

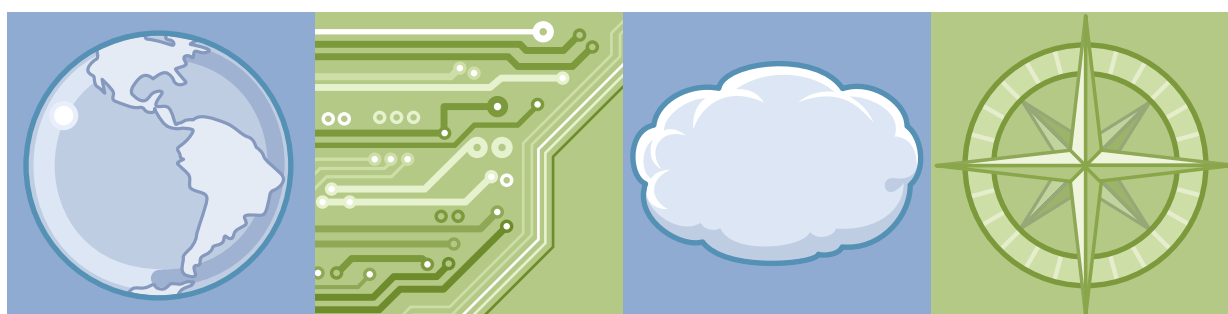


# IBM Training

Student Exercises

## **IBM Case Foundation 5.2.1: Manage Work in Progress**

Course code F234 ERC 1.0



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# Unit 1. Manage Work in Progress

## Unit overview

### Lessons

Lesson 1.1, "Search for work," on page 1-3

Lesson 1.2, "Modify work," on page 1-25

Lesson 1.3, "Process and manage work," on page 1-31

Lesson 1.4, "Manage workflow exceptions," on page 1-41

### Requirements

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





## Lesson 1.1. Search for work

### Overview

### Why is this lesson important?

A workflow participant tries to locate a work item in a public queue, but cannot find it. The user calls you, the workflow administrator, for help. You need to search for work in progress.

ABC Bank has received a large number of loan applications. As the workflow administrator, you need to search for workflows and work items with certain loan IDs in order to resolve issues with these items.

### Activities

- System Start, on page 1-5
- Activity Preparation, on page 1-7
- Search for work, on page 1-13

### User accounts

	Type	User ID	Password
	Operating system	administrator	passw0rd
	Workflow administrator	p8admin	IBMFileNetP8
	Workflow users	mary matt	filenet



#### Note

Passwords are always case-sensitive.



#### Note

Unless otherwise noted, use Firefox to access student system URLs.



# System Start

## Introduction

In this exercise, you start the system to prepare for later exercises.

## Procedures

Procedure 1, "System start," on page 1-5

Procedure 2, "System Check," on page 1-5

Procedure 3, "Start WebSphere applications," on page 1-6

### ***Procedure 1: System start***

You must start your student system before you can continue with your lesson activities.

1. If necessary, log in to the operating system as Administrator (password: passw0rd)
2. Open the WebSphere Admin folder on your desktop.
3. Double-click Start Server1.bat
4. Wait for the command window to close.

### ***Procedure 2: System Check***

If your system is already running, you can check to ensure that the components are all started.

1. Open the Firefox browser on your desktop.
2. View the Ping pages that are located in the System Health bookmarks folder.
  - a. Click CE ping to verify that the Content Engine Startup Context (Ping Page) is displayed.
  - b. Click PE ping to verify that the Process Engine Server Information (Ping Page) is displayed.
    - User name: p8admin
    - Password: IBMFileNetP8
  - c. Click Navigator Ping page. Verify that the IBM Content Navigator Ping page interface is displayed.
3. Click the FileNet P8 System Health shortcut. Verify that the following components are online:
  - Global Configuration Database
  - Directory Configurations
  - PE Connection Points
  - PE Isolated Regions
  - Object Stores
  - Storage Areas
  - Sites

**Note**

The following components are not configured on this system:

- Fixed Content Devices
- Content Cache Areas

**Procedure 3: Start WebSphere applications**

If any of the components from the previous procedure are not functioning as described, use this procedure to confirm that WebSphere and the applications are running.

