

Course Exercises Guide

IBM Case Foundation 5.2.1: Routing Work

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Exercise 1. Workflow routing

Overview

Why is this lesson important?

You are designing a workflow application. At a point in the workflow, the process flow depends on the response given by a workflow participant at a step. You need to add step responses and conditional routing to your workflow definition.

Objectives

Use conditions to direct the flow of work.

Activities

- ["Define workflow routing based on responses"](#) on page 1-2
- ["Define workflow routing based on a data field"](#) on page 1-10

Before you begin

Follow the instructions in Procedure 1 and 2 to start the system components. ["Start and Stop System Components"](#) on page A-1

User accounts

Type	User ID	Password
Workflow Author P8 administrator	p8admin	IBMFileNetP8
Loan Officer	Olivia	filenet
Loan Processor	Pat	filenet



Note

Passwords are always case-sensitive.

Define workflow routing based on responses

Introduction

In this exercise, you define step responses and conditional routes to define multiple workflow routes. You test the resulting workflow, with different responses to validate that the correct workflow routes are taken.

Procedures

[Procedure 1, "Define step responses,"](#) on page 1-2

[Procedure 2, "Define conditional routes for each response defined,"](#) on page 1-5

[Procedure 3, "Test the workflow with different responses,"](#) on page 1-7

Procedure 1: Define step responses

In this procedure, you modify an activity step. You delete the existing responses and add three new responses.

1. Open the workflow definition, Basic Loan Processing Workflow.pep in Process Designer.
 - a. Open the Workflow Author desktop.
 - Open a Mozilla Firefox window, go to Bookmarks > Workflow Author desktop.



Note

The Workflow Author desktop is an IBM Content Navigator desktop that is configured on the student system.

-
- b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8



Note

On the student system, the Workflow Author is a P8 administrative user. In a real development environment, administrative users might not be used.

- c. Open Process Designer.
 - On the left, right-click LoanProcess and select, **Open Process Designer**.



Note

The first time that you open Process Designer, after starting up the student system, it can take a few minutes for the tool to open. You see a blank screen for a while, be patient.

- d. Open the Basic Loan Processing Workflow.pep file.

- File > Open

C:\Labs\Case Foundation 5.2.1 Workflow Design\Basic Loan Processing Workflow.pep

2. Assign workflow properties.

- a. Use the data in the table to update the Workflow Properties > General tab:

Item	Value
Workflow Name	Basic Loan Processing-Routing
Subject	Basic Loan Processing-Routing

- b. Add two data fields.

Name	Type	Expression
Response_array	Integer[]	{0}
Response_string	String	""

- c. Select the Advanced tab and make a note of the roster that is configured.

3. Select the **Verify Info** step.

- a. The assigned to the Work Queue, **LoanOfficer**. Define three routing responses.

- a. Select the Routing tab.

- b. Delete the two existing responses.

- c. Add three responses (double-click the empty row):

-Valid information
 -Not valid information
 -Cancel loan



Hint

Make sure to click return after entering each response.

4. Save the response selected to a data field.
 - a. Go to the **Assignments** tab and select **After Completion**.
 - b. Use the data in the table and the Expression Builder to define the field assignments. F_Response and F_Responses are system data fields.

Name	Expression
Response_array	F_Responses
Response_string	F_Response



Information

The system clears F_Responses and F_Response between each step. If you want to check the values, you must define, After Completion, assignments to save them. See the IBM FileNet P8 Platform 5.2.1 documentation topic: FileNet P8 Platform 5.2.1>Integrating workflow into document management>Process applications concepts>Design and run workflows>About workflow maps>About step states.

You can use the saved responses in any expressions to control the flow of work in a workflow.

5. Modify properties for the Modify Info step, to simplify testing.
 - a. Select the **Modify Info** step and use the data in the table to modify the properties:

Tab	Item	Value
General	Activity Type	Work Queue:
		LoanOfficer
Parameters	Selected Parameters	LoanAmount[RW]
		LoanName[R]
		Response_array[R]
		Response [R]

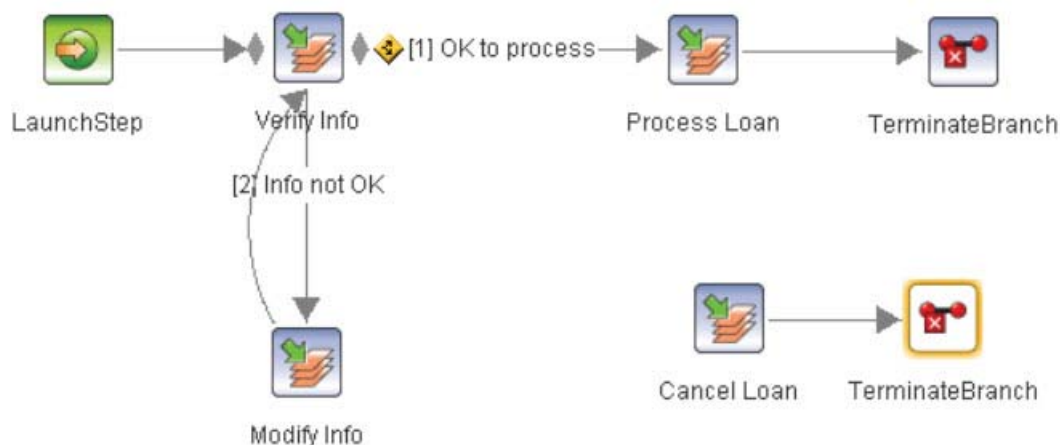
6. Add the new data fields to the Process Loan step.
 - a. Select the **Process Loan** step and use the data in the table to modify the properties:

Tab	Item	Value
Parameters	Selected Parameters	Add:
		Response_array[R]
		Response_string [R]

7. Add an activity step below the Process Loan step for the third response. Use the data in the table to set the step properties:

Tab	Item	Value
General	Name	Cancel Loan
	Activity Type	Work Queue: LoanOfficer
Parameters	Selected Parameters	Response_array[R]
		Response_string [R]

8. From the General System Palette, add a TerminateBranch step, to the right of the Cancel Loan step.
9. Draw a route from the Cancel Loan step to the TerminateBranch step.
10. Click **File > Save as**, to save the workflow definition. Accept the name Basic Loan Processing-Routing.pep. The workflow should look similar to:



11. Leave Process Designer open for the next procedure.

Procedure 2: Define conditional routes for each response defined

In this procedure, you define a conditional route for each of the responses that you defined.

1. Rename the existing outgoing routes.
 - a. Select the route labeled, **OK to process**.
 - b. Change the route name to `Valid`.
 - c. Select the route labeled, **Info not OK**.
 - d. Change the route name to `Not Valid`.

2. Define route properties based on responses.

a. Select the route, **Valid**.

- In the Properties pane, just below the pencil, click **Clear** to clear the current condition.
- Set the Conditional Route so the Valid route is selected when all responses are set to Valid Information (click Add to add the condition).

The screenshot shows the 'Workflow Properties' dialog box with the 'Routing' tab selected. The 'Route' field is set to 'Valid'. Under the 'Routing' section, the 'Conditional Route' radio button is selected. The 'Responses' tab is active, showing a condition where 'ALL' responses are 'Valid information' and the operator is 'is equal'. The 'Value' field is empty. An 'ADD >>' button is highlighted with a red box.

b. Select the route, **Not Valid**.

- Select **Conditional Route**.
- Set the Conditional Route so the route is taken if any response is Not valid information. (ANY(Not valid information)).

c. Draw a route from the Verify Info step to the Cancel Loan step.

- Route name: Cancel
- Select **Conditional Route**.
- Set the Conditional Route so the Cancel route is taken if any response is set to Cancel Loan. (ANY(Cancel loan)).

3. Validate the workflow.

a. **File > Validate Workflow Collection.**

- b. Make sure that the workflow validation is successful. If any errors occur, you must fix them before continuing.

4. Transfer the workflow.

a. **File > Transfer the Workflow Collection.**

b. Save the workflow definition to:

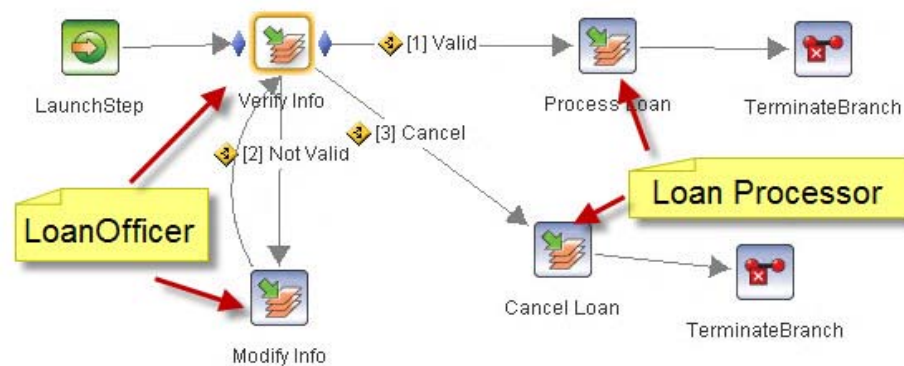
- Folder: **LoanProcess > Workflows**
- Document Title: Basic Loan Processing-Routing
- Click **Finish** (accept the default security access).

c. Ensure that you get, **Transfer was successful**.

5. Close the workflow definition.
 - a. Click **File > Close**.
 - b. Choose the option to Cancel the checkout.
6. Exit Process Designer.

Procedure 3: Test the workflow with different responses

In this procedure, you launch a couple of instances of the workflow and choose each of the responses defined to see how they affect the flow of the work items. The diagram shows the steps, the work queue they are assigned to, and routes defined.



1. Launch the workflow.
 - a. In the Workflow Author desktop, browse to LoanProcess > Workflows.
 - b. Select, Loan Processing-Routing.
 - c. Click Actions, Workflow > Launch Workflow.
 - d. Use the data in the table to enter values for the fields:

Item	Value
Customer Name	Jeff Jenkins
Loan Amount	250000

- e. Click **Launch Workflow**.
 - f. Logout of the desktop.
2. Process the **Verify Info** step.
 - a. Log in as the Loan Officer on the Workflow Author desktop.
 - Username: Olivia
 - Password: filenet
 - b. Switch to the Work View and go to the Loan Officer Inbasket.
 - c. Open the work item.

- d. You see links, at the bottom, for each of the three responses that you defined.

LoanName: ? Jeff Jenkins

LoanStatus: ?

Comment: ?

Get next work item Cancel loan Not Valid information Valid information Reassign Move to In-basket Save Cancel

- e. Click, **Not Valid information**.

3. Complete the **Modify Info** step.

Information

You selected the response, Not valid information, the work item takes the route, **Not Valid** to the Modify Info step.

- a. Open the work item.
 - b. Response_array shows a 0 or a 1 for each response. The 1 indicates that one participant selected the response. The order is determined by the order the response is defined in the routing tab of the step properties.
 - c. Response_string displays the string of the response selected.
 - d. Click **Complete**.
4. Process the **Verify Info** step again. (The work item is back in the Verify Info step).
- a. Open the work item.
 - b. Click, **Valid information**.

Information

You selected the response, Valid information, the work item takes the route, **Valid** to the Process Loan step.

- c. Log out of the desktop.

5. Complete the **Process Loan** step.
 - a. Log in as the Loan Processor.
 - Username: Pat
 - Password: filenet
 - b. Switch to the Work View and go to the Loan Processor Inbasket.
 - c. Open the work item.
 - d. Notice the values of **Response_array** and **Response**.
 - e. Click **Complete**.
6. Launch another instance of the workflow.
 - a. Switch to Browse, and go to LoanProcess > Workflows.
 - b. Right-click Basic Loan Processing-Routing and select Workflow > Launch Workflow.
 - c. Enter a customer name and a loan amount.
 - d. Click **Launch Workflow**.
7. Use the diagram at the beginning of Procedure 3 to remind you of the flow of work, Choose the response, Cancel loan, and verify the values for Response_array and Response_string.
8. When you are finished, log out of the desktop.
9. Close all open windows.

Define workflow routing based on a data field

Introduction

In this exercise, you define conditional routes based on a data field expression. Different routes are taken depending on the value entered for the Loan Amount. You test the resulting workflow definition, with different values for the Loan Amount, and validate that the correct route is processed.

