

Lesson: Content operations

Overview

Why is this lesson important to you?

You are designing an IBM FileNet BPM solution. You want to integrate operations performed on the Content Engine in your workflow. To accomplish this, you use the system-provided component, Content Extended Operations (CE_Operations). You add a component step in a workflow definition that sets a Content Engine document property. You must test the workflow to verify the changes.

Activities

- Add Content Extended Operations to a workflow: Challenge
- Add Content Extended Operations to a workflow: Walkthrough

Lesson dependency

You must have successfully completed the previous lesson activities.

Requirements

The activities in this unit assume that you have access to the student system configured for these activities.

Virtual student system

Connect to your student system to complete these lab activities. See the Readme First file on the Materials tab if you need instructions to connect to the student system.

System startup and system check

IBM FileNet P8 software services on your student system must be started. If you have not already started the IBM FileNet P8 software on your system, do the procedures in *Appendix A: System startup and system check* before proceeding with the lessons in this unit.

Perform a system check whenever you start up an IBM FileNet P8 system or start working on a system that is in an unknown state. These activities assume that you have performed a system check when you begin an activity session.

User accounts

Type	User ID	Password
FileNet Workplace XT	p8admin	IBMFileNetP8



Note

Passwords are always case-sensitive. User names are not case-sensitive. Many user names use only lowercase letters on the student system.

Add Content Extended Operations to a workflow: Challenge

Challenge

Verify that all Component Managers and components for PELoanRegion are started. Modify the workflow collection that you saved in the previous lesson. Replace the Set Loan Document Status step on the Terminate map of the main workflow with a component step using CE_Operations. Use the data in the tables to complete this activity.

Data

Item	Value
Workflow definition file	LoanProcess > Workflows > Loan Processing Collection - Java Component
New file name in the Object Store	LoanProcess > Workflows > Loan Processing Collection - CE Operations

Set Loan Document Status Operations

Name	Component
setStringProperty	CE_Operations

Set Loan Document Status Operation Parameters

Name	Type	Expression
destDocument	Attachment	loan_document
symbolicPropName	String	"Status"
value	String	status

Verification

- You must launch and process the workflow without error.
- After workflow completion, the Status property of the attachment document must contain a value similar to the following: "Customer confirms rate and payment."
- The Terminate map must look similar to the following diagram. This diagram includes a component step.



Add Content Extended Operations to a workflow: Walkthrough

Introduction

This exercise gives you practice in using Content Extended Operations to set a Content Engine document property in a workflow step.

Procedure 1: Verify the state of Component Manager

1. If Process Task Manager on the Application Engine is already running, return to the Process Task Manager window on the Linux desktop.
Otherwise, double-click the *Launch Process Task Manager on AE.WPXT* shortcut on the Linux desktop.
Tip: Process Task Manager might take several seconds to start.
2. In the left pane of the Process Task Manager, select Application Engine.WPXT > Component Managers.
3. Select the PELoanRegion.ALL node found under Component Managers.
4. Verify that PELoanRegion.ALL Component Manager and all components under it are started (do **not** have a red X symbol next to the name of the component).
If necessary, start the PELoanRegion.ALL Component Manager and components.
5. Minimize Process Task Manager.

Procedure 2: Add a component step using CE_Operations to a workflow

In this procedure, you modify the loan processing workflow collection that you worked with in the previous activity. You replace a queue step with a component step that uses Content Extended Operations.

1. On your student Windows XP system, log in to FileNet Workplace XT using the p8admin user account listed in the "Lesson Overview" section.
2. Open the workflow collection file that you checked in to the object store.
 - a. Open Process Designer.
 - b. In Process Designer, click File > FileNet > FileNet Open/Checkout.
 - c. Locate and select the following file:
LoanProcess > Workflows > Loan Processing Collection - Java Component
 - d. Select "Open As Checkout" and click Open.