1. Click the WAS admin server 1 link in the browser bookmark list.
2. Log in as the p8admin user.
3. Make sure that the applications are all started.
  - a. From the WebSphere Application Administration page, go to Applications > Application Types > WebSphere Enterprise Applications.
  - b. Confirm that the following components are running:
    - FileNet Engine
    - IDSSWebApp
    - SampleEDSService
    - navigator

**Note**

WorkplaceXT is not used in this course, so it does not need to be started.

4. Start them if they are not started.
  - a. Check the application that is not started.
  - b. Click the Start button.
5. Log out of the WebSphere Application Server Administration page.

## Activity Preparation



### Important

This activity is required to proceed with the lesson exercises.

## Introduction

In order to search for work, some workflows need to be launched to create work in the isolated region. In this activity, you transfer and then launch a workflow multiple times and partially process some work items to create work in progress. This activity creates that data that you use for the rest of this unit.

## Procedures

Procedure 1, "Transfer a workflow," on page 1-7

Procedure 2, "Launch workflow instances," on page 1-8

Procedure 3, "Process workflows," on page 1-9

Procedure 4, "Launch a workflow with a different subject field," on page 1-9

Procedure 5, "Launch a workflow with multiple participants," on page 1-10

Procedure 6, "Process a task as a loan manager," on page 1-11

Procedure 7, "Complete all steps for one workflow," on page 1-11

### ***Procedure 1: Transfer a workflow***

Use the following procedure to transfer a workflow definition and launch several workflows so that you have some data to work with in the rest of the activities.

1. Open Firefox.
2. Use the bookmark to open Workflow Author desktop.
3. Log on as the workflow system administrator:
  - User name: p8admin
  - Password: IBMFileNetP8
4. Open Process Designer.
  - a. Right-click the LoanProcess object store.
  - b. Select Open Process Designer.
5. Transfer the workflow to be used:
  - a. Click File > Open and locate and open the following file:

C:\Labs\Case Foundation 5.2.1 Administration\Manage Work in Progress\Manage Work in Progress Workflow.pep

- b. Click File > Transfer Workflow Collection.

Add the workflow to the LoanProcess > Workflows object store folder with the document title Manage Work in Progress Workflow.

- c. Click Close in the message window.
- d. Click File > Exit and select *Cancel the checkout*.
- e. Click OK.

## Procedure 2: Launch workflow instances

In this procedures, you create eight instances of the workflow that are going to be used throughout this unit. You are logged on to Workflow Author Desktop as p8admin, viewing the LoanProcess object store.



### Note

The property values are important, so take care to type them exactly as shown. The values are also case-sensitive.

1. Open the Workflows folder.
2. Launch eight instances of Manage Work In Progress workflow using the following data table and steps.

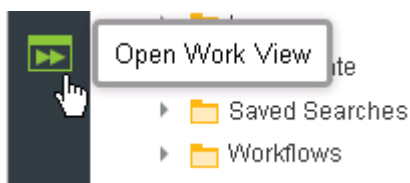
customer_name	Interest_rate	loan_amount	loan_id	loan_term
John	4.5	100000	L001	30
Marvin	4.9	200000	L002	30
Angela	5.1	300000	L003	20
Tara	5.2	350000	L004	30
Anita	5.5	430000	L005	20
Rupert	4.5	120000	L006	15
Ava	4.6	140000	L007	15
Mia	5.1	230000	L008	30

- a. Right-click Manage Work in Progress Workflow.
- b. Click Workflow > Launch Workflow.
- c. Enter the values from the row in the Workflow Data table.
- d. Click Launch Workflow.

### Procedure 3: Process workflows

In this procedure, you process the first five workflows so that they are in different queues and states. You are logged on to Workflow Author Desktop as p8admin.

1. Open the Work view.



2. Open Loan Officer > Loan Officer Inbasket. Verify that you see the eight work items listed.
3. Open each of the first five work items and process them according to the following table.

customer_name	loan_id	Response for the work item
John	L001	Approved
Marvin	L002	Approved
Angela	L003	Reject
Tara	L004	Send to Management
Anita	L005	Send to Management



#### Note

When you complete a work item, it leaves the queue, so you always select the top work item in the queue.

4. Confirm that three work items remain in the LoanOfficer inbasket.

### Procedure 4: Launch a workflow with a different subject field

In this procedure, you launch a workflow with a different subject field. You are still logged on to Workflow Author Desktop as p8admin. You are in the Work View.

1. Open the Browse view.
2. Launch another instance of the Manage Work In Progress workflow.

3. In the Submit Loan Application window, do the following.
  - a. Type Manage Work in Progress 1 in the Subject field.

Manage Work in Progress 1

Started by: P8Admin

---

Enter information for loan application.