Procedures

[Procedure 1, "Define conditional routes based on a data field,"](#) on page 1-10

[Procedure 2, "Test the workflow with different data field values,"](#) on page 1-12

Procedure 1: Define conditional routes based on a data field

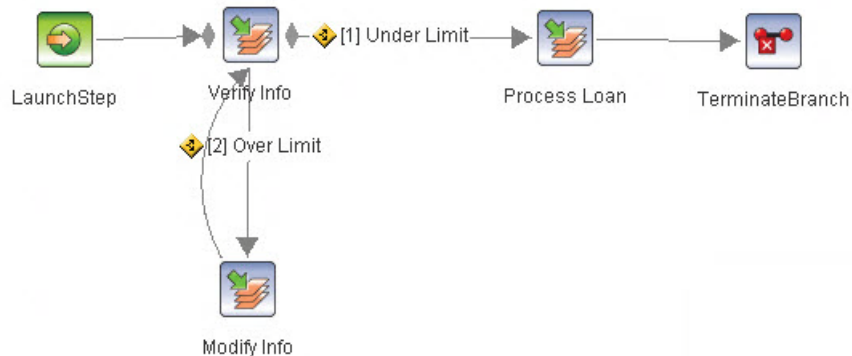
In this procedure, you define a conditional route based on the data field, Loan Amount.

1. Check out the workflow, Basic Loan Processing-Routing.
 - a. Open the Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Browse to **LoanProcess > Workflows**.
 - d. Click the icon to the left of the workflow, **Basic Loan Processing-Routing**.
2. Delete responses for the **Verify Info** step.
 - a. Select the **Verify Info** step.
 - b. On the Routing tab, delete the existing responses.
3. Modify the outgoing routes.
 - a. Select the route, **Valid**.
 - b. Change the route name to `Under limit`.
 - c. Select the route, **Not Valid**.
 - d. Change the route name to `Over limit`.
 - e. Delete the two steps. **Cancel Loan** and **TerminateBranch**.
4. Define route properties based on a data field.
 - a. Select the route, **Under limit**.
 - In the route properties, click Clear, to clear the condition.
 - Select the Data Fields tab.

- Set the Conditional Route to `LoanAmount < 400000`. (Make sure to click Add).

The screenshot shows the 'Route' configuration window. The 'Route' name is 'Under Limit'. Under the 'Routing' section, 'Conditional Route' is selected. The 'Data Fields' tab is active, showing 'Field' as 'LoanAmount (Float)', 'Operator' as 'is less than', and 'Value' as '400000'. An 'ADD >>' button is highlighted with a red box.

- Select the route, **Over limit**.
 - In the route properties, click Clear, to clear the condition.
 - Select the Data Fields tab.
 - Set the Conditional Route to `LoanAmount >= 400000`. (Make sure to click Add).
- Allow the value of `LoanAmount` to be modified in the Modify Info step.
 - Select the step, Modify Info.
 - Click the Parameters tab.
 - Click the pencil icon next to Selected Parameters.
 - Change the access rights for the parameter, `LoanAmount`, to Read/Write.
 - Close the Step Parameters window.
 - The resulting workflow looks similar to:

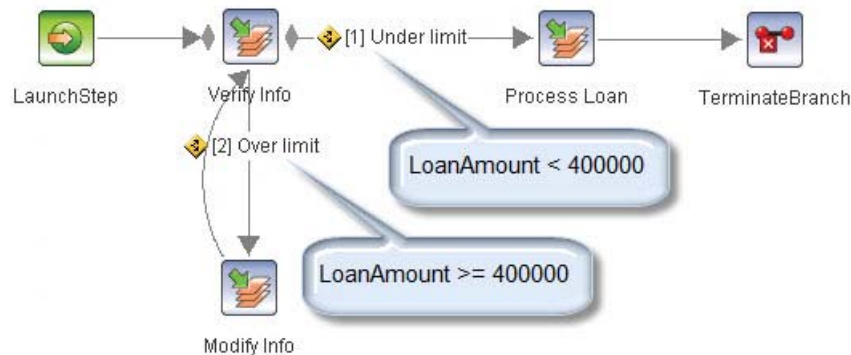


- Validate the workflow.
 - Click **File > Validate Workflow Collection**.
 - Make sure that the workflow validation is successful. If any errors occur, you must fix them before continuing.

8. Transfer the workflow.
 - a. Click **File > Transfer the Workflow Collection**.
 - Accept the workflow name and click Finish.
 - b. Ensure that you get, **Transfer was successful**.
9. Close the workflow definition.
 - a. **File > Close**.
 - b. Cancel the checkout.
10. Close Process Designer.

Procedure 2: Test the workflow with different data field values

In this procedure, you launch a couple of instances of the workflow and enter different values for the Loan Amount to validate that the correct routes are processed. The diagram shows the steps and routes defined.



1. Launch the workflow.
 - a. In the Workflow Author desktop, in the folder, LoanProcess > Workflows, click **Refresh** to ensure that you launch the latest version of the workflow.
 - b. Select, **Basic Loan Processing-Routing**.
 - c. Click Actions and select **Workflow > Launch Workflow**.
 - d. Use the data in the table to enter values for the fields:

Item	Value
Customer Name	Geroge Gatt
Loan Amount	450000

- e. Click **Launch Workflow**.

**Note**

To speed up testing, you switch to the different inbaskets as the same user, p8admin.

2. Process the **Verify Info** step.
 - a. Switch to the Work View and go to the Loan Officer Inbasket.
 - b. Open the work item.
 - c. Click **Complete**.
 3. Complete the **Modify Info** step.
-

**Information**

The LoanAmount is greater than the limit of 400000, the work item takes the route, **Over limit** to the Modify Info step.

- a. Open the work item.
 - b. Change the LoanAmount to: 350000.
 - c. Click **Complete**.
 4. Process the **Verify Info** step again.
 - a. Open the work item.
 - b. Click **Complete**.
-

**Information**

The LoanAmount is less than the limit of 400000, the work item takes the route, **Under limit** to the Process Loan step.

5. Complete the **Process Loan** step.
 - a. Switch to the Loan Processor Inbasket.
 - b. Open the work item.

- c. Click **Complete**.
-

**Note**

You can combine data fields and responses in your route conditions, You can also create expressions that test response results and data field values to decide what route to take in the workflow.

6. Log out of the desktop.
7. Close all the browser windows.

End of exercise

Exercise review and wrap-up

In this exercise, you used conditions on responses and data fields to direct the flow of work.

Exercise 2. Parallel processing

Overview

Why is this lesson important?

You are designing a workflow application. Your process has several steps that are executed in parallel to save time. You must model parallel execution in your workflow.

Objectives

Create a parallel process in a workflow.

Activities

- ["Create a parallel process in a workflow"](#) on page 2-2

User accounts

Type	User ID	Password
Workflow Author P8 administrator	p8admin	IBMFileNetP8



Note

Passwords are always case-sensitive.

Create a parallel process in a workflow

Introduction

In this activity, you start with a predefined workflow definition. You define an AND-split step, a couple of steps that are executed in parallel, and a Collector step. You define data fields and their merge types to control what the data field values will be after the Collector step is processed.

Procedures

[Procedure 1, "Add steps to define a parallel process,"](#) on page 2-2

[Procedure 2, "Set a data field merge type,"](#) on page 2-4

[Procedure 3, "Test parallel processing,"](#) on page 2-6

Procedure 1: Add steps to define a parallel process

In this procedure, you add a AND-split step, two steps to execute in parallel, and a Collector step to combine the parallel steps, to a pre-defined workflow definition.

1. Open the workflow definition, Basic Loan Processing Workflow.pep in Process Designer.
 - a. Open the Workflow Author desktop.
 - Open a Mozilla Firefox window, go to Bookmarks > Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Open Process Designer.
 - On the left, right-click LoanProcess and select, **Open Process Designer**.
 - d. Open the Basic Loan Processing Workflow.pep file.
 - File > Open

C:\Labs\Case Foundation 5.2.1 Workflow Design\Basic Loan Processing Workflow.pep
2. Change the workflow properties:
 - a. Use the values in the table:

Item	Value
Workflow Name	Basic Loan Processing-parallel processing
Subject	Basic Loan Processing-parallel processing

3. Add two new steps.

- a. Add two activity steps, one above the other, to the right of the step, **Process Loan**. **Tip:** You can delete the route between the Process Loan step and the TerminateBranch step and move the TerminateBranch step to the right to make room.

Item	Value
Step Name	Get Home Valuation
	Work Queue: LoanOfficer
Step Name	Get Credit Rating
	Work Queue: LoanOfficer

4. Define the AND-split step.

- a. Select the step, **Process Loan**.
- Change the step name to: Get Financial Info.
 - Activity Type: Click Participants, but do not add any participants
 - Routing tab: Under Outgoing Routing Information, select **Take Routes Of: All true conditions**.

5. Draw routes.

- a. Draw a route from the Get Financial Info step to the Get Home Valuation step.
- Accept the default route condition, "**Always true.**"
- b. Draw another route from the Get Financial Info step to the Get Credit Rating step.
- Accept the default route condition, "**Always true.**"

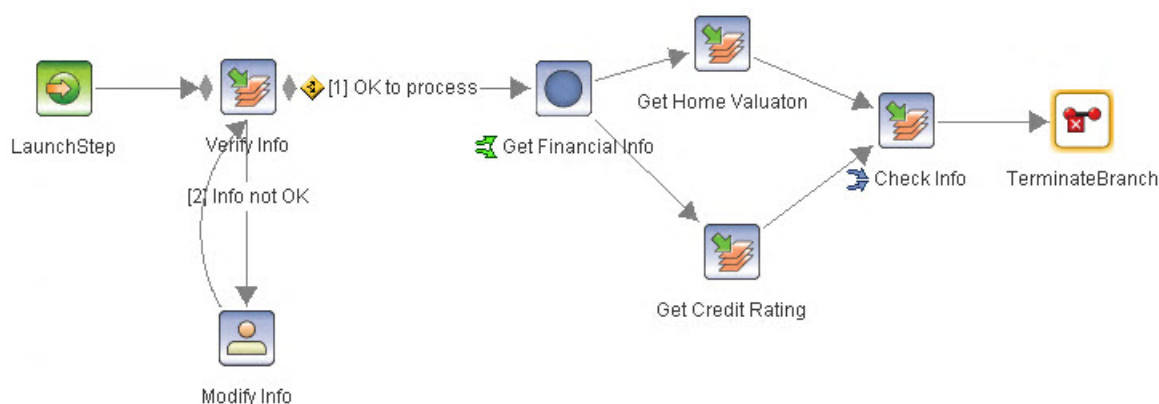
6. Define a Collector step.

- a. Add an activity step to the right of the two steps you added in Step 3.

Item	Value
Step Name	Check Info
	Work Queue: LoanProcessor

- b. Select the Routing tab.
- Select the Collector step check box.
- c. Draw a route from the Get Home Valuation step to the Check Info step.
- Accept the default route condition, "**Always true.**"
- d. Draw a route from the Get Credit Rating step to the Check Info step.
- Accept the default route condition, "**Always true.**"
- e. Draw a route from the Check Info step to the TerminateBranch step.
- Accept the default route condition, "**Always true.**"

The Workflow definition should look similar to:



7. Leave Process Designer open for the next procedure.



Important

If you are waiting a while, before continuing with the next procedure, save the workflow definition to the file system with a new filename (File > Save As, for example, add your initials to the filename).

Procedure 2: Set a data field merge type

In this procedure, you add two data fields, of type string and integer, and set the Merge Type for each field. You add the two data fields to steps in the workflow as well as the data field, LoanAmount of Merge Type, Override.

1. Add new workflow data fields to demonstrate how to merge data fields.

- a. In the Workflow Properties tab, click the Data Fields tab.
- b. Add a string data field:

Item	Value
Name	loan_comment
Type	String
Merge Type	Add
Expression	"New Loan"
Description	Loan processing comments.

- c. Add an integer data field:

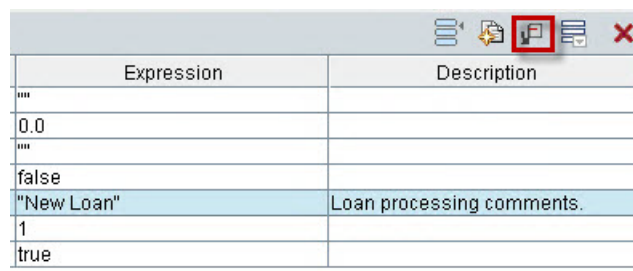
Item	Value
Name	CreditRating
Type	Integer
Merge Type	Add
Expression	1

- d. Make a note of the Merge Type for the data field, LoanAmount.

2. Add data fields as parameters to workflow steps.

- a. Add the data field, loan_comment, as a parameter in three steps.

- Select the data field, loan_comment.
- Click the Field Usage icon.



