properties tab.
    a. Open the Properties tab.
    b. Confirm that the Event Action field has a value: `Workflow Event Action` indicating that when an event triggers a workflow is launched.
3. Examine the Configuration tab.
    a. Open the Configuration tab.
    b. Inspect the settings:
        - There are options to enable the event action to include the subclasses, and to run the event action as a synchronously.
        - In the Filter expression field, you specify conditions to trigger the subscription. This workflow is launched when quantity property has a value of 20.
4. Examine the Subscribed Events tab.
    a. Open the Subscribed Events tab.
    b. Confirm that the Creation Event is selected. When a document is created, it triggers the subscription.
5. Examine the WorkFlow tab.

Information

The Properties page for this subscription has a WorkFlow tab because it is a Workflow Subscription. When the subscription is only associated with a custom event handler, the Properties page does not have a WorkFlow tab.

a. Verify that for the Workflow definition field, Test Subscription Workflow is selected. (Version number is selected at the time of creation but not shown in the view).

b. Scroll down and locate the Property Maps.

	Property Map
	quantity=quantity
	product_id=product_id
	description=product_description

The workflow properties are mapped to the document properties.

6. Log out of Administration Console for Content Platform Engine and close the browser.

Important

The names of workflow and document properties do not have to match, but they must be of the same data type. Example: both quantity properties are of integer type; description and product_description are of string type.

Procedure 3: Test the Workflow Subscription

In this procedure, you create a document of Product class that triggers the workflow. You verify that a workflow is launched and a work item is shown.

1. Start IBM Content Navigator for the Sample Desktop.

   a. In your browser, go to `http://ecmedu01:9080/navigator/?desktop=SampleDesktop`.

      The URL value is case-sensitive.

   b. Enter the logon credentials for an administrator (user name: `P8admin`, password: `IBMFileNetP8`).

   c. The IBM Content Navigator client opens with the Browse view.

   d. Verify that Sales object store is shown.

2. Add a document.

   a. Expand Sales object store node and click Products in the left pane.

b. Click Add Document from the toolbar on the right pane. Add Document page opens.

3. Specify the content:

   a. For the “What do you want to save” field, select “Information about a document” from the list.

4. Enter the properties:

   a. In the Properties section, select Product from the list for the Class field.

   b. Enter the following values for each property:

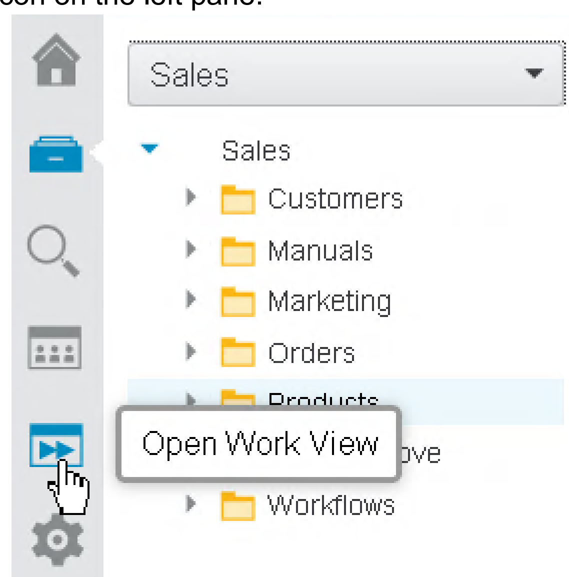
Property Name	Value
Document Title	Subscription Test
product_id	PYM02
product_description	Fair
price	10
quantity	20 (This value needs to be 20 for the workflow to launch as defined in the subscription filter).

   c. Click Add.

   d. Verify that the new document is listed.

5. Verify that the workflow is launched and work item is shown.

   a. Click the Work View icon on the left pane.



Information

Your student system is configured for the Workflow Subscription. When you add a document of Product class, a workflow is launched. A work item is available in the Sales Officer in-box.

   b. Click My work items.

c. Verify that a work item with the subject “Verify the subscription” is listed with the current date and time.

Note

The product_id, quantity, and description fields have the same values that you set for the document properties. These fields are the workflow properties that are mapped to the document properties.

d. Log out of Administration Console for Content Platform Engine and Content Navigator.

e. Close the browsers.

3.4. Create a Subscription with an Event Action

Introduction

Complete the following exercise scenario to practice the procedures that you learned in this lesson.

Scenario: Create an automated action for the Sales Department

Sales Department of your company requests the following automated action for their IBM FileNet Content Manager system: Whenever, a business user creates a Project folder, they want specific subfolders to be automatically created for that project.

Name of the sub folders: Contracts, Orders, and Quotes

The Solution Developer provides you the Java code that creates these subfolders. As the Solution Builder, you must create a Subscription with an Event Action that uses the code.