- b. Fill in the data fields as shown in the following table.

customer_name	Interest_rate	loan_amount	loan_id	loan_term
Jim	4.5	100000	L009	30

- c. Click Launch Workflow.

### Procedure 5: Launch a workflow with multiple participants

In this procedure, you launch a workflow with multiple participants.

1. Launch another instance of the Manage Work In Progress workflow.
2. In the Submit Loan Application window, change the subject field to Manage Work in Progress-Multiple Participants.
3. Fill in the data fields as shown in the following table, but do **not** launch the workflow yet.

customer_name	Interest_rate	loan_amount	loan_id	loan_term
Rita	4.9	200000	L010	30

4. Change the LoanManagers field to have more than one participant.
  - a. Click the LoanManagers link.

\*LoanManagers: ? mary

- b. Verify that the option to search for users is selected.

Search for: Users ma 🔍

**Available**

**Selected**

👤 mary

- c. Type ma in the *Starts with* field.
  - d. Click the Search button.



- e. Select `matt` from the Available Choices list.
  - f. Click *Add to selection*.
  - g. Click OK.
  - h. In the Submit Loan Application window, verify that the LoanManagers field has `mary`, `matt` as the value.
5. Click Launch Workflow.
  6. Process the Verify Information task.
    - a. Open the Work view.
    - b. Open Loan Officer > Loan Officer Inbasket.
    - c. Open the work item with the name *Manage Work in Progress-Multiple Participants*.
    - d. On the Verify Information window, select *Send to Management* from the Responses list.
  7. Log out of Workflow Author Desktop.

### ***Procedure 6: Process a task as a loan manager***

1. Log on to Workflow Author Desktop as a loan manager:
  - User name: `mary`
  - Password: `filenet`
2. Open the Work View.
3. Open the Inbox. The inbox contains three work items.
4. Process the first item with the subject *Manage Work in Progress*.
  - a. Open the first *Manage Work in Progress* work item.
  - b. Click Accept Loan Application.
5. Log out of Workflow Author Desktop.

### ***Procedure 7: Complete all steps for one workflow***

1. Log on to Workflow Author Desktop as `p8admin`.
  - User name: `p8admin`
  - Password: `IBMFileNetP8`
2. Open the Work View.
3. Open Loan Supervisor > Inbox.
4. Open the work item with the step name of Loan Rejected.
5. Verify that the value for the `loan_id` is `L003` and that the `customer_name` is Angela.
6. Click Complete to finish processing this workflow.
7. Log out of Work Author Desktop.



### Note

You have launched 10 workflows and processed some work items so that you have workflows in different stages of completion. You search for these workflows and work items in the following activities.

# Search for work

## Introduction

This exercise gives you the opportunity to practice searching for work using the Process Administrator application.

## Procedures

Procedure 1, "Open Process Administrator," on page 1-13

Procedure 2, "Search for workflows," on page 1-13

Procedure 3, "Configure how search results are presented," on page 1-15

Procedure 4, "Search for work items in a queue," on page 1-16

Procedure 5, "Search for workflows using exposed field values," on page 1-16

Procedure 6, "Use an index in a search," on page 1-17

Procedure 7, "Search for work by date and time," on page 1-19

Procedure 8, "Search for work assigned to a user," on page 1-20

Procedure 9, "Locate multiple work items from the same workflow," on page 1-21

### ***Procedure 1: Open Process Administrator***

1. Log on to Administration Console for Content Platform Engine as a workflow system administrator.
  - a. In Firefox, open the ACCE bookmark.
  - b. Log on as p8admin
    - User name: p8admin
    - Password: IBMFileNetP8
2. Open the LoanProcess object store.
3. Expand Administrative > Workflow System > Connection Points.
4. Right-click P8ConnP5 and then click Administer Work items. Process Administrator opens.

### ***Procedure 2: Search for workflows***

In this procedure, you search for the workflows that you launched in the Activities preparation activity. Process Administrator is open.

**Note**

Because LoanRoster has only a few workflows, you can easily look through the results. In a production environment, a similar search might return thousands of workflows. You typically use search criteria to narrow the search.