Important

This workflow collection is the one that you built and saved to the object store in the previous lesson. If you did **not** successfully complete all steps in the previous lesson activity, then you must open the following starting file located on the local system:

C:\Labs\F145\Solutions\Components\
Loan Processing Collection - Components - Java Component solution.xpdl

- e. If necessary, explore the main workflow definition in the collection to refamiliarize yourself with the process flow.

In this activity, you work only with the Prepare Loan Map and Terminate submaps of the main workflow. The Process Loan and Complete Loan submap steps are assigned to the EMPTY MAP submap, which contains no steps.

3. Replace a queue step with a component step using CE_Operations.
 - a. On the map toolbar, select Terminate.
 - b. Right-click the Set Loan Document Status step and click Change step type > Component step.
 - c. In the Set Loan Document step properties General tab, click the Add icon located in the Operations section.
 - d. In the Operation Selection window, verify that CE_Operations is the selected Component.
 - e. In the list of Operations, select setStringProperty.
 - f. Click OK.
 - g. Use the following information to assign the Operation Parameters.

Tip: Notice that the Name and Type columns are already completed for you.

Name	Type	Expression
destDocument	Attachment	loan_document
symbolicPropName	String	"Status"
value	String	status

4. Verify that your Terminate submap looks similar to the following diagram. This diagram includes a component step.



Procedure 3: Test the workflow

1. Launch and check in the workflow definition to the object store.
 - a. Validate the workflow collection and correct validation errors, if any.
 - b. Click File > Launch Main Workflow.
 - c. Click OK in the Check workflow name window, if the window is displayed.
 - d. When prompted, complete the “Checkin Workflow Definition” wizard using the following information.
 - Document Title: Loan Processing Collection - Content Operations
 - Security: <Accept default values.>
2. Complete the Launch Step processor.
 - a. In the Launch Step window, click Data Fields.
 - b. In the Data Fields view, type the following values in the fields.
 - customer_name: Barbara Brown
 - down_payment: 160000.
 - loan_date: <a future date and time>
 - loan_id: L345
 - loan_term: 15
 - purchase_price: 876500.
 - c. In the Attachments view, assign an attachment from the LoanProcess > Loans folder on the object store.

 In order to test the setStringProperty Content Extended Operation, you must assign an attachment from the object store that contains a document property named Status.
 - d. Click Launch.
3. Use Process Administrator to locate the work item for the Loan Processing - Component workflow.
 - a. In Process Designer, select Tools > Process Administrator.
 - b. Construct and execute a filtered search of LoanRoster by using the loan_id exposed field and the data in the following table.

Search criteria	Value
Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
Criteria	loan_id = 'L345'

- c. Verify that your work item appears in the results pane and is waiting in the LoanCustomer queue.
- 4. Process the work item through to the Terminate submap.
 - a. In the results pane, select the row containing the work item in the LoanCustomer queue.
 - b. Click Open Tracker on the results pane toolbar.
 - c. Notice that the current step in progress is the Confirm Rate and Payment step.
 - d. Click Tasks > Complete Work.
 - e. In the Complete Work window, select the LoanCustomer participant and click OK.
 - f. Click Yes in the confirmation window.
 - g. Click the Workflow History tab.
 - h. Verify that the Set Loan Document Status step of the Terminate map was completed.

You might observe that the status of Set Loan Document Status step is in progress (an hour glass symbol in the Status field). If this is the case, wait a few seconds for the component to process the step and then click Refresh on the Process Tracker toolbar.

- i. Close Process Tracker.
- 5. Verify that the Content Engine document property was set.
 - a. Switch to the Workplace XT window.
 - b. Click Browse > LoanProcess > Loans.
 - c. Locate and select the document that you attached in the Launch Step processor.
 - d. Click Properties (the Information icon) on the toolbar.
 - e. Verify that the Status property contains the following value: Barbara Brown confirms rate and payment.
 - f. Click OK to close the Properties window.
- 6. Close all applications.
 - a. Close Process Administrator.
 - b. Return to Process Designer.
 - c. If you have not already done so, check in your final version of the workflow definition. Otherwise, close the file and cancel the checkout.
 - d. Exit Process Designer.
 - e. Log out of Workplace XT and close the browser.