

Lesson: Workflow routing

Overview

Why is this lesson important to you?

You are designing an IBM FileNet BPM solution. At a point in the workflow, the process flow is dependent on the response given by a workflow participant at a step. You need to add step responses and conditional routing to your workflow definition. You must test the workflow to verify the changes that you make.

Activities

- Use conditional routing: Challenge
- Use conditional routing: 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. 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	filenetadmin	IBMFileNetP8



Note

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

Use conditional routing: Challenge

Challenge

Add step responses and routes to the Prepare Loan Map and Process Loan Map submaps of a prepared loan processing workflow definition file.

In the Prepare Loan Map submap at the Verify Information step, if the response is "Valid information," proceed to the Get Rate and Payment step. If the response is "Not valid information," proceed to the Correct Information step. After the Correct Information step, proceed to the Verify Information step.

In the Process Loan Map submap at the Evaluate Amount step, if the loan amount is over the limit, proceed to the Approve Loan Amount step. If the loan amount is less than or equal to the limit, proceed to the Review Loan step. The limit is specified by the MAX_AMOUNT data field.

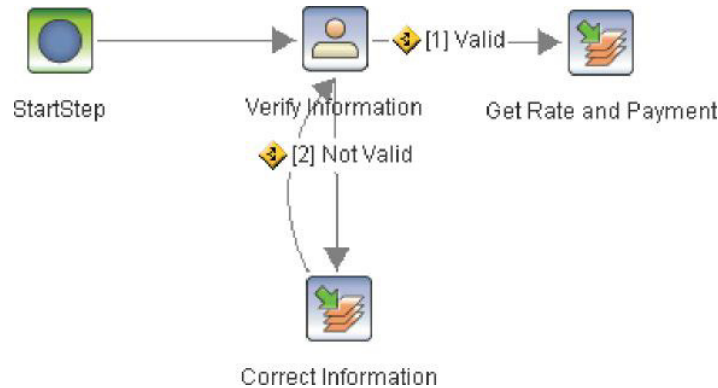
Test the workflow definition and verify the conditional routes. Use the data in the table to complete this activity.

Data

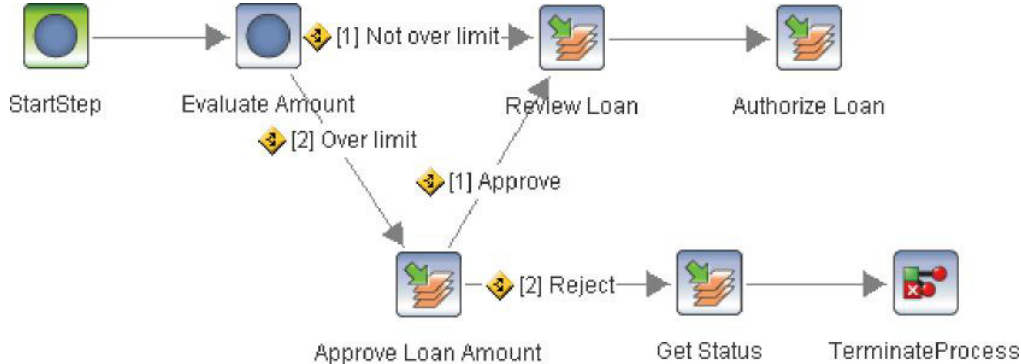
Item	Value
Prepared workflow definition file	C:\Labs\F145\Infrastructure\Loan Processing - Routing Start.pep
Outgoing routes for Verify Information step	'Valid 'Not valid
Responses for Verify Information step	'Valid information 'Not valid information
Outgoing routes for Evaluate Amount	'Not over limit 'Over limit

Verification

- You must launch and process the workflows through to completion.
- Your response at the Verify Information step must determine the next step executed in the workflow.
- Your Prepare Loan Map submap must look similar to the following diagram. This diagram shows the Verify Information step with two outgoing conditional routes.