Challenge

- Create an event action with Code Module in the Sales object store. Associate it with a Subscription and test it. Use the data in the following tables.

Data for creating an Event Action

Item	Value
Object store	Sales
Name of the Event Action	`CreateProjectSubFoldersAction`
Specify the Type of Event Action	Initial Status: Enabled Class Java class handler: `com.ibm.filenet.edu.CreateProjectSubFoldersAction` Configure code module: Yes
Specify the Code Module	Code module title: `CreateProjectSubFoldersModule`
Location of the Java class	C:\Users\Administrator\Documents\Lab Files\Event Subscriptions

Hint

Create an Event Action with a code module first, then the subscription.

Java class handler name is case-sensitive.

Data for creating a Subscription

Item	Value
Administration Console for Content Platform Engine account (logon/password)	p8admin/IBMFileNetP8
Object store	Sales
Target Object (Folder Class name)	ProjectFolder
Folder class node in the object store	Sales > Data Design > Classes > Folder > ProjectFolder
Name of the Subscription	Project Folder Subscription
Subscription Behavior	Scope: Apply to all objects of this class (default value)
Triggers > Event Name	Creation event
Name of the Event Action	CreateProjectSubFoldersAction
Specify Additional Options	Initial state: Enabled Subclass option: Include Subclasses

Verification

Create a folder (Name: `Subscription Test`) of `ProjectFolder` class in the Sales object store. Verify that the subfolders (`Contracts`, `Orders`, and `Quotes`) are created inside the Subscription Test folder

Hint

You might need to refresh the object store before you can see the subfolders.

End of exercise

Exercise review and wrap-up

In this exercise, you did the following tasks:

- Create a subscription with an event action.
- Update an event action with a new code module.
- Examine a workflow subscription.

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 image, ensure that the Windows 7 Operating System completes starting all the services. 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).

Procedure 2: Check system components

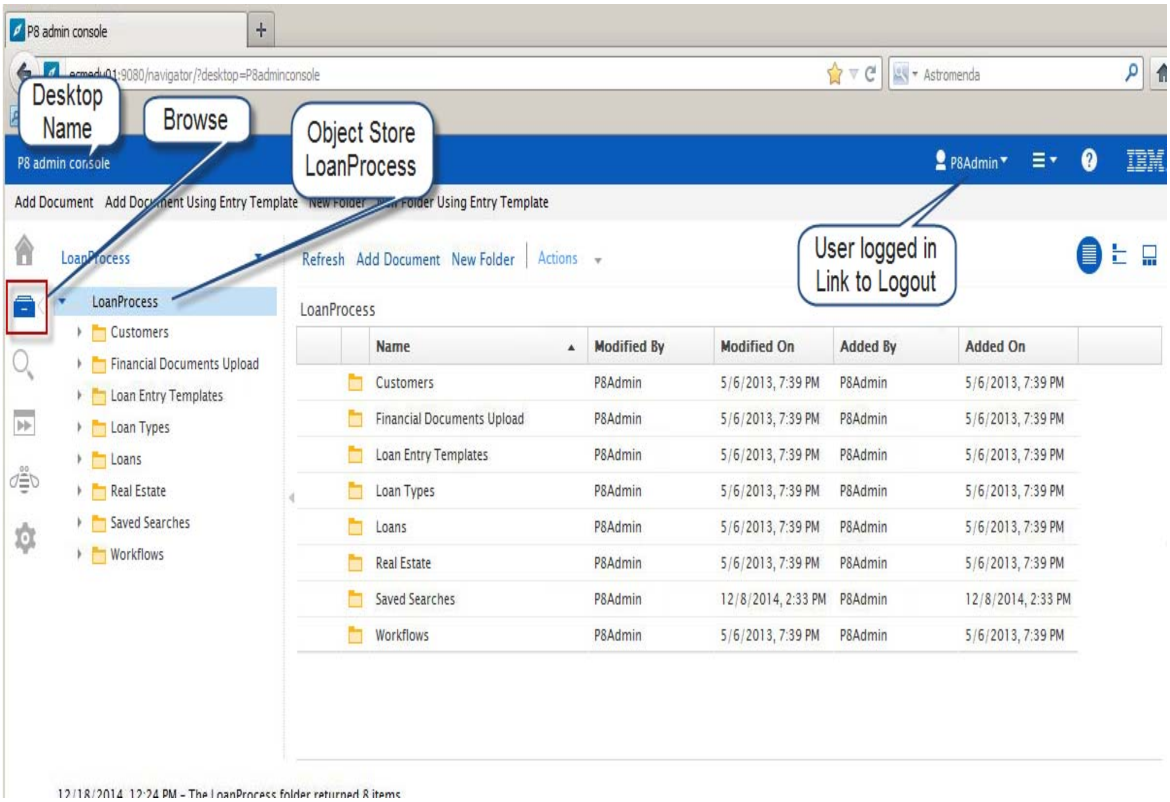
An IBM FileNet P8 Workflow system consists of one main engine, the Content Platform Engine, with two primary services, content and process services. In addition to the Content Platform Engine, a client application is required for the users and databases are required to store configuration information 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 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. Click the Bookmarks menu and select, System Health > CE ping
        i. URL for Ping Page: `http://ecmedu01:9080/FileNet/Engine`