1. In the Search window, set up the following search criteria.
  - a. Select Workflows in the *Look for* list.
  - b. Select Workflow Roster from the *In* list.
  - c. Select LoanRoster in the *Select one* list.
  - d. Select the *Read only (exposed fields)* option for the Search mode.
  - e. Type 5 in the *Max returned per set* field.
2. See how many workflows are in LoanRoster before you run the search.
  - a. Click Search Count and verify that at least nine records match the search criteria, because you launched 10 workflows and completed one.
  - b. Click OK to close the Search Count window.
3. Examine the search results.
  - a. Click Find Now.
  - b. Verify that the workflows that you launched in the Activities preparation activity for this lesson are returned by the search.

**Tip:** You can expand the F\_Subject column width by sliding the column separators in the column heading area.

Because you have completed all the steps for the workflow with loan\_id L003, it does not exist in the roster and is not returned by the search.

- c. Click the *Next Set of Results* button to view the next set of five search results.

	F_Subject	F_Originator
1	0520420625C...	50 (P8Admin)
2	26F34256C22...	50 (P8Admin)

- d. Notice that only eight columns for data fields, including F\_Subject, customer\_name, and loan\_id, are displayed.
4. Leave Process Administrator open for the next procedure.

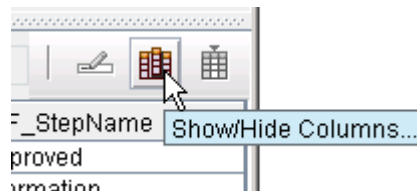
### Procedure 3: Configure how search results are presented

Use the following instructions to customize the presentation of the current results set and make it easier to locate specific items.

1. In Process Administrator, set up the following search criteria.

Item	Value
Look for	Workflows
In	Workflow roster
Select one	LoanRoster
Search Mode	Edit (all fields)
Max returned rows per set	20

2. Run the search and view the results.
  - a. Click Find Now to run the search.
  - b. In the search results pane, scroll to the right as necessary and verify that, because the Edit search mode was used, **all** of the workflow data fields are displayed.
3. Customize the way that the results are displayed for this search.
  - a. Click the Show/Hide Columns button in the results pane toolbar to open the Column Selection window.



- b. Move all of the property names from the Selected Columns list to the Available Columns list by clicking the red, double left arrow button between the two lists.
- c. Configure the Selected Columns list to include only the following items and arrange the items in the order listed.
  - customer\_name
  - loan\_amount
  - Interest\_rate
  - loan\_term
  - F\_StepName



#### Note

You can use the Shift and Ctrl keys to select multiple items in the two lists. Use the right and left arrow buttons between the lists to move items from one list to the other. Select one or more items in the Selected Columns list and use the up and down arrow buttons to put the items in the desired order.

- d. After the data fields are listed in the correct order, click OK to close the Column Selection window.
4. Examine the search results and verify that only the selected columns are displayed and are arranged in the order specified in step 3.
5. Leave Process Administrator open for the next procedure.

**Note**

The method of customizing the search results performed in this procedure applies only to the current search. The default set of columns is displayed the next time the Find Now button is used.

### ***Procedure 4: Search for work items in a queue***

In this procedure, you search for work items waiting to be processed in the LoanOfficer queue.

1. In Process Administrator, set up the following search criteria.

Item	Value
Look for	Work items
In	Work Queue
Select one	LoanOfficer
Search Mode	Read only
Max returned rows per set	20

2. Click Search Count to see how many work items are in the LoanOfficer queue before you perform the search.
3. Run the search and view the results.
  - a. Click Find Now to run the search.
  - b. You did not process the workflows with loan\_id values of L006 through L009 after launching the workflows in the Activities preparation activity. Verify that these are the ones waiting in the LoanOfficer queue.
4. Leave Process Administrator open for the next procedure.

### ***Procedure 5: Search for workflows using exposed field values***

1. In Process Administrator, set up the following search conditions.

Item	Value
Look for	Workflows
In	Workflow Roster
Select one	LoanRoster
Search mode	Read only

2. Set up a search expression on the Criteria tab.
  - a. Verify that the *Use index* field is set to <default>.

- b. In the Search Fields list, select *F\_Subject (String)*.
  - c. In the Operator field, select *is equal*.
  - d. In the Value field, type *Manage Work in Progress*.