- The value of loan amount at the Evaluate Amount step must determine the next step executed in the workflow.
- Your Process Loan Map submap must look similar to the following diagram. This diagram shows the Evaluate Amount step with two outgoing conditional routes.



Use conditional routing: Walkthrough

Introduction

This exercise gives you practice in using step responses and conditional routing in a workflow. You use a prepared loan processing workflow definition file as a starting point. The prepared workflow definition contains two submaps that you worked with in the previous lesson and some additional steps.

You add conditional routing and step responses to the Prepare Loan Map submap. You add conditional routing based on a data field value to the Process Loan Map submap.

Procedure 1: Define step responses

1. On your student Windows XP system, log in to Workplace XT using the filenetadmin user account listed in the "Lesson Overview" section.
2. Open a prepared loan processing workflow definition file.

This prepared file contains a partially completed Prepare Loan Map and Process Loan Map submaps that you worked with in the previous lesson. You are going to complete these submaps. This file has been prepared for you to save time in class.

- a. In Workplace XT, click Tools > Advanced Tools > Process Designer.
- b. Click File > Open.
- c. Locate and select the following file on the student client system local hard drive:
<C:\Labs\F145\Infrastructure\Loan> Processing - Routing Start.pep
- d. Click Open.

e. Explore the workflow definition to familiarize yourself with the process flow and notice the following items:

- This Workflow map contains two submap steps. To save time in this activity, the Complete Loan Map submap is not being used.
- The Prepare Loan Map submap is incomplete and is missing some routes.
- The Correct Information step was added to the Prepare Loan Map. This step is where the customer corrects any invalid information submitted with the loan application.
- The Get Rate and Payment step is assigned to the LoanOfficer queue and step properties include loan_term and monthly_payment parameters.
- The Process Loan Map submap is incomplete and is missing some routes.
- The Approve Loan Amount step is assigned to the LoanManager queue.
- The Get Status step is the same step you saved to My Palette.xml in a previous lesson.
- The TerminateProcess system step executes the Terminate system map and terminates all work items in the workflow.
- The workflow data field called MAX_AMOUNT is assigned an initial value of 400000. A loan amount over this limit must be approved by a Loan Manager.

3. Add responses to the Verify Information step.

- a. Use the Map toolbar to select the Prepare Loan Map submap.
- b. Select the Verify Information step.
- c. Select the Routing tab.
- d. In the Responses field, type the following two responses in this order:
 - Valid information
 - Not valid information

Procedure 2: Define conditional routes

1. Draw and label multiple outgoing routes for Prepare Loan Map.

- a. Draw a route from the Verify Information step to the Get Rate and Payment step.
- b. Type the following text in the route name property: Valid
- c. Draw a route from the Verify Information step to the Correct Information step.
- d. Type the following text in the route name property: Not Valid
- e. Draw a route from the Correct Information step to the Verify Information step.

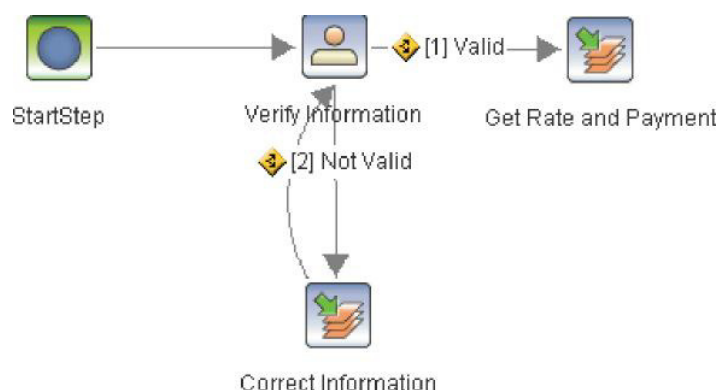
2. Define route properties based on responses.

- a. On the Prepare Loan Map submap, select the Valid route.
- b. In the Valid route properties, click Conditional Route.
- c. Select the Responses tab.