    Because the Content 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. Click the Bookmarks menu and select, System Health > PE ping
        i. URL for Ping Page: `http://ecmedu01:9080/peengine/IOR/ping`
    c. If both ping pages display successfully, close the browser and all the tabs.
3. Verify that the P8 Admin console desktop is functioning properly.
    a. Open a Mozilla Firefox browser window.
    b. Click the Bookmarks menu and select, P8 Admin console
        i. URL for desktop: `http://ecmedu01:9080/navigator/?desktop=P8adminconsole`
    c. Log in as the administrator.
        - Username: `p8admin`
        - Password: `IBMFileNetP8`

A successful login to the P8 Admin console desktop opens to a screen similar to:



If you get to this screen, it indicates that the following components are running and communicating within your student system:

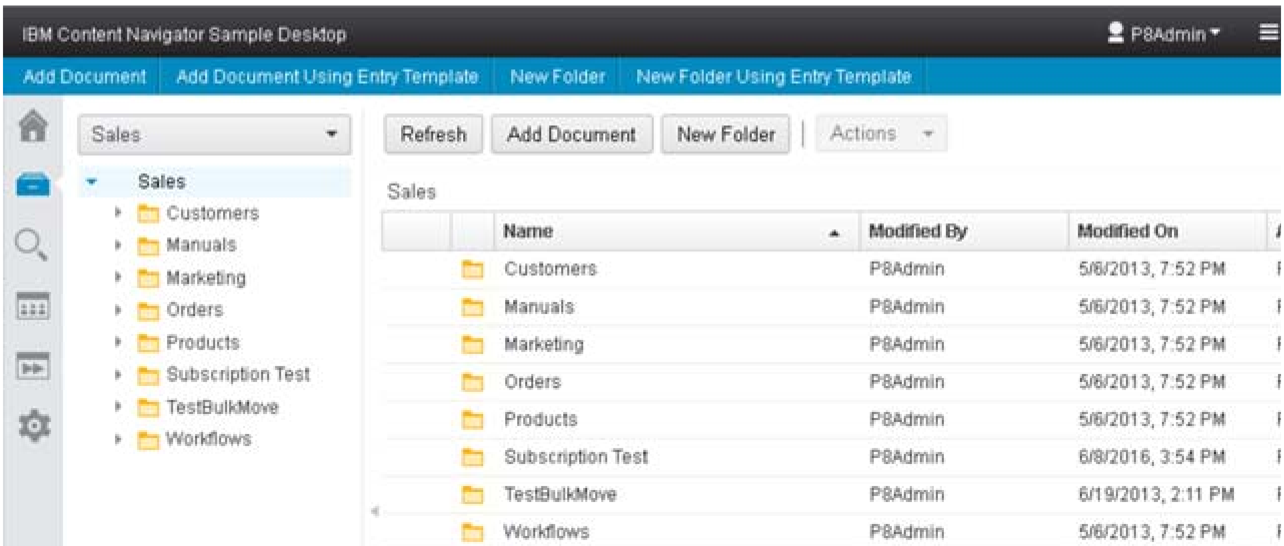
- A database system. Your system uses the IBM DB2 database software. Every time a user logs in to the P8 Admin console desktop, the desktop configuration is loaded from the IBM Content Navigator DB2 database. This desktop is configured to browse the LoanProcess object store by default, which demonstrates that the database used by the Content Platform Engine is functional.
- A directory service to handle user authentication. Your system uses the IBM Tivoli Directory Server.

d. Logout of the P8 Admin console.

   i. On the upper right corner of the desktop, click P8Admin and select Log Out.

   ii. Click Log Out to confirm.

4. Verify that the Sample desktop is functioning properly.
   a. Open a Mozilla Firefox browser window.
   b. Click the Bookmarks menu and select, Content Navigator.
      i. URL for desktop: `http://ecmedu01:9080/navigator/`
   c. Log in in as an administrator:
      - Username: `p8admin`
      - Password: `IBMFileNetP8`
   d. Confirm that you see the Sample desktop, the Sales object store.



   e. Logout of IBM Content Navigator.
      i. On the upper right corner of the desktop, click P8Admin and select Log Out.
      ii. Click Log Out to confirm.

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

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