**Tip:** The search value is case-sensitive.

  - e. Click Insert and confirm that the expression is added to the search condition field.
3. Run the search and review the results.
  - a. Click Find Now to display the search results.
  - b. Verify that all the items returned in the search results have *Manage Work in Progress* as the value for the *F\_Subject* field.
  - c. Verify that the two workflows that you launched that had different subjects are not listed.
4. Add a second search condition in the search pane to further refine the search.
  - a. Verify that the expression created in step 3 is still visible in the search condition field.
  - b. On the toolbar above the search condition field, click AND.
  - c. Verify that the word *and* is added after the first expression in the search condition field.
  - d. In the Search Fields list, select *customer\_name (String)*.
  - e. In the Operator field, select *like*.
  - f. In the Value field, type *A%*.

**Tip:** The value is case-sensitive.

  - g. Click Insert and verify that the new expression matches the following.

*F\_Subject = 'Manage Work in Progress' and customer\_name like 'A%'*
5. Run the new search and review the results.
  - a. Click Find Now to display the search results.
  - b. Verify that each of the items returned in the search results has *Manage Work in Progress* as the value for the *F\_Subject* field, and that all of the *customer\_name* values start with the letter "A".
  - c. Verify that fewer search results are returned from the second search than the first because of the extra search condition.

### ***Procedure 6: Use an index in a search***

On your student system, an index exists in the LoanRoster so that you can more efficiently perform a search using the *loan\_id* property. In this procedure, you use the index value to narrow the search results and also to sort the results based on that index.

1. On the Criteria tab of Process Administrator, click Clear to remove the search expression from the previous procedure.

2. Set up the following search conditions.

Item	Value
Look for	Workflows
In	Workflow Roster
Select one	LoanRoster
Search mode	Read only (exposed fields)
<b>Criteria tab</b>	
Search Fields	F_Subject (String)
Operator	is equal
Value	Manage Work in Progress

1. Run the search and examine the results.
  - a. Click Find Now to display the search results.
  - b. Verify that there are at least seven items in the search results, with loan\_id values ranging from L001 to L008.
  - c. Look at the loan\_id column and verify that the search results are **not** listed in order based on the loan\_id property values.



### Important

The workflow for loan\_id L003 does not exist in the roster because you completed all the steps for it.

2. Add an index condition to the existing search.
  - a. Select *LoanID (loan\_id + F\_WobNum)* in the *Use index* list.
  - b. Click Advanced to open the *Specify index values* window.
  - c. Click the cell for the Min row in the loan\_id column and type L001 for the value.
  - d. Click the cell for the Max row in the loan\_id column and type L005 for the value.
  - e. Click OK to close the *Specify index values* window.
3. Run the search and examine the results.
  - a. Click Find Now to display the search results.
  - b. Verify that only workflows that have loan\_id values from L001 to L005 are included in the results.
  - c. Look at the loan\_id column and verify that the search results are listed in order based on the loan\_id property values.



## Procedure 7: Search for work by date and time

Use this procedure to create a search that looks for work items based on the date and time that they were created.

- Set up the following search conditions in Process Administrator, but do **not** run the search yet.

Item	Value
Look for	Work Items
In	Work Queue
Select one	LoanOfficer
Search mode	Read only (exposed fields)

- Add a date and time to the search criteria.
  - Select the Criteria tab and select *F\_CreateTime (Time)* from the Search Fields list.
  - Select *is greater than or equal* from the Operator list.
  - In the Value field, type yesterday's date and a time in the following format:  
3-25-11 6:00 am
  - Click Insert. An error message for invalid date and time format is displayed.
  - Click OK.
  - Change the Value field to use one of the valid formats. Refer to the following excerpt from the IBM FileNet P8 Information Center topic for valid date and time formats.

### Valid date/time formats

Format	Example
M/d/yy h:mm a	3/15/00 3:20 pm
M/d/yy h:mm:ss a	3/15/00 3:20:35 pm
EEEE, MMM d, yyy h:mm:ss a z	Thursday, June 25, 2000 3:25:33 am PDT
MMM d, yyyy h:mm:ss a	June 25, 2000 3:25:33 am
MMMM d, yyyy h:mm:ss a z	June 25, 2000 3:25:33 pm PDT
MMMM d, yyy h:mm a	June 25, 2000 3:25 am
MMMM d, yyy h:mm:ss a	June 25, 2000 3:25:35 am
M/d/yy h:mm:ss a z	6/25/00 3:33:25 am PDT

- Click Insert.
  - Notice that the date and time is converted to a system-generated number in the search condition field after you successfully insert the date condition. The system generated number is the number of seconds from midnight of January 1, 1970.
- Run the search and examine the results:
    - Click Find Now.