- d. Select `ALL` in the Condition field.
- e. Select `Valid Information` in the Response field.
- f. Click `ADD`.
- g. Verify that the following condition is displayed in the expression text box:
`ALL(Valid information)`
- h. Select the Not Valid route.
- i. In the Not Valid route properties, click Conditional Route.
- j. Select the Responses tab.
- k. Use the options and `ADD` button to build the following expression or type the expression directly in the expression text box:

`ANY(Not valid information)`

3. Verify that your Prepare Loan Map submap look similar to the following diagram. This diagram shows the Verify Information step with two outgoing conditional routes.



4. Draw and label multiple outgoing routes for Process Loan Map.
 - a. Use the map toolbar to select the Process Loan Map submap.
 - b. Draw a route from the Evaluate Amount step to the Review Loan step.
 - c. Type the following text in the route name property: `Not over limit`
 - d. Draw a route from the Evaluate Amount step to the Approve Loan Amount step.
 - e. Type the following text in the route name property: `Over limit`
5. Define route properties based on a data field.
 - a. On the Process Loan Map submap, select the "Not over limit" route.
 - b. In the route properties, click Conditional Route.
 - c. Select the Data Fields tab.

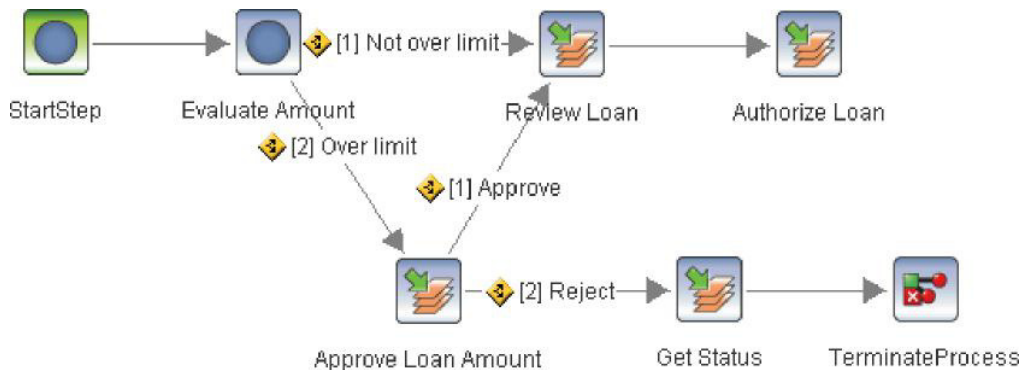
- d. Use the options and ADD button to build the following expression or type the expression directly in the expression text box:

```
loan __ amount <= MAX __ AMOUNT
```

- e. Select the "Over limit" route.
 f. In the route properties, click Conditional Route.
 g. Select the Data Fields tab.
 h. Use the options and ADD button to build the following expression or type the expression directly in the expression text box:

```
loan __ amount > MAX __ AMOUNT
```

6. Verify that your Process Loan Map submap look similar to the following diagram. This diagram shows the Evaluate Amount step with two outgoing conditional routes.



Procedure 3: Test the conditional routes

1. Launch and save the workflow definition to the object store.
 - a. Validate the workflow and correct validation errors, if any.
 - b. Click File > Launch Main Workflow.
 - c. Complete the "Save the workflow definition to an object store" wizard using the following information.
 - Object store: LoanProcess > Workflows
 - Document Title: Loan Processing Workflow - Routing
 - Security: <Accept default values.>
2. Complete the Launch Step processor.
 - a. In the Launch Step window, click Data Fields to display the data fields.

db. In the Data Fields view, type the following values in the fields:

- customer_name: Cathy Miles
- loan_amount: 125000.
- loan_term: 30

c. Click Launch.

3. Use Process Administrator to locate the work item.

a. In Process Designer, select Tools > Process Administrator.

b. Construct and execute a filtered search of LoanRoster by using 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	F_Subject like '%Cathy Miles%'

c. Verify that your work item appears in the results pane and is in the Inbox(0) queue assigned to olivia.