Expression	Description
""	
0.0	
""	
false	
"New Loan"	Loan processing comments.
1	
true	

- Add the data field, loan_comment, to the steps that follow:

Step	Access
Check Info	R
Get Credit Rating	RW
Get Home Valuation	RW

- b. Add the data field, LoanAmount to the steps that follow:

Step	Access
Check Info	R
Get Home Valuation	RW

- c. Add the data field, CreditRating to the steps that follow:

Step	Access
Check Info	R
Get Credit Rating	RW

3. Click **File > Validate the Workflow Collection**.
 - a. If you get any errors, resolve them before continuing.
4. Click **File > Transfer the Workflow Collection**.
 - a. Save the workflow definition to:
 - Folder: **LoanProcess > Workflows**
 - Document Title: Basic Loan Processing-parallel processing
 - Click **Finish** (accept the default security access).
 - b. Ensure that you get, **Transfer was successful**.
5. Close the workflow definition.
 - a. **File > Close**.
 - b. Cancel the checkout.
6. Minimize Process Designer.

Procedure 3: Test parallel processing

In this procedure, you launch the workflow. You use Process Administrator and Process Tracker as you complete each step to verify that the steps are executed in parallel. You see how the system waits until all the parallel steps complete before processing the Collector step.

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse **LoanProcess > Workflows**.
 - b. Select **Basic Loan Processing-parallel processing**.
 - c. Right-click and select **Workflow > Launch Workflow**.
2. Use the data in the table to populate the fields:

Item	Value
Customer Name	Penny Pines
Loan Amount	300000

3. Find the work item in Process Administrator.
 - a. Maximize the Process Designer window. Click **Tools > Process Administrator**.
 - b. Use the data in the table to create the search:

Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	DefaultRoster
Search mode	Edit (all fields)

- c. Select the work item in the Tracker queue that does not have a green check mark and click the icon to open Process Tracker.



Hint

If you have a window already open, Process Tracker might open behind the current window. If you do not see the Process Tracker window, check the Windows system tray for the open Process Tracker window.

- d. The hour glass appears above the Verify Info step.
4. Complete the Verify Info step.
 - a. In the Workflow Author desktop, switch to the Work View.
 - b. Go to the Loan Officer Inbasket.
 - c. Open the work item and select **Info OK**.
5. Verify that two parallel processes started.
 - a. You see two items listed in the Loan Officers Inbasket, with step names:
 - Get Home Valuation
 - Get Credit Rating
6. View the work items with Process Tracker.
 - a. In the Process Tracker window, click the refresh icon.



Information

You see 2 hour glasses, over the two steps that are waiting to process, **Get Home Valuation** and **Get Credit Rating**. The **Get Financial Info** step (AND-split) completed and successfully split the workflow execution into the two parallel steps.

7. View the work items with Process Administrator.
 - a. In the Process Administrator window, click **Find Now**.



Hint

If you get several rows with green check marks, you can delete the entries to make it easier to see just the information for this workflow. The green check marks indicate that the workflow is completed. Select the rows, right-click, and select Tasks > Delete Work.

b. You see:

- Four active work items. One in the Tracker Queue, one in the Delay Queue, and two in the LoanOfficer Queue.
- The F_WobNum, work object numbers, are unique for each of the work items.
- The F_WorkFlowNumber is the same for all the work items.

Queue	F_WobNum	F_Originator	F_WorkFlowNumber	F_Stat
Tracker(0)	4CAA98D9DEE12349BE3A1A7E2106D942	50 (P8Adm...	768C2EEB8B210F4590B9EEFB2A1D35F0	Feb 16
Delay(0)	768C2EEB8B210F4590B9EEFB2A1D35F0	50 (P8Adm...	768C2EEB8B210F4590B9EEFB2A1D35F0	Feb 16
LoanOfficer	8E08F92615865845ADB2F41DF1C8114C	50 (P8Adm...	768C2EEB8B210F4590B9EEFB2A1D35F0	Feb 16
LoanOfficer	9B93A0101DFDEA4BA519790B1A349D7D	50 (P8Adm...	768C2EEB8B210F4590B9EEFB2A1D35F0	Feb 16

8. Complete the step, **Get Home Valuation**.

- Switch back to the Workflow Author desktop. In the Loan Officer Inbasket, Open the item with the Step Name, **Get Home Valuation**.
- Replace the value for Loan processing comments with: Home value is confirmed.
- Replace the value for LoanAmount, with: 250000.
- Click Complete.
- Switch to the Process Administrator window. Click **Find Now**.
 - A work item is still in the Delay queue, waiting for the step, Get Credit Rating to complete.
 - If you want, switch to the Process Tracker window and click the refresh icon.
 - o The step, Get Home Valuation is complete.

9. Complete the step, **Get Credit Rating**.

- Switch back to the Workflow Author desktop. In the Loan Officer Inbasket, open the item with the Step Name, **Get Credit Rating**.
- Replace the value for CreditRating with: 650.
- Replace the value for Loan processing comments with: Credit Rating is confirmed.
- Click Complete.

10. Complete the step, Check Info, and verify the data field merge.

- Switch to the Loan Processor Inbasket. Open the item with the step name, Check Info.

- b. Verify that the data fields look like:

Properties	
CreditRating: ?	651
loan_comment: ?	New LoanHome value is confirmed.Credit Rating is confirmed.
LoanAmount: ?	250000
Comment: ?	



Information

The two data fields, CreditRating and loan_comment, have Merge Types set to **Add**. In the case of an integer, the two integers are summed together, $1 + 650 = 651$. In the case of a string, the two strings are concatenated, “New Loan” + “Home is confirmed.” + “Rating is confirmed.” The data field, LoanAmount has a Merge Type of **Override**. The original LoanAmount of 300000 is replaced with 250000.

11. Click Complete.
12. Log out of the Workflow Author desktop and close all open windows.

End of exercise

Exercise review and wrap-up

In this exercise, you created a parallel process in a workflow.

Exercise 3. Manage participation

Overview

Why is this lesson important?

You are designing a workflow application and you want to control how users participate in a workflow. You want to:

- Assign a user to track the progress of a workflow.
- Design a workflow that uses dynamic assignment of participants at run time.
- Use participant voting to determine the next step in the workflow.

Objectives

- Control how users participate in a workflow
- Define participant voting for a step

Activities

- ["Control how users participate in a workflow"](#) on page 3-2
- ["Define participant voting with multi-participant steps"](#) on page 3-7

User accounts

Type	User ID	Password
Workflow Author P8 administrator	p8admin	IBMFileNetP8



Note

Passwords are always case-sensitive.

Control how users participate in a workflow

Introduction

In this activity, you:

- Assign a user to track the progress of a workflow by assigning a Tracker to a workflow.
- Define a couple of workflow groups in a workflow definition.
- Assign an LDAP group to a workflow group in the workflow definition.
- Use an expression with a data field to assign participants to a workflow group at run time.

Procedures

[Procedure 1, "Assign a Tracker to a workflow,"](#) on page 3-2

[Procedure 2, "Add a dynamically assigned workflow group,"](#) on page 3-3

[Procedure 3, "Test dynamically assigning a workflow group,"](#) on page 3-4

Procedure 1: Assign a Tracker to a workflow

1. Open the workflow definition, Basic Loan Processing Workflow.pep in Process Designer.
 - a. Open the Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Open Process Designer.
 - d. Click **File > Open**.

C:\Labs\Case Foundation 5.2.1 Workflow Design\Basic Loan Processing Workflow.pep

2. Change the workflow properties:
 - a. Use the values in the table:

Item	Value
Workflow Name	Basic Loan Processing-dynamic participants
Subject	Basic Loan Processing-dynamic participants

3. Assign a workflow tracker.
 - a. Select the **Workflow Groups** tab.
 - b. Select the F_Trackers workflow group.
 - You see the user, P8Admin, is listed under participants. A tracker work item is created and assigned to the user, P8Admin.

4. Leave Process Designer open for the next procedure.



Information

If you have a user or group that needs the ability to monitor events to help resolve problems when the workflow is running, you assign that user or group to the F_Trackers workflow group.

Procedure 2: Add a dynamically assigned workflow group

In this procedure, you add two workflow groups, `loan_manager_group` and `loan_processor_group`. You assign the `loan_manager_group` to the LDAP group, Loan Managers. The `loan_processor_group` is not assigned an LDAP group, instead you define an assignment expression to dynamically set the `loan_processor_group` to different loan processors if the value of `LoanAmount` is less than or greater than 100000.

1. You are in Process Designer with the workflow definition, Basic Loan Processing-dynamic participants displayed.
2. Add two workflow groups to the workflow definition.
 - a. Make sure that you are in the Workflow Groups tab of the Workflow Properties pane.
 - b. Select the row under F_Trackers and type: `loan_processor_group`. Click return.
 - c. In the next row, type: `loan_manager_group`. Click return.
3. Assign the group, **Loan Managers**, to the `loan_manager_group`.
 - a. Select the row with `loan_manager_group`, in the Participants pane, click the pencil icon.
 - b. Search Groups for the string, `Loan`.
 - c. Select the group, **Loan Managers**, and move it to Selected Users.
 - d. Click OK.
4. Modify the step, Process Loan.
 - a. Select the step, Process Loan.
 - b. In the Properties pane, change the Activity Type to Participants.
 - c. Click the pencil icon and select the workflow group, `loan_processor_group` as the Selected Participants.
 - d. Click OK.

- e. Assign users to the workflow group, loan_process_group, based on the loan amount and run time.
 - Click the Assignments tab.
 - Select Before Execution.
 - Under Field Assignments, use the expression builder to enter the expression shown:

Name	Expression
loan_processor_group	If (LoanAmount>100000, {"pat"}, {"peter"})



Note

Make sure to click return or tab to save the expression.

5. Validate the Workflow Collection.
 - a. Click **File > Validate the Workflow Collection**.
 - b. If you get any errors, resolve them before continuing.
6. Transfer the Workflow Collection.
 - a. Click **File > Transfer the Workflow Collection**.
 - b. Save the workflow definition to:
 - Folder: **LoanProcess > Workflows**
 - Document Title: Basic Loan Processing-dynamic participants
 - Click **Finish** (accept the default security access).
 - c. Ensure that you get, **Transfer was successful**.
7. Close the workflow definition.
 - a. **File > Close**.
 - b. Cancel the checkout.
8. Minimize Process Designer.

Procedure 3: Test dynamically assigning a workflow group

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse **LoanProcess > Workflows**.
 - b. Select **Basic Loan Processing-dynamic participants**.
 - c. Right-click and select **Workflow > Launch Workflow**.

2. Use the data in the table to populate the fields:

Item	Value
Customer Name	Mary Crow
Loan Amount	455000

- a. Click **Launch Workflow**.
3. Find the work item in Process Administrator.
- a. Maximize the Process Designer window. Click **Tools > Process Administrator**.
 - b. Use the data in the table to create the search:

Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	DefaultRoster
Search mode	Edit (all fields)

- c. Ignore the completed items that have a green check mark. Verify that two work items are listed in the results pane: a tracker item and a work item in the Loan Officer queue. The tracker item has F_BoundUser=P8Admin.
4. Complete the Verify Info step.
- a. In the results pane, select the work item in the LoanOfficer Queue.
 - b. Right-click and select **Tasks > Complete Work**.
 - In the Complete Work window,
 - Select the LoanOfficer Queue.
 - For the Response, select Info OK.
 - Click OK.
5. Complete the Process Loan step.
- a. In Process Administrator, click Find Now.
 - b. Select the work item in the Inbox Queue and open the Process Tracker.



Information

The work item is assigned to the participant, pat. The work item was dynamically assigned to pat because the LoanAmount > 100000.

- c. Click **Tasks > Complete Work**.
 - In the Complete Work window, select the participant, pat, and click OK.

6. Verify that workflow completed processing.
 - a. In Process Administrator, click Find Now.
 - b. You should see work items in the Tracker Queue, with green check marks in the status column, indicating that the workflows completed.
7. In the Workflow Author desktop, launch another workflow.
 - a. Type values for the Customer Name and LoanAmount. Make sure that LoanAmount < 100000.
8. Use Process Administrator and Process Tracker to complete each step.
9. Verify that the Process Loan step is assigned to Peter's inbox.
10. Close Process Administrator and Process Tracker.
11. Log out of the Workflow Author desktop. If you are waiting before continuing with the next activity, close all the windows.

Define participant voting with multi-participant steps

Introduction

In this activity, you add a multi-participant step activity step to an existing workflow. When a workflow executes a step that is assigned to multiple participants, work items are created for each of the participants and the Delay Queue. The work item in the Delay Queue does not complete until all of the work items for each participant are processed. You see how this workflow behavior can be used to set up participant voting in a workflow.