- b. Use the Show/Hide columns button to select the columns to view.



Show/hide columns	
Selected Columns (Arrange in the order specified.)	loan_id customer_name loan_amount F_CreateTime


- c. Verify that the results contain only items that match the date criteria.

### Procedure 8: Search for work assigned to a user

Use this procedure to determine what work items are in the user mary's user queue, and to open one of the items in Process Tracker.

- Clear any existing search criteria, and then set up the following search conditions in Process Administrator, but do **not** run the search yet.


Item	Value
Look for	Work Items
In	User Queue
Select one	Inbox(0)
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	F_Subject (String)
Operator	is equal
Value	Manage Work in Progress (The value is case-sensitive.)

- Limit the search to the inbox of the user mary.
  - On the Users tab, click inside the *Starts with* field, type *ma*, and then click the Search button .
  - Select the user mary in the Available Users pane.
  - Click the single right arrow between the two panes and then verify that the user mary is listed in the *Limit search to users* pane.
- Run the search and examine the results.
  - Click Find Now to display the search results.
- Configure the way the search results are presented.
  - Click the Results Options tab.

- b. Configure the Selected Columns list to include only those items in the following list. Arrange the items in the order listed.
- F\_QueueWPClassId
  - F\_Subject
  - F\_BoundUser

**Hint**

Use the Shift and Ctrl keys to select multiple items. Use the right and left arrow buttons between the two panes to move items from one pane to the other. Select one or more items in the Selected Columns pane and use the up and down arrow buttons to put the items in the order shown in this step.

5. Examine the results.
- a. Verify that for the item returned, the F\_BoundUser column has 59 (mary) as the value and the F\_QueueWPClassId column has 2 (Inbox) as the value.
6. View the workflow history for the work item returned by the search.
- a. Select the row for the returned work item by clicking the far left cell in the row.
  - b. Click the Open Tracker button  above the search results to start Process Tracker.
 

**Tip:** The Process Tracker window might open behind other windows. If you don't see the window, look on the Windows taskbar for the Process Tracker task.
  - c. Verify that the current step is ManagementApproval, as shown by the placement of the hourglass symbol next to the step icon on the process map.
  - d. The unlocked symbol indicates that the work item is not locked because the user mary is not working on that item.
  - e. Click the Management Approval step on the map to ensure that it is selected.
  - f. On the General tab in the *View by* panel in the right pane, verify that the status is *In progress* and the Step Status shows that the user mary is listed as the participant.
  - g. In the left pane, select the Workflow History tab (located near the bottom of the Process Tracker window) to display the steps that have been completed and are in progress for this work item.
  - h. Explore other tabs and the information displayed in Process Tracker.
  - i. Close Process Tracker and leave Process Administrator open for the next procedure.

### ***Procedure 9: Locate multiple work items from the same workflow***

In the Activities preparation, you launched a workflow with the loan\_id value of L010, which had multiple participants specified at the Management Approval step.

In this procedure, you run two searches in order to verify that a single workflow with multiple participants can have multiple work items at the same step.

1. Set up the following search conditions in Process Administrator.

Item	Value
Look for	Workflows
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	loan_id (String)
Operator	is equal
Value	L010
<b>Show/Hide columns</b>	
Selected Columns	loan_id F_Subject F_WobNum F_WorkFlowNumber

2. Run the search and examine the results.
  - a. Click Find Now to display the search results.
  - b. Verify that one workflow is returned.
3. Modify the search to look for work items.
  - a. In the *Look for* field of the search, select Work Items.
  - b. Set up the rest of the search as indicated in the previous table.
4. Run the search and examine the results.
  - a. Click Find Now to display the search results.
  - b. Verify that three work items are returned with the loan\_id value of L010.
  - c. Verify that each work item has a unique F\_WobNum value.
  - d. Confirm that all work items have the same value for F\_WorkFlowNumber and that the value is the same as the F\_WobNum of the root work item.

The root work item is waiting in the Delay(0) system queue.
  - e. Look at the Queue and F\_BoundUser columns and verify that two of the work items are in users' inboxes.



### Information

When you have a step with multiple participants in a workflow, one work item is created for each participant for that step, and another work item, called the root work item (used for system implementation reasons), waits in the Delay queue.

5. Close Process Administrator and log out of Administration Console for Content Platform Engine.



## Lesson 1.2. Modify work

### Overview

### Why is this lesson important?

A customer has submitted a loan application and the loan is being processed. He wants to change the loan amount in his application. As the workflow system administrator, you need to search for this work item and change the value of the loan amount.