4. Complete the Verify Information step with the "Valid information" response in order to test the Valid route.

- a. In the results pane, select the row containing the work item in the Inbox assigned to olivia.
- b. Click Open Step Processor on the results pane toolbar.
- c. In the Responses field of the Verify Information step processor window, select "Valid information."
- d. Click Complete.

5. Complete the Get Rate and Payment step.

Because you selected the "Valid information" response, the work item followed the Valid route and is in the LoanOfficer queue waiting at the Get Rate and Payment step.

- a. In Process Administrator, click Find Now to reexecute the roster search.
- b. In the results pane, select the row containing the work item in the LoanOfficer queue.
- c. Click Open Step Processor on the results pane toolbar.
- d. In the Get Rate and Payment step processor window, type values of your choice in the interest_rate and monthly_payment fields.

- e. In the status field, type the following text value:

Loan preparation is completed.

- f. Click Complete.

6. Complete the Review Loan step from the Process Loan Map submap.

In the Launch step, you assigned loan_amount a value less than MAX_AMOUNT (400,000.). Therefore, the work item followed the "Not over limit" route and is in the LoanProcessor queue waiting at the Review Loan step.

- a. In Process Administrator, click Find Now to reexecute the roster search.
- b. In the results pane, select the row containing the work item in the LoanProcessor queue.
- c. Click Open Step Processor on the results pane toolbar.
- d. Click Complete.

7. Complete the Authorize Loan step from the Process Loan Map submap.

- a. In Process Administrator, click Find Now to reexecute the roster search.
- b. In the results pane, select the row containing the work item in the LoanManager queue.
- c. Click Open Step Processor on the results pane toolbar.
- d. Click Complete.

8. Complete the Set Loan Document Status step from the Terminate submap.

- a. In Process Administrator, click Find Now to reexecute the roster search.
- b. In the results pane, select the row containing the work item in the LoanUnderwriter queue.
- c. Click Open Step Processor on the results pane toolbar.
- d. Verify that the status field contains the following text: "Loan preparation is completed."
- e. Click Complete.
- f. In Process Administrator, click Find Now to reexecute the roster search.
- g. Verify that the work item is no longer listed in the results pane.

9. Launch another workflow to test the Not Valid route and the Over limit route.

- a. Switch to Process Designer.
- b. Click File > Launch Main Workflow.

- c. In the Launch Step window, click the Data Fields tab and type the following:
- customer_name: Joan Brown
 - loan_amount: 615000.
 - loan_term: 0
- d. Click Launch.
- e. Minimize Process Designer.
- f. In Process Administrator, construct and execute a search of the LoanRoster to locate your work item.
- g. Select your work item in the results pane and click Open Step Processor.
- h. In the Response field, select "Not valid information."
- i. Click Complete.
- j. In Process Administrator, execute a search to locate your work item.
- k. Verify that the work item now appears in the LoanCustomer queue at the Correct Information step, which means that the Not Valid route was taken.
- l. Open the step processor for the Correct Information step.
- m. Change the value of loan_term to 30.
- n. Click Complete.
- o. Use the skills that you have learned to complete processing of the remaining steps. Use the following information to guide you.

- At the Verify Information step, select the "Valid information" response.
- In the Get Rate and Payment step, type the following in the status field: `Loan preparation is completed.`
- In the Approve Loan Amount step, select the "Deny loan" response and replace the value of the status field with the following:
`Loan is denied.`
- Verify that the work item is sent to the Get Status step with status "Loan is denied."
- Verify that the work item is sent to the Set Loan Document Status step with status "Loan is denied."

10. Exit all applications.

- a. Close Process Administrator.
- b. In Process Designer, if you have not already done so, check in your final version of the workflow definition.
- c. Exit Process Designer.
- d. Log out of Workplace XT and close the browser.