Procedures

[Procedure 1, "Define participant voting for a step,"](#) on page 3-7

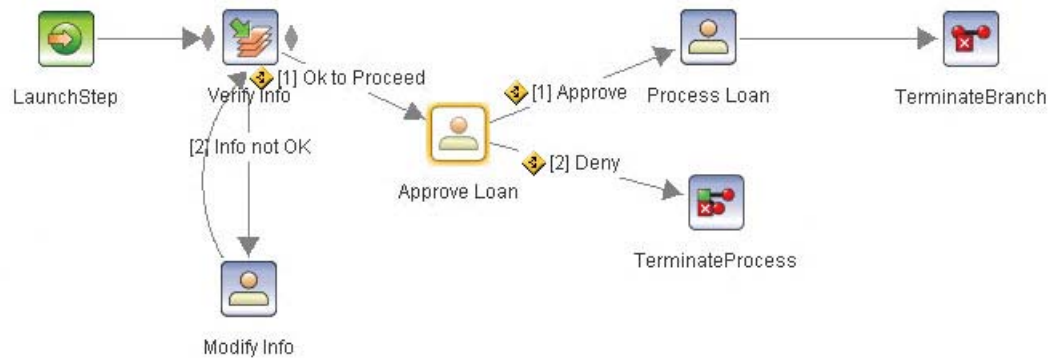
[Procedure 2, "Test participant voting,"](#) on page 3-9

Procedure 1: Define participant voting for a step

In this procedure, you start with the workflow you defined in the previous activity and add an activity step that you assign to the workflow group, loan_managers_group. The group, loan_managers_group, is assigned to the LDAP group, Loan Managers, that contains four users (Mabel, Mac, Matt, and Mary), which creates a multi-participant step. You set up appropriate routes and conditions to create two distinct outcomes based on the responses of the participants.

1. Checkout the Basic Loan Processing-dynamic participants workflow that you created in the previous exercise.
 - a. Open the Workflow Author desktop, if necessary.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Checkout the workflow, **Basic Loan Processing-dynamic participants**.
 - In LoanProcess > Workflows, click the icon to the left of **Basic Loan Processing-dynamic participants**.
2. Save to a new workflow definition file.
 - a. In the Workflow Properties > General tab, change the Workflow Name and Subject to:
 - Basic Loan Processing-multiparticipant step.
 - b. Click **File > FileNet Add New**
 - Select, **Cancel the checkout, and continue with FileNet Add New**.
 - Folder: LoanProcess > Workflows.
 - Document Title: Basic Loan Processing-multiparticipant step.

3. Use the diagram as a guide and the data in the table to modify the workflow definition.



a. Activity step, **Approve Loan**.

Tab	Item	Value
General	Name	Approve Loan
	Activity Type	Participants: loan_manager_group
Parameters	Selected Parameters	LoanStatus[RW]
		LoanName[R]
		LoanApproved[RW]
		LoanAmount[R]
Routing	Responses	Approve
		Deny

b. Route, **Approve**.

Section	Item	Responses
Routing	Conditional Route	COUNT(Approve) >= COUNT(Deny)

c. Route, **Deny**.

Section	Item	Responses
Routing	Conditional Route	COUNT(Approve) < COUNT(Deny)

d. Delete the route between the steps, **Verify Info** and **Process Loan**.

e. Route, **OK to Proceed**.

Section	Item	Responses
Routing	Conditional Route	All(Info OK)

f. Step, **Verify Info.**

Tab	Item	Order of routes
Routing	Outgoing Routing	Ok to Proceed
	Information	Info not OK

4. Click **File > Validate the Workflow Collection.**
 - a. If you get any errors, resolve them before continuing.
5. Click **File > Transfer the Workflow Collection.**
 - a. Click **Finish** (accept the default security access).
 - b. Ensure that you get, **Transfer was successful.**
6. Close the workflow definition.
 - a. **File > Close.**
 - b. Cancel the checkout.
7. Minimize the Process Designer window.

Procedure 2: Test participant voting

In this procedure, you launch two instances of the workflow you defined. You process each of the workflows with different responses to produce the two outcomes defined.

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse **LoanProcess > Workflows.**
 - b. Select **Basic Loan Processing-multiparticipant step.**
 - c. Right-click and select **Workflow > Launch Workflow.**
2. Use the data in the table to populate the fields:

Item	Value
Customer Name	Oscar Owens
Loan Amount	200000

- a. Click **Launch Workflow.**
3. Complete the Verify Info step.
 - a. In the Workflow Author desktop, switch to the Work View.
 - b. Go to the Loan Officer Inbasket.
 - c. Open the work item and select **Info OK.**
4. Find the work items in Process Administrator.
 - a. Maximize the Process Designer window. Click **Tools > Process Administrator.**

- b. Use the data in the table to create the search:

Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	DefaultRoster
Search mode	Edit(all fields)



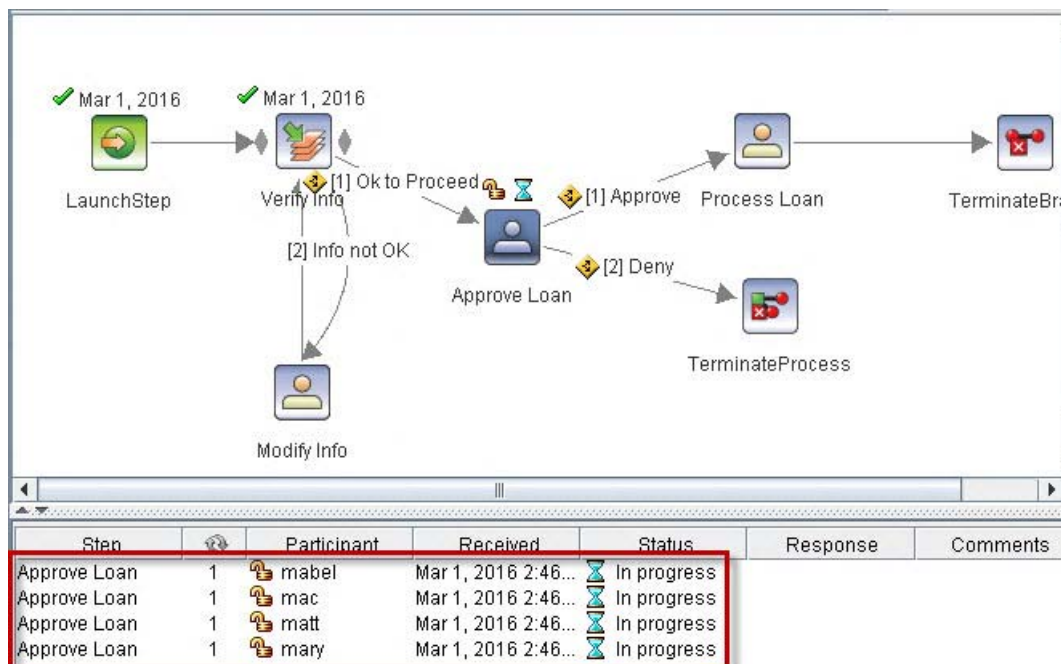
Note

You should see six incompleted work items listed in the results pane: One in the Tracker queue, one in the Delay Queue and 4 in the Inbox queue.

					Queue	F_WobNum	F_Originator	F_WorkFlo...	F_StartTime	F_Subject	F_L
1					Inbox(0)	1E697FD3...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0
2		✓	⊕		Tracker(0)	4CAA98D9...	50 (P8Adm...	768C2EEB...	Feb 16, 20...	Basic Loan...	0 0
3		✓	⊕		Tracker(0)	4D41AB4C...	50 (P8Adm...	0ECEB4B0...	Feb 17, 20...	Basic Loan...	0 0
4					Delay(0)	7287B39C...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0
5					Inbox(0)	7DAF31CF...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0
6			⊕		Tracker(0)	833BA9F2...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0
7					Inbox(0)	97C1E3ED...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0
8					Inbox(0)	A1EDEA60...	50 (P8Adm...	7287B39C...	Mar 1, 201...	Basic Loan...	0 0

5. Select one of the work items in the Inbox queue and open the Process Tracker.

6. You see 4 Approve Loan steps listed in the Step History tab.





Information

The step, Approve Loan, is assigned to the workflow group, loan_manager_group, which is assigned to the LDAP group, Loan Managers. The LDAP group, Loan Managers, includes the users, Mabel, Mac, Matt, and Mary. All four work items must be either approved or denied before workflow processing can continue. The work item in the Delay Queue is created so the workflow waits until all the Loan Managers process their assigned work item.

7. Complete each of the Approve Loan steps.
 - a. In Process Tracker, click Tasks > Complete Work.
 - b. In the Complete Work window, select each of the participants and select a response.
 - Select two responses to Approve and two responses to Deny.



Hint

To save time, in the Complete Work window, click Apply after each response, instead of OK. Click OK on the last work item only.

If the number of Approve responses is greater than or equal to the number of Deny responses, the Approve Route is taken.

8. In Process Administrator, click Find Now.
 - a. Only two incompleted work items are listed: one in the Tracker Queue and one in Pat's inbox. The work item in the Delay Queue, automatically completes when all the work items for the multi-participant step are processed.
9. Complete the step, Process Loan, in Process Tracker.
 - a. Select the step in the Inbox Queue, click Tasks > Complete Work.
 - b. Select the participant, pat, and click OK.
10. In Process Administrator, click Find Now.
11. You see green check marks by all the work items, indicating that processing is complete.
12. Launch another instance of the workflow and process each of the steps. However, select the response Deny, for all the work items at the Approve Loan step. If necessary, use the instructions in Steps 1 - 11 as a guide.



Note

When you complete all the work items at the Approve Loan step, with the response, Deny, the workflow takes the Deny route to the TerminateProcess step. If you search for the work items in Process Administrator, you see the completed work item in the Tracker Queue.

13. When you are done, log out of the desktop, close all open browser windows.

End of exercise

Exercise review and wrap-up

In this exercise, you controlled how users participate in a workflow and learned how to use a multi-participant step to define participant voting for a step.

Exercise 4. Work with submaps

Overview

Why is this lesson important?

You are designing a workflow application. You need an efficient way of organizing steps in a workflow definition. You want to define a set of post-processing steps, which always run immediately before workflow termination.

Objectives

- Use a submap in a workflow

Activities

- ["Use workflow submaps"](#) on page 4-2

User accounts

Type	User ID	Password
Workflow AuthorP8 administrator	p8admin	IBMFileNetP8



Note

Passwords are always case-sensitive.

Use workflow submaps

Introduction

In this activity, you:

- Create a few submaps and move steps from the main workflow into the submaps.
- Create a custom terminate submap to ensure that a post-processing step is always processed upon workflow termination.
- Test the workflow and use Process Administrator and Process Tracker to follow the step processing through the submaps.

Procedures

[Procedure 1, "Create submaps,"](#) on page 4-2

[Procedure 2, "Use submaps in a workflow,"](#) on page 4-3

[Procedure 3, "Override the Terminate map,"](#) on page 4-5

[Procedure 4, "Test the workflow with submaps,"](#) on page 4-6

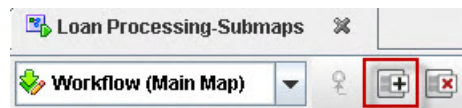
Procedure 1: Create submaps

In this procedure, you start with a predefined workflow definition that contains several activity steps and create several submaps in Process Designer.

1. Open the workflow definition, Loan Processing-Submaps Start.pep in Process Designer.
 - a. Open the Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Open Process Designer.
 - d. Click **File > Open**.

C:\Labs\Case Foundation 5.2.1 Workflow Design\Loan Processing-Submaps Start.pep

2. Create new maps.
 - a. Click the Create Map icon on the toolbar.



- b. Use the data in the table to complete the wizard:

Item	Value
Map Type	Select, Create new map
Name	Prepare Loan Map

3. Repeat Step 2 to create two new maps. Use the names in the table:

Item	Value
Name	Process Loan Map
Name	Complete Loan Map

4. Leave Process Designer open for the next procedure.

Procedure 2: Use submaps in a workflow

In this procedure, you move steps from the workflow (Main Map) to the submaps you created in the previous procedure.