### Activities

- Modify work items, on page 1-27

### User accounts

	Type	User ID	Password
	Workflow system administrator	p8admin	IBMFileNetP8
	Workflow user	mary	filenet
	Workflow user	olivia	filenet



#### Note

Passwords are always case-sensitive.



#### Note

Unless otherwise noted, use Firefox to access student system URLs.





# Modify work items

## Introduction

This exercise allows you to practice using Process Administrator to access work items and make changes to them.

## Procedures

Procedure 1, "Modify a single work item," on page 1-27

Procedure 2, "Modify multiple work items," on page 1-28




Procedure 3, "Modify a workflow group," on page 1-29

### ***Procedure 1: Modify a single work item***

In this procedure, you modify a workflow field value for a single work item.

1. On your student system, log in to Administration Console for Content Platform Engine as p8admin
2. Open Process Administrator from the LoanProcess Object Store.
3. Run a search using the conditions in the following table.

Item	Value
Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	loan_id (String)
Operator	is equal
Value	L005 (The value is case-sensitive)

4. Lock the work item.
  - a. In the search results pane, select the row for the returned item.
  - b. Click the Lock Selection button  to lock the work item.
5. Change the value of the loan\_amount property for the work item.
  - a. Click the value in the loan\_amount column.
  - b. Click the Edit Field Values button . The Edit Fields window opens.
  - c. Type 400,000.0 in the Value field and click OK to close the window.
  - d. Verify that the value has changed in the loan\_amount column in the results pane.
6. Click the Save Selected Changes button  to save the changes.
7. Click Unlock Selection to unlock the work item.

8. Rerun the search and verify that the property value shows 400,000.

## **Procedure 2: Modify multiple work items**

In this procedure, you modify a data field value for multiple items simultaneously.



### **Information**

For this and other exercises, you use Internet Explorer and Firefox as separate browser instances because they do not share browser authentication information.

1. Use Process Administrator to run an Edit mode search to return all of the work items in the LoanOfficer queue. Use the search conditions in the following table.

Item	Value
Look for	Work Items
In	Work Queue
Select one	LoanOfficer
Search mode	Edit (all fields)

2. Lock all of the work items found.
  - a. Click the far left cell to select the row for the first item. The first row is highlighted.
  - b. Shift-click anywhere in the row for the last item. All rows are highlighted.
  - c. Click the Lock Selection button and verify that the lock status column shows that all of the items are locked by the current user.
3. Change the value of the Interest\_rate property for all of the work items at one time.
  - a. Locate the Interest\_rate column and use the shift-click method to select all of the values in that column.
  - b. Confirm that none of the Interest\_rate values is 4.4.
  - c. Click the Edit Field Values button. The Edit Fields window opens.
  - d. Type 4.4 in the Value field and click OK.
  - e. Verify that the value has changed in the Interest\_rate column for each work item in the search results pane.
4. Click the Save Selected Changes button to save the changes, and then unlock the work items.
5. Minimize the Process Administrator window and the Administration Console window.
6. Verify that the values have changed in the work items in the public inbox.
  - a. Double-click the Internet Explorer shortcut to open a second browser window.
  - b. Go to Workflow Author Desktop and log in to as the user olivia.

**Hint**

You can drag bookmarks from Firefox to the Favorites bar in Internet Explorer.

- <http://ecmedu01:9080/navigator/?desktop=WorkflowAuthordesktop>
  - User name: olivia
  - Password: filenet
- c. Open the Work View.
  - d. Go to LoanOfficer Inbasket and open any of the work items.
  - e. Verify that the value in the Interest\_rate field has the value that you entered in Process Administrator.
  - f. Click Cancel.
  - g. Log out of Workflow Author Desktop.
  - h. Close Internet Explorer.
7. Leave the Firefox windows open for the next procedure.

### ***Procedure 3: Modify a workflow group***

Use the following procedure to add a workgroup participant to a work item.

1. Use Process Administrator to run an Edit mode search to return the work items with the loan\_id value of L007. Use the following search criteria.

Item	Value
Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	loan_id (String)
Operator	is equal
Value	L007 (The value is case-sensitive.)