1. Remove a step from the Workflow map and move to the Prepare Loan Map submap.
 - a. In the map toolbar, select the Workflow (Main Map).
 - b. Right-click the Verify Information step and click Cut.
 - c. Switch to the Prepare Loan Map submap.
 - d. Right-click in the map area, to the right of the StartStep and click Paste.
 - In the step properties, change the Activity type to: **Work Queue** and select **LoanOfficer** (changing the activity type makes it easier to test the workflow).
 - e. Draw a route from the StartStep to the Verify Information step.
2. Copy a step from the Workflow map to the Process Loan Map submap.
 - a. Switch to the Workflow (Main Map).
 - b. Right-click the Process Loan step and click Copy.
 - c. Switch to the Process Loan Map submap.
 - d. Right-click the map area to the right of StartStep and click Paste.
 - e. Change the Process Loan step name to: Review Loan.
 - f. Draw a route from the StartStep to the Review Loan step.

3. Remove multiple steps from the Workflow map and paste them on the Complete Loan Map submap.
 - a. Switch to the Workflow (Main Map) map.
 - b. Select the Complete Loan and Assign Values steps. Right-click and click Cut.



Hint

To select multiple elements, on the map click the cursor and drag it to create a rectangle that includes both elements.

- c. Hover your mouse over the Assign Values step, right-click, and select Cut.
 - d. Switch to the Complete Loan Map submap.
 - e. Paste the steps to the right of the StartStep.
 - f. Draw a route from the StartStep to the Complete Loan step.
 - g. Rename the step, Complete Loan to: *Complete Loan Package*.
4. Change a step type to a submap step.
 - a. Select the Workflow (Main Map).
 - b. Right-click Process Loan, select **Change step type >Submap Step**.
 - c. In the General tab, set, Select a map for the Submap to: **Process Loan Map**.
5. Add two more submap steps to the Workflow map.
 - a. Drag a Submap step from the BPM Palette and place it between LaunchStep and Process Loan.



- b. Use the data in the table to configure the submap step:

Item	Value
Step Name	Prepare Loan
Select a map for the Submap	Prepare Loan Map

- c. Drag another Submap step from the BPM Palette and place it after the Process Loan step.

Item	Value
Step Name	Complete Loan
Select a map for the Submap	Complete Loan Map

- d. Draw routes to connect each step.

- e. The resulting workflow looks similar to:



6. Leave Process Designer open for the next procedure.

Procedure 3: Override the Terminate map

In this procedure, you create a map to override the default Terminate map. You add a post-processing step to the new map that always processes when the workflow terminates.

1. Override Terminate.
 - a. Click the Create Map icon, select Override Inherited Map
 - b. Select Terminate.
 - c. Click OK.
2. Add a step to the Terminate map.
 - a. Add an Activity step to the Terminate map. Place it to the right of StartStep.
 - b. Use the data in the table to configure the step:

Tab	Item	Value
General	Name	Set Loan Document Status
	Work Queue	LoanUnderwriter
Parameters	Selected Parameters	loan_document[R]
		Status[R]

3. Draw a route between the steps StartStep and Set Loan Document Status.
4. Click **File > Validate the Workflow Collection**.
 - a. If you get any errors, resolve them before continuing.
5. Click **File > Transfer the Workflow Collection**.
 - a. Save the workflow definition to:
 - Folder: **LoanProcess > Workflows**
 - Document Title: Basic Loan Processing-submaps.
 - Click **Finish** (accept the default security access).
 - b. Ensure that you get, **Transfer was successful**.
6. Close the workflow definition and cancel the checkout.
7. Minimize the Process Designer window.

Procedure 4: Test the workflow with submaps

In this procedure, you launch a couple of instances of the workflow definition that you modified in Procedures 1-3. You use Process Administrator and Process Tracker to follow the workflow processing through each of the submaps.

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse **LoanProcess > Workflows**.
 - b. Select **Basic Loan Processing-submaps**.
 - c. Right-click and select **Workflow > Launch Workflow**.
2. Use the data in the table to populate the fields:

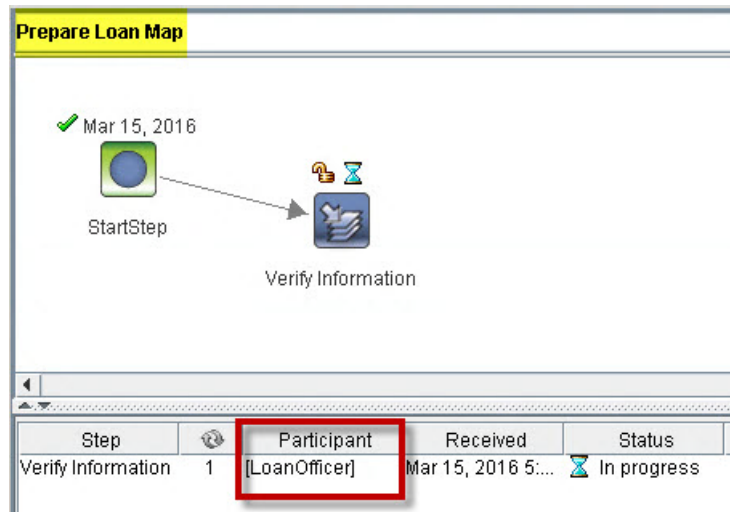
Item	Value
Customer Name	Joe Adams
Loan Amount	250000

- a. Click **Launch Workflow**.
3. Find the work items in Process Administrator.
 - a. In the Process Designer window, click **Tools > Process Administrator**.
 - b. Use the data in the table to create the search:

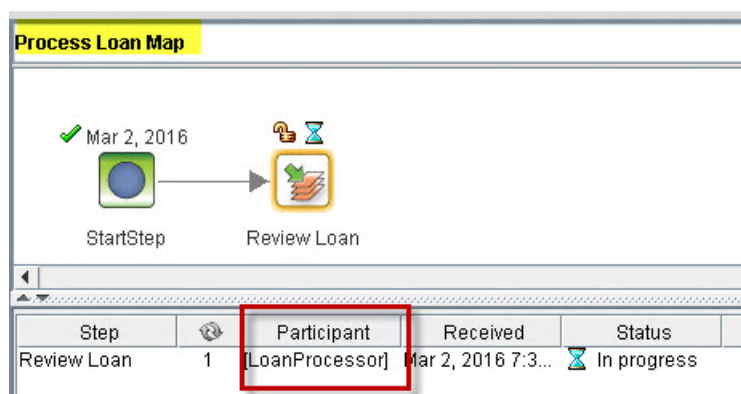
Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	LoanRoster
Search mode	Edit(all fields)

- c. Select the work item in the LoanOfficer Queue and open the Process Tracker.

- d. Verify that you are in the Prepare Loan Map.

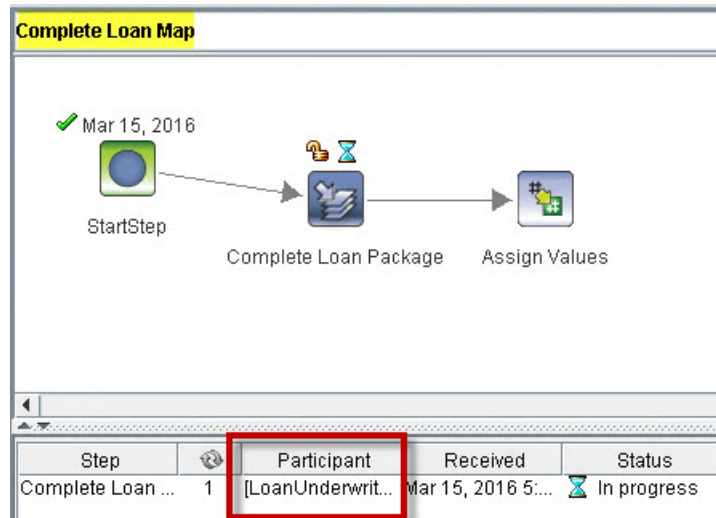


- e. Minimize the Process Tracker window.
4. Process the Prepare Loan Map submap. (Verify Information step).
- In the Workflow Author desktop, switch to the Work View.
 - Go to the Loan Officer Inbasket and open the work item.
 - For interest_rate, type 3.25.
 - Click **Complete**.
5. Check the progress in Process Tracker.
- In the Process Tracker window, click the refresh icon.
 - Select the Workflow (Main Map). A curved arrow indicates that the work item is in the Process Loan submap step.
 - Double-click the Process Loan submap step to open the Process Loan Map.
 - The Review Loan step is waiting to process, indicated by the hour glass displayed.

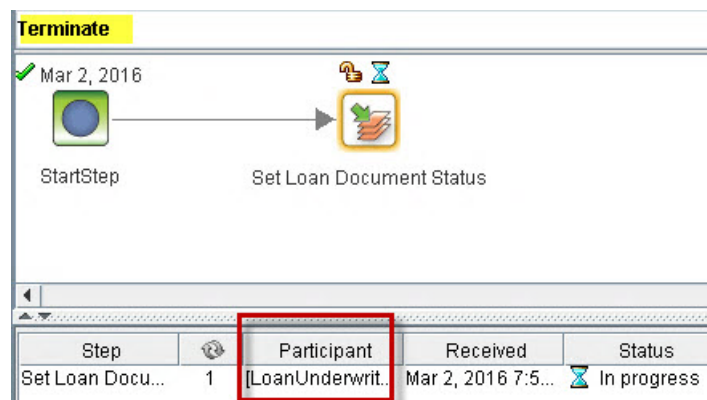


- e. Close the Process Tracker window.
6. Process the Process Loan Map submap.
- In the Workflow Author desktop, switch to the Loan Processor Inbasket.

- b. Open the work item and click Complete.
7. Check the progress in Process Tracker.
 - a. In the Process Administrator, window, click Find Now.
 - b. Select the work item in the results pane and open the Process Tracker.
 - c. The window opens to the Complete Loan Map. The step, Complete Loan Package, is waiting to process.



- d. Leave the Process Tracker window open.
8. Process the Complete Loan Map submap.
 - a. In the Workflow Author desktop, switch to the Loan Underwriter Inbasket.
 - b. Open the work item and click Complete.
9. Check the progress in Process Tracker.
 - a. Switch back to the Process Tracker, click the refresh icon.
 - b. Select the Workflow (Main Map). All the steps show a green check mark, indicating that processing is complete.
 - c. In the Map selection window, click the down arrow and select **Terminate**. The **Set Loan Document status** step is waiting to process.



**Information**

When you override the Terminate map, when the workflow completes or is caused to terminate by a TerminateBranch or TerminateProcess, the updated Terminate Map is executed.

10. Process the Terminate Map submap.
 - a. In the Workflow Author desktop, open the work item in the Underwriter Inbasket.
 - b. Click Complete.
11. Log out of the Workflow Author desktop.
12. Close all open windows.

End of exercise

Exercise review and wrap-up

In this exercise, you learned how to use submaps in a workflow.

Exercise 5. Handle workflow exception

Overview

Why is this lesson important?

You are designing a workflow application. You must handle the resolution of possible business process exceptions in your workflow definition. You need to override the Malfunction system map.

Objectives

- Resolve business process exceptions

Activities

- ["Resolve business process exceptions"](#) on page 5-2

User accounts

Type	User ID	Password
Workflow Author P8 administrator	p8admin	IBMFileNetP8



Note

Passwords are always case-sensitive.

Resolve business process exceptions

Introduction

In this activity, you:

- Test an existing workflow definition that results in a workflow exception and use Process Administrator to determine the cause of the exception and correct the error.
- Update the workflow definition with a custom Malfunction map to handle the workflow exception.
- Test the updated workflow and verify that the work item does not result in the Conductor queue.

Procedures

[Procedure 1, "Determine the cause of the workflow malfunction,"](#) on page 5-2

[Procedure 2, "Override the Malfunction map,"](#) on page 5-5

[Procedure 3, "Test business process exception handling,"](#) on page 5-9

Procedure 1: Determine the cause of the workflow malfunction

In this procedure, you test an existing workflow definition that is defined to generate an exception. The workflow definition uses the default Malfunction map. You use Process Administrator to determine the cause of the exception, correct the problem, and continue the workflow processing.

1. Open the workflow definition, **Loan Processing-Exception Processing Start.pep** in Process Designer.
 - a. Open the Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Open Process Designer.
 - d. Click **File > Open**.
`C:\Labs\Case Foundation 5.2.1 Workflow Design\Loan Processing-Exception Processing Start.pep`
2. Change the Subject for the workflow definition.
 - a. In the Workflow Properties > General tab, set Subject to Loan Processing-Exception processing.
3. Explore the workflow definition. It is similar to the workflow definition used in Exercise 4.
 - a. Double-click the Prepare Loan submap to open it.
 - b. Explore the steps that are defined to get familiar with the workflow.

4. Click **File > Validate the Workflow Collection**.
 - a. If you get any errors, resolve them before continuing.
5. Click **File > Transfer the Workflow Collection**.
 - a. Save the workflow definition to:
 - Folder: **LoanProcess > Workflows**
 - Document Title: Loan Processing-Exception.
 - Click **Finish** (accept the default security access).
 - b. Ensure that you get, **Transfer was successful**.
 - If you get prompted to save to an object store, select No.
6. Close the workflow definition and cancel the checkout.
7. Switch to the Workflow Author desktop, browse to the workflow you transferred and launch the workflow.
8. Use the data in the table to populate the fields:

Item	Value
Customer Name	Sam Eden
Down_payment	15000
Loan_term	15
Purchase_price	150000

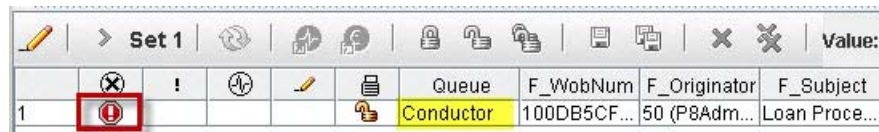
9. Use the Process Administrator to locate the work item.
 - a. In the Process Designer window, click **Tools > Process Administrator**.
 - b. Search for work items in the LoanRoster. Specify the following criteria:


-customer_name like %Sam%

The screenshot shows the 'Process Administrator' window with the following configuration:

- Search** tab is active.
- Look for:** Work Items (dropdown)
- In:** Workflow Roster (dropdown)
- Select one:** LoanRoster (dropdown)
- Search mode:**
 - ☐ Read only (exposed fields)
 - ☒ Edit (all fields)
- Max returned per set:** 50
- Criteria** tab is active.
- Use index:** <default> (dropdown)
- Advanced...** button is visible.
- Search Fields:** customer_name (String) (dropdown)
- Operator:** like (dropdown)
- Value:** %Sam% (text input)
- Logic:** AND, OR, (,) buttons are available at the bottom.

- c. The results pane shows the work item flagged with the exception symbol, waiting in the Conductor queue.



		Set 1						Value:		
1		!					Queue	F_WobNum	F_Originator	F_Subject
							Conductor	100DB5CF...	50 (P8Adm...	Loan Proce...

10. Determine the cause of the workflow exception.

- Select the work item, right-click the row, and select View Information Stack.
- In the Information Stack window, click the work item listed in the top pane.
- In the bottom pane, view information about the exception, as well as the map and step where the error occurred and a description of the error.

Tip: You can resize the window to view the entire message. Or you can hover your mouse over the Error Message to display the entire message as a tooltip.
- Notice that the malfunction occurred at the Get Rate and Payment step.
- The system cannot find the user information for the user assigned to the step, Get Rate and Payment.
- Click Close to close the Information Stack window.

11. Correct the error and complete processing the work item.

- In Process Administrator, select the work item.
- Click Tasks > Workflow Groups.
- Click OK in the message window about locking the work item.
- In the Manage Workflow Groups window, remove UnknownUser from the list of Selected Users.
- Use the options to search for the P8Admin user and add it to the list of Selected Users.
- Click OK.
- In Process Administrator, scroll across the results pane to locate the loan_officer_group field in the work item.
- Verify that P8Admin is assigned to this workflow group.
- Click **File > Save All Changes**.
- Click **Tasks > Complete Work**.
- In the Complete Work window, select the item in the top pane and click OK.
- Click **Find Now** to reexecute the roster search.
- Verify that the work item is now in the LoanOfficer queue and notice that the item is no longer flagged as an exception.

12. Complete processing the remainder of the steps in the workflow.

- Select the work item in the results pane.
- Click Tasks > Complete Work and complete the work item.

- c. Click **Find Now** to reexecute the roster search.
- d. Repeat Steps 12.a - 12.b until no work items are listed in the results pane when you execute the roster search.
- e. Minimize Process Administrator

Procedure 2: Override the Malfunction map

In this procedure, you update the workflow definition from Procedure 1. You define a custom malfunction map that will:

- Route the work item that caused the exception, to the Loan Manager instead of the Conductor queue.
 - Allow the Loan Manager to review the cause of the exception, take appropriate action to correct the issue. The Loan Manager can choose whether to return the work item to the step that caused the exception, or skip to the next step in the workflow.
1. In Process Designer, click **File > FileNet Open/Checkout**.
 - a. Browse to LoanProcess > Workflows and select, **Loan Processing-Exception**.
 2. In the Data Fields tab, define the data fields shown in the table:

Name	Type	Expression
retry_option	Boolean	false
error_number	Integer	0
error_message	String	""
response_array	Integer[]	{0}
response_string	String	""

Tip: Make sure to click return after you complete each row entry.

3. Override the default Malfunction map.
 - a. On the map toolbar, click Create Map.
 - b. Click Override Inherited Map.
 - c. Select the Malfunction map.
 - d. Click OK.
 - e. The Malfunction map is displayed with the three default steps.
4. Modify the Review step in the custom Malfunction map.
 - a. Select the Review step.

- b. Use the data in the table to modify the step properties for the Review step:

Tab	Item	Value
General	Name	Review Exception
	Activity Type	Work Queue: LoanManager
	Instructions in Step Processor	Review the error, correct it if possible, and select a response.
	Participant Privileges	Uncheck: Reassign
Parameters	Selected Parameters	customer_name[R] down_payment [R] error_number [R] error_message [R] status[R] loan_officer_group[RW]
Routing	Responses	Retry
		Skip

- c. In the Assignments tab, select **After Completion**.
- d. Use the data in the table and the Expression Builder to define the assignments.

Name	Expression
retry_option	F_Response="Retry"
response_array	F_Responses
response_string	F_Response

Tip: Make sure to click return after you complete each row entry.



Information

After the Review Exception step completes, the expression is evaluated. If the Loan Manager selects Retry for the response, then the data field retry_option is set to true, if Skip is selected, retry_option is set to false.

The system clears F_Responses between each step. If you want to check the values, you must define, After Completion, assignments to save them. See the IBM FileNet P8 Platform 5.2.1 documentation topic: [FileNet P8 Platform 5.2.1>Integrating workflow into document management>Process applications concepts>Design and run workflows>About workflow maps>About step states](#).

5. Add an activity step to check values.

- a. Drag an activity step to the right of the Review Exception step.

Tab	Item	Value
General	Name	Check Values
	Activity Type	Work Queue: LoanManager
		error_number [R] error_message [R] loan_officer_group[R]
	Parameters	Selected Parameters response_array[R] response_string[R] retry_option[R] status [R]

**Information**

The step, Check Values, is added for troubleshooting purposes. When you test the workflow, in the next procedure, you will be able to see the Malfunction error number and error message, as well as the response that the Loan Manager selects.

- b. Draw a route from the Review Exception step to the Check Values step.
6. Modify the default behavior of the Return step.
 - a. On the map, right-click the Return step and click Delete.
 - b. From the General System Palette, drag a Return system step onto the map and place it below the Review Exception step.
 - c. In the Return Expression field, open the Expression Builder and select the data field, retry_option.
 - d. Draw a route from the Check Values step to the Return step.

**Note**

If the loan manager clicks Retry at the Review Exception step, then the workflow returns to the step where the malfunction occurred and retries the step. If the loan manager clicks Skip, the workflow returns to the step after the step that caused the exception.

7. Capture the current error message and error number to display in the Review Exception step.
 - a. Click the StartStep step on the Malfunction map.

- b. Use the Expression Builder to define the following Assignments Before Execution.

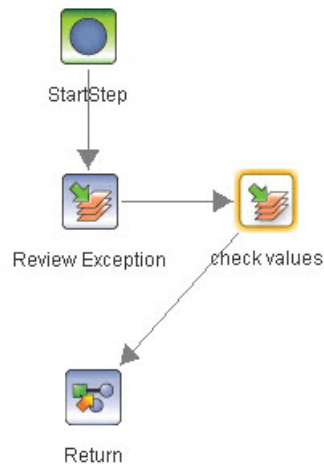
Name	Expression
error_message	F_LastErrorText
error_number	F_LastErrorNumber
status	error_message



Information

F_LastErrorText is a string system field that contains the text message that is associated with the last exception that occurred. F_LastErrorNumber is an integer system field that contains the error number that is associated with the last exception that occurred.

8. Verify that your Malfunction map looks similar to the following diagram:



9. Click **File > Validate the Workflow Collection**.
 - a. If you get any errors, resolve them before continuing.
10. Click **File > Transfer the Workflow Collection**.
 - a. Click **Finish** (accept the default security access).
 - b. Ensure that you get, **Transfer was successful**.
11. Close the workflow definition and cancel the checkout.
12. Minimize the Process Designer window.

Procedure 3: Test business process exception handling

In this procedure, you test the workflow definition that you updated in Procedure 2. When the exception occurs, the work item is sent to the Loan Manager. The Loan Manager corrects the issue that caused the exception then chooses to Retry the step that generated the exception or skip to the next step.

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse to **LoanProcess > Workflows**.
 - If you are already at the folder, click Refresh to ensure that you launch the latest version of the workflow.
 - b. Select **Loan Processing-Exception**.
 - c. Right-click and select **Workflow > Launch Workflow**.
2. Use the data in the table to populate the fields:

Item	Value
customer_name	Joe Jenkins
down_payment	9000
loan_term	15
purchase_price	100000

- a. Click **Launch Workflow**.
3. Find the work item in Process Administrator.
 - a. In the Process Designer window, click **Tools > Process Administrator**.
 - b. Use the data in the table to create the search:

Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	LoanRoster
Search mode	Edit(all fields)

- c. The work item is flagged with the exception symbol and is waiting in the LoanManager queue.
4. Process the step, Review Exception.
 - a. Switch to the Workflow Author desktop and go to the Work View.
 - b. Open the work item in the Loan Supervisor inbasket.
 - c. Scroll down to where you see the loan_officer group.
 - d. Click the down arrow to the far right.
 - e. Use the search to add P8Admin to Selected.

- f. Click **Retry**.
5. Process the step, Check Values.
 - a. Open the new work item in the Loan Supervisor inbasket.
 - b. Review the data fields.

Properties	
error_message: ?	Malfunction: [FNRPE0920020008E]The user or group could not be found. (UnknownUser)[FNRPE2130200016E]Group or User N
error_number: ?	1543634952
response_array: ?	1; 0
response_string: ?	Retry
retry_option: ?	True
status: ?	Malfunction: [FNRPE0920020008E]The user or group could not be found. (UnknownUser)[FNRPE2130200016E]Group or User N
loan_officer_group: ?	P8Admin
Comment: ?	

- c. Click **Complete**.
6. Find the work item in Process Administrator.
 - a. Switch to Process Administrator and click **Find Now**.
 - b. The work item is in the Inbox queue and is no longer in an exception state.
 - c. You can open the Process Tracker to see a visual representation.
7. Complete the step, Get Rate and Payment.
 - a. Switch to the Workflow Author desktop. Open the Inbox under the role, Loan Supervisor.
 - b. Open the work item.
 - c. Type values of your choice for the monthly_payment (Calculate based on current interest rate) and interest_rate.
 - d. Click Complete.
8. Complete the step, Confirm Rate and Payment.
 - a. Go to the Loan Officer Inbasket, open the work item, and click **Complete**.

9. Complete the rest of the steps in the workflow.
 - a. Use Process Administrator, and the skills that you learned to figure out what inbasket the work item is waiting in then use the Workflow Author desktop Work View to complete each step.
-

**Hint**

If you are pressed for time, you can use Process Administrator > Tasks > Delete Work.

10. Launch another instance of the workflow. Repeat Steps 1-7 to process the workflow. You can use the same data or type your own values (be aware that valid loan terms are 5, 15 and 30 years). At the step, Review Exception, choose **Skip** for the response.
-

**Note**

Processing should continue with the step after the exception occurred, Confirm Rate and Payment.

11. Log out of the Workflow Author desktop.
12. Close all open windows.

End of exercise

Exercise review and wrap-up

In this exercise, you learned how to override the Malfunction map to resolve business process exceptions.

Exercise 6. Workflow inheritance

Overview

Why is this lesson important?

You are designing a workflow application. You want to take advantage of process reusability and use inheritance in a workflow definition. You need to create a workflow hierarchy and override an inherited map.

Objectives

- Create a workflow hierarchy
- Override an inherited map

Activities

- ["Use workflow inheritance"](#) on page 6-2

User accounts

Type	User ID	Password
P8 administrator	p8admin	IBMFileNetP8
Service user	Oscar	filenet
Loan Officer	Olivia	filenet



Note

Passwords are always case-sensitive.

Use workflow inheritance

Introduction

In this activity, you create a workflow hierarchy by creating a workflow definition that is derived from a base workflow. The new workflow inherits the characteristics of the base workflow, such as: submaps, data fields, workflow groups, event log, roster, and so on. You override one of the submaps of the derived workflow to modify it.

Procedures

[Procedure 1, "Create a workflow hierarchy,"](#) on page 6-2

[Procedure 2, "Override an inherited map,"](#) on page 6-4

[Procedure 3, "Reactivate and modify the Workflow \(Main map\),"](#) on page 6-5

[Procedure 4, "Test the inherited workflow,"](#) on page 6-6

Procedure 1: Create a workflow hierarchy

In this procedure, you transfer a predefined workflow definition to use as a base workflow. You create a new workflow definition that is derived from the base workflow that creates a workflow hierarchy.

1. Open a base workflow definition.
 - a. Open the Workflow Author desktop.
 - b. Log in as a workflow author:
 - Username: p8admin
 - Password: IBMFileNetP8
 - c. Open Process Designer.
 - d. Click **File > Open**.
 - e. Open: C:\Labs\Case Foundation 5.2.1 Workflow Design\Base Loan Processing-Inheritance Start.pep
2. Change the Subject for the workflow definition.
 - a. In the Workflow Properties > General tab, set Subject to match the Workflow Name, **Base Loan Processing-Inheritance**.
3. Explore the workflow.
 - a. Open the Prepare Loan Map and familiarize yourself with the flow.
 - b. Go to the Process Loan Map and familiarize yourself with the flow.
4. Validate and transfer the workflow.
 - a. File > Validate Workflow.
 - b. Click **File > Transfer the Workflow Collection**.

- c. Save the workflow definition to:
 - Folder: **LoanProcess > Workflows**
 - Document Title: Base Loan Processing-Inheritance.
 - Click **Finish** (accept the default security access).
 - d. Ensure that you get, **Transfer was successful**.
 - e. Close the workflow definition and cancel the checkout.
 - If you get prompted to save to an object store, select No.
5. Create a workflow definition that is derived from the Base Loan Processing-Inheritance workflow.
- a. Click File > New.
 - b. In the Workflow Properties General tab, click the Modify icon (pencil) located next to Base Workflow.
 - c. Select Base Loan Processing - Inheritance from the list.
 - d. Click OK.
 - e. In the Workflow Properties pane, select the Maps tab.
 - f. The Prepare Loan Map and Process Loan Map are included in the list of maps and the Inherited symbol appears next to the map names.
 - g. On the map toolbar, click the arrow to display the list of maps.
 - h. Notice that all the maps, except for the Workflow (Main Map) are labeled Read Only.
6. Assign Workflow Properties
- a. Use the data in the table to update the Workflow Properties > General tab:

Item	Value
Workflow Name	Commercial Loan Processing-Inheritance
Subject	Commercial Loan Processing

- b. Add a data field.

Name	Type	Expression
business_name	String	""

- c. Override the MAX_AMOUNT value, replace the expression with 999000.

Notice the overridden symbol (pencil) that appears, to the left of MAX_AMOUNT, when you click enter.

7. In the Attachments tab, define the attachment, business_plan. The description is optional.



Note

The inherited main map is automatically overridden in the new workflow by a blank main map with only a Launch step. In Procedure 3, you activate and modify the Workflow (Main Map).

Procedure 2: Override an inherited map

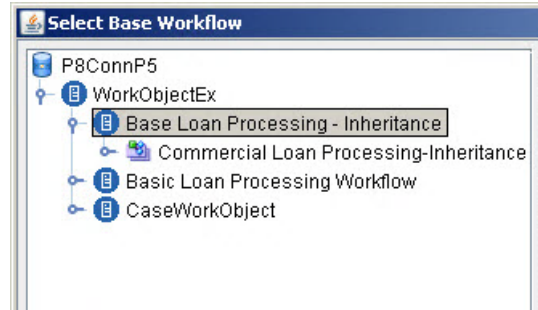
In this procedure, you override two inherited maps, Prepare Loan Map and Process Loan Map. You make some modifications to the overridden maps.

1. Override the inherited Prepare Loan Map.
 - a. On the map toolbar, select the click Prepare Loan Map.
 - b. Click the Create Map icon.
 - c. Select Override Inherited Map.
 - d. Select Prepare Loan Map.
 - e. Notice that the Prepare Loan Map is no longer labeled Read Only.
2. Modify the instructions for the step, Verify Information.
 - a. Select the step, Verify Information.
 - b. Change the Instructions to: Verify the information and choose Valid or Not valid.
3. Override the inherited Process Loan Map.
 - a. On the map toolbar, select the Process Loan Map.
 - b. Click the Create Map icon.
 - c. Select Override Inherited Map.
 - d. Select Process Loan Map.
 - e. Notice that the Process Loan Map is no longer labeled Read Only.
4. Add two parameters to a couple of the steps.
 - a. Add the following parameters to the Approve Loan Amount and Review Loan steps:
 - business_name[Read]
 - business_plan[Read]
 - b. Change the instructions for the step, Verify Information.
 - Select the step, Verify Information.
 - Change the Instructions to:

Procedure 3: Reactivate and modify the Workflow (Main map)

In this procedure you, delete the blank Workflow (Main Map) in order to reactivate the base inherited Workflow (Main Map). You override the inherited Workflow (Main Map) and modify it.

1. Reactivate the Workflow (main map) from the base workflow.
 - a. On the Map toolbar, select the Workflow (Main Map).
 - b. On the map toolbar, click the icon to Delete current map. (Sets the map to a Read Only version of the base workflow main map).
 - c. Click Create Map.
 - d. Select Override Inherited Map.
 - e. Select Workflow.
 - f. Notice that the Workflow map is no longer labeled Read Only and is no longer has the gray background.
2. Modify the Workflow map.
 - a. Add the parameters, business_plan and business_name to the LaunchStep parameters.
3. View the workflow hierarchy in Process Designer.
 - a. In the Workflow Properties General tab, click the Modify icon (pencil), next to Base Workflow.
 - b. The workflow hierarchy looks similar to:



4. Validate the workflow collection. Make sure that no errors occur.
5. Transfer the workflow collection.
 - a. Save the workflow definition to:
 - Folder: LoanProcess > Workflows
 - Document Title: Commercial Loan Processing-Inheritance.
 - b. Click Finish (accept the default security access).
 - c. Ensure that you get, Transfer was successful.
6. Close the workflow definition and cancel the checkout.
7. Leave Process Designer open for the next procedure.

Procedure 4: Test the inherited workflow

In this procedure, you test the inherited workflow that you modified.

1. Launch the workflow.
 - a. In the Workflow Author desktop, browse to LoanProcess > Workflows.
 - b. Select Commercial Loan Processing-Inheritance.
 - c. Right-click and select Workflow > Launch Workflow.
2. Use the data in the table to populate the fields:

Item	Value
business_name	CreditCorp
customer_name	Joe Cooper
Loan_amount	750000

- a. Click **Launch Workflow**.
3. Find the work item in Process Tracker.
 - a. Switch to the Process Designer window.
 - b. Open Process Administrator, Tools > Process Administrator.
 - c. Use the data in the table to create the search:

Item	Value
Look For	Work Items
In	Workflow Roster (default)
Select one:	LoanRoster
Search mode	Edit(all fields)

- d. Select the work item and open the Process Tracker.
 - e. Select the step, Verify Information.
 - f. Under the step properties, on the right, click the Fields tab.
 - Verify that the value of MAX_AMOUNT and business_name are the values you entered.

4. Complete the rest of the steps in the workflow or use Process Administrator to delete the work.
 - a. Use Process Administrator, and the skills that you learned to figure out what inbasket the work item is waiting in then use the Workflow Author desktop, Work View, to complete each step.
-

**Hint**

The Loan Manager Queue is assigned to the Loan Supervisor inbasket.

If you are pressed for time, you can use Process Administrator > Tasks > Delete Work.

5. Log out of the Workflow Author desktop.
6. Close all open windows.

End of exercise

Exercise review and wrap-up

In this exercise, you learned how to:

- Create a workflow hierarchy
- Override an inherited map

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,"](#) on page A-1
- [Procedure 2, "Check system components,"](#) on page A-2
- [Procedure 3, "Stop system components,"](#) on page A-3

Procedure 1: Start system components

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



Important

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

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



Note

For your convenience, the WebSphere Admin folder also contains:

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

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



Information

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

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

Procedure 2: Check system components

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

1. Verify that the Content Platform Engine, content services are functioning properly by opening the Content Engine Startup Context (Ping Page).
 - a. Open a Mozilla Firefox browser window.
 - b. Go to the URL: `http://ecmedu01:9080/FileNet/Engine`
-



Hint

There is a bookmark in the Bookmarks menu under:

- *System Health > CE ping*
-

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

2. Verify that the Content Platform Engine process Services are functioning properly.
 - a. Open a new browser tab.
 - b. Go to the URL: `http://ecmedu01:9080/peengine/IOR/ping`
-

**Hint**

There is a bookmark in the Bookmarks menu under:

- *System Health > PE ping*
-
- c. Log in as the P8 administrator.
 - Username: p8admin
 - Password: IBMFileNetP8
 - d. If both ping pages display successfully, close the browser and all the tabs.

Procedure 3: Stop system components

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

Appendix B. Troubleshooting

Appendix Overview

This appendix contains issues and resolutions.

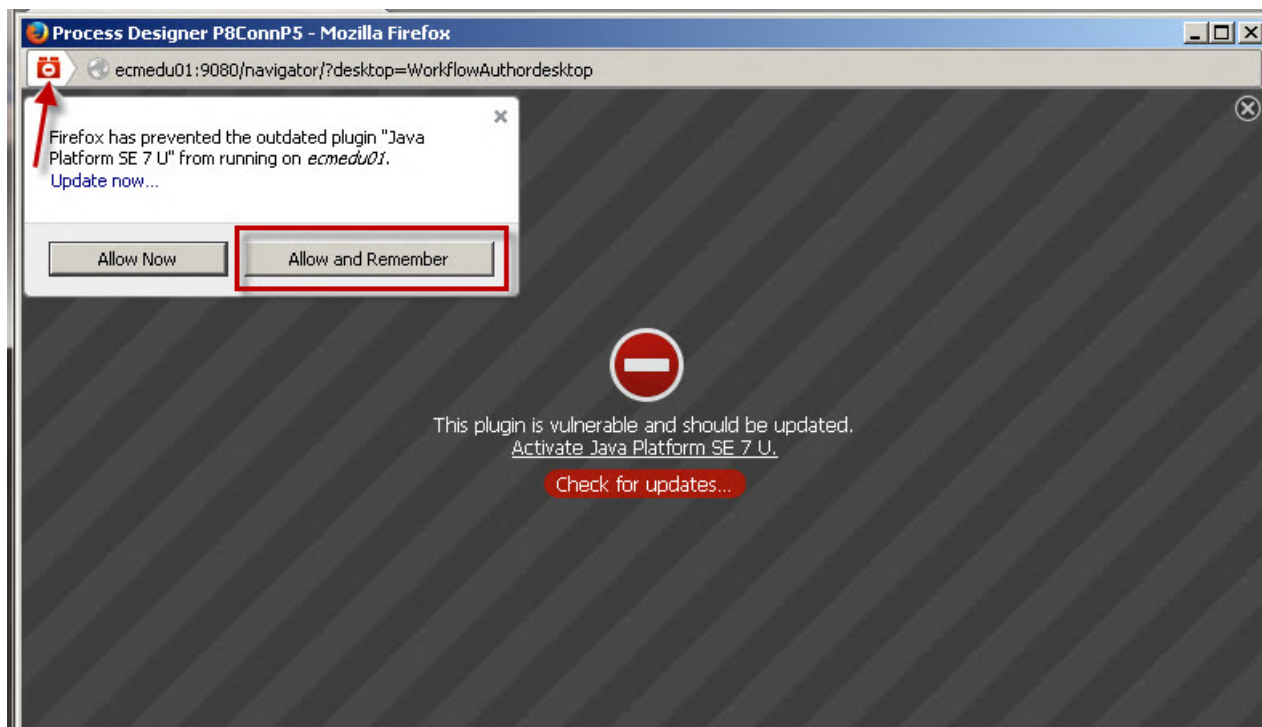
- ["Java issues"](#) on page B-1
- ["WebSphere Application Server error log"](#) on page B-2
- ["IBM Content Navigator Desktop issues"](#) on page B-3
- ["Administration Console for Content Platform Engine issues"](#) on page B-4
- ["Process Designer issues"](#) on page B-5
- ["Component Queue issues"](#) on page B-8
- ["Technotes"](#) on page B-9

Java issues

Issue

Some Content Platform Engine applications run as Java applets. When you launch them for the first time, you might see a Java plug-in error.

1. Click the red icon in the address bar.
2. Select Allow and Remember.

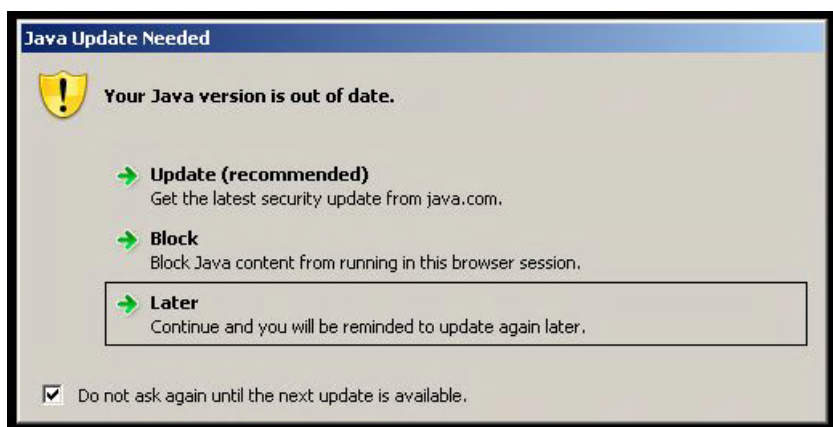


**Note**

If the Java applet you are opening is Process Designer, and it is the first time you open it after starting up the system, it can take several minutes for Process Designer to open. The window is blank and appears to be doing nothing. Be patient. The tool eventually opens. Subsequent times that you open Process Designer is faster.

Issue

You get a Java Update Needed window.



Check the box, **Do not ask again until the next update is available** and select **Later**.

WebSphere Application Server error log

The IBM Content Navigator and Content Platform Engine applications are web applications that run on the WebSphere Application Server. If you encounter issues that are not covered in this guide, review the WebSphere Application Server error log.

1. Open the WebSphere Admin folder on the desktop.
2. Right-click **server1 WAS logs** and select, **Open in new window**.
3. Right-click **SystemOut.log** and select, **Edit with Notepad++**.
4. Scroll to the bottom and look for any stack traces. See whether you can figure out the cause of the issue from the exception reported.

IBM Content Navigator Desktop issues

Issue

You attempt to launch a Content Navigator desktop and you get the error:



The desktop ID is not defined in the web client administration tool.

Ask your system administrator to review the web application server log file for information about the desktop ID.

Additional information about the error is in the web application server log files. For more information about the log files, see "IBM Content Navigator log files" in IBM Knowledge Center.

After you determine which desktop ID is causing the problem, review the desktop configuration in the administration tool to determine the correct ID.

Cause

Content Navigator cannot find the desktop, identified by the desktop ID.

Resolution

Verify the URL that you entered to launch the desktop. Ensure that the desktop ID, following the equal sign is not misspelled, for example:

```
http://ecmedu01:9080/navigator/?desktop=ProccessLoans
```

The desktop ID, has an extra "c" in the name; it should be, ProcessLoans.

Issue

The P8 admin console or the Workflow author desktops appear to hang with Loading Desktop.

Cause

The first time a desktop is launched; it has to load the Java applications. Once the Java cache is populated, subsequent desktop launches are faster.

Resolution

Be patient. It can take a few minutes for the desktop to open and display the login prompt.

Issue

You open an IBM Content Navigator desktop and do not get a login prompt.

Cause

The cookies are stale.

Resolution

Close the browser window and open a new browser window. Open the desktop again. If the login prompt does not display; clear the browser cache and open the desktop again.

Issue

You want to have two Workflow Author desktops open with two different users logged in. When you open the second desktop, you are not allowed to log in.

Cause

IBM Content Navigator (ICN) shares the logon credentials within a browser session.

Resolution

Open a different browser, for example, Internet Explorer, to open the second Workflow Author desktop.

Administration Console for Content Platform Engine issues

Issue

You are working with the Administration Console for Content Platform Engine successfully. You get a message that states that you must be a member of the Process Administrators group.

Cause

The desktop was open for a long time, which can cause a session authentication timeout.

Resolution

Log out of the Administration Console for Content Platform Engine and close the browser window. Open a new browser window and open the Administration Console for Content Platform Engine.

Issue

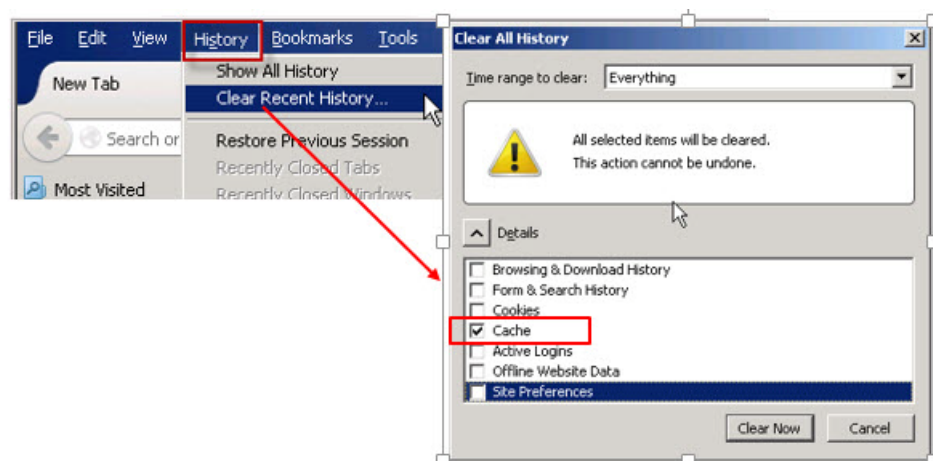
You have a browser tab open to the Administration Console for Content Platform Engine (ACCE). You refresh the tab, expecting to get a login prompt and nothing happens.

Cause

When you have ACCE and an IBM Content Navigator (ICN) desktop open in the same browser session, ICN attempts to share the logon credentials. If you use different credentials for ACCE and the ICN desktop, the system gets confused.

Resolution

Clear the browser cache.



On occasion, it might be necessary to clear the cookies.

Process Designer issues

Issue

You open the Process Designer tool for the first time and you see a blank screen; it appears to be hung.

Cause

The first time that you open the Process Designer tool, all the Java applications need to be loaded into the Java cache.

Resolution

Be patient. The tool can take a few minutes to display.

Issue

You click File > Transfer Workflow Collection and get the error.



Cause

The session connection between the object store and the workflow system expired.

Resolution

- Save your workflow to the file system so you do not lose your work. File > Save as.
- Close Process Designer.
- Log out of the Workflow Author desktop.
- Clear the browser cache.
- Open the Workflow Author desktop and log in.
- Open Process Designer.
- Open the workflow definition and validation and transfer the workflow collection.

Issue

You open the Process Designer tool from the Workflow Author desktop and you get a screen that shows the plug-in is vulnerable and should be updated.

Cause

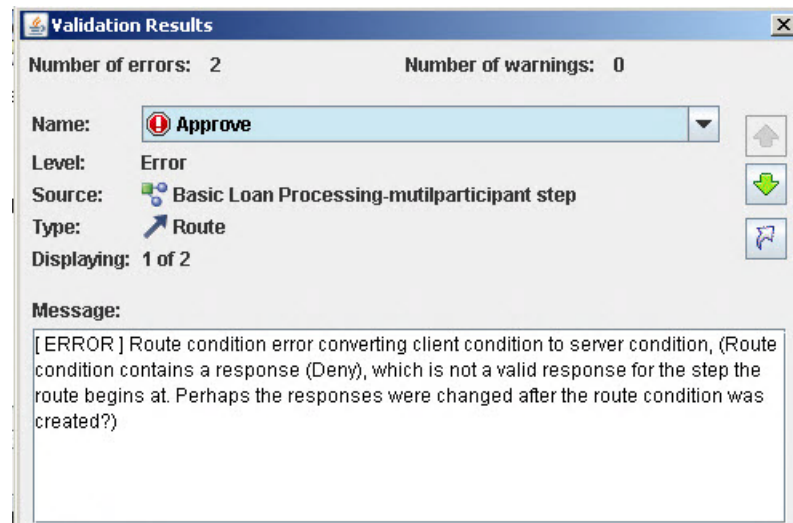
Mozilla Firefox is protecting against the Padding Oracle On Downgraded Legacy Encryption (Poodle) threat.

Resolution

Click the *Activate Java Platform SE 7 U* link, and select *Allow and Remember*.

Issue

You attempt to validate a workflow, but you get an error similar to.



Cause

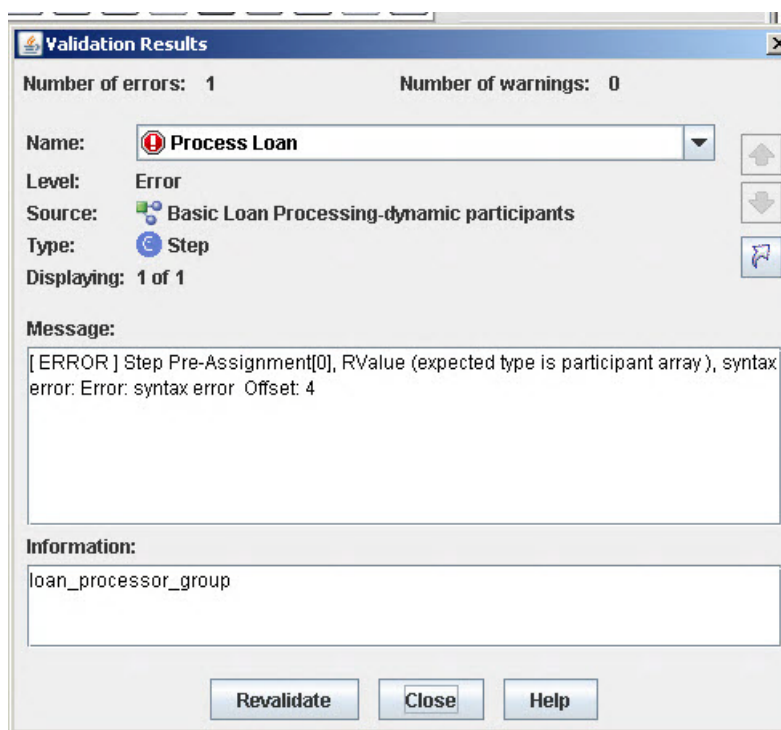
In this case, the response Deny is missing. You probably forgot to click return when you defined the response, so the system did not save it.

Resolution

- Go to the step where the response is suppose to be defined.
- If the cursor is at the response, then click return to save the response.
- If the response does not exist, then define the response and click return or the tab key.

Issue

You attempt to validate a workflow, but you get an error similar to.



Cause

A syntax error at the step, Process Loan, in the Assignments > Before Execution.

Resolution

- Go to the step identified in the error (Process Loan).
- Click the Assignment tab and select Before Execution.
- Verify the assignment expressions. Make sure to click enter at the end of each row.
- If you do not see any errors, delete the assignment expressions and redefine them.

Issue

You attempt to validate a workflow, but you get many validation errors that cannot be resolved.

Cause

The security session on the Content Platform Engine timed out. The Process Designer application remains open, but is disconnected from the Content Platform Engine.

Resolution

Save your workflow definition to the file system. Close all browser windows. Reopen your saved workflow definition in Process Designer.

Issue

You are working in Process Designer for an extended period. When you attempt to checkin your workflow, you get the error:



Cause

The session timed out.

Resolution

1. Save your workflow definition to the file system as a pep file, so you do not lose your work.
2. Close Process Designer.
3. Log out of IBM Content Navigator.
4. Clear the browser cache.
5. Log in to IBM Content Navigator.
6. Open Process Designer and open the pep file you saved.
7. Check-in your workflow.

Component Queue issues

Issue: You update a component queue adapter property with ACCE. The component behaves as if the change was not made, even though the updated value is displayed correctly. The issue occurs with component queue security updates as well.

Cause

A known bug in releases before IBM Case Foundation 5.2.1.3.

Resolution

Multiple methods exist to resolve the issue. If the fix pack is not installed, you can:

- In Administration Console for Content Platform Engine, stop the component queue and save. Start the component queue and save.
- Repeat the update by using Process Configuration Console, then commit the changes.

Technotes

<http://www.ibm.com/support/docview.wss?uid=swg27043131>

<http://www.ibm.com/support/docview.wss?uid=swg21963021>

<http://www.ibm.com/support/docview.wss?uid=swg21882893>



IBM Training