2. In the results pane, locate the LoanManagers column and verify that *mary* is the only name listed for that workflow group.
3. Select the work item in the results pane and then lock the work item.
4. Add a user to the LoanManagers workflow group that is assigned for this work item.
  - a. From the Tasks menu, select Workflow Groups.
  - b. Confirm that the user mary is listed in the Selected Users pane in the Manage Workflow Groups window.

- c. Type `ma` in the *Starts with* field and then click the Search button.
- d. Select the user mabel from the Available Users list and then click the single right arrow to move the user name to the Selected Users pane.
- e. Click OK to close the Manage Workflow Groups window.
- f. Verify that the value in the LoanManagers column has changed to `mabel;mary`.

Notice that the pencil icon and the lock icon are displayed for the work item. These icons indicate that the modification that you have made is not yet saved and that the item is still locked.

5. Save the selected change.
6. Unlock the work item.
7. Verify that the value has changed in the work item in the public inbox.
  - a. Open Internet Explorer and log in to Workflow Author Desktop as the user olivia.
    - User name: `olivia`
    - Password: `filenet`
  - b. Open the Work View.
  - c. Go to LoanOfficer Inbasket.
  - d. Open the *Manage Work in Progress* work item for loan L007.
  - e. Verify that the LoanManagers field has both mabel and mary listed.
  - f. Click Cancel.
  - g. Log out of Workflow Author Desktop and then close Internet Explorer.
8. Close Process Administrator and log out of Firefox.
9. Close Firefox.

## Lesson 1.3. Process and manage work

### Overview

### Why is this lesson important?

A work item is waiting for some missing information. As the workflow system administrator, you need to add the information and complete the workflow.

An employee is out sick. As the workflow administrator, you need to reassign all work items in this employee's Inbox to another employee.

### Activities

- Process and manage work, on page 1-33

### User accounts

Type	User ID	Password
Workflow system administrator	p8admin	IBMFileNetP8
User	mabel	filenet
User	mary	filenet
User	matt	filenet
User	olivia	filenet



#### Note

Passwords are always case-sensitive.



#### Note

Unless otherwise noted, use Firefox to access student system URLs.



# Process and manage work

## Introduction

This exercise allows you to practice using Process Administrator to process and manage work.

## Procedures

Procedure 1, "Complete a work item," on page 1-33

Procedure 2, "Lock a work item," on page 1-34

Procedure 3, "Unlock a work item," on page 1-34

Procedure 4, "Verify assigned work," on page 1-36

Procedure 5, "Reassign work," on page 1-37

Procedure 6, "Delete work items," on page 1-38

Procedure 7, "Add a tracker to workflows," on page 1-39

### ***Procedure 1: Complete a work item***

In this activity, you use Process Administrator to find and complete a work item.

1. Log in to Administration Console for Content Platform Engine as p8admin and open Process Administrator from the Loan Process object store.
  - User name: p8admin
  - Password: IBMFileNetP8
2. Run a search of the LoanRoster to return the current work item for the loan L002.

Item	Value
Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	loan_id
Operator	is equal
Value	L002

3. Select the work item in the results pane and click Tasks > Complete Work.

**Tip:** If the Complete Work command is not available, select *Edit (all fields)* as the search mode and run the search again.

4. In the Complete Work window, select the work item in the *Selected work* field.
5. In the *Enter comments* field, type Sent loan status update to the customer.
6. Click OK to complete the work item.

7. Click Find Now to reexecute the search and to refresh the search results pane.
8. Verify that the work item is not found.
9. Leave Process Administrator open for the next procedure.



### Important

The workflow is complete, is no longer available in the roster, and is removed from the results pane.

## Procedure 2: Lock a work item

In this procedure, you lock a work item so that you can practice using Process Administrator to unlock it.

1. Ensure that the following conditions are true:
  - You are signed in to Administration Console as the p8admin user.
  - The Administration Console is open in Firefox.
  - Process Administrator is open.
2. Use Internet Explorer to log in to Workflow Author Desktop as the user olivia.
  - URL: `http://ecmedu01:9080/navigator/?desktop=WorkflowAuthordesktop`
  - User name: `olivia`
  - Password: `filenet`
3. Lock a work item by simulating a client workstation problem occurring while a user has a work item open.
  - a. Open the Work View.
  - b. Open the Loan Officer Inbasket.
  - c. Open a work item with the name *Manage Work in Progress*. Note the `customer_name` value for the work item.
  - d. Leave this window open to keep the work item locked.



### Important

Do **not** close the window. The window must remain open to ensure that the work item is locked.

## Procedure 3: Unlock a work item

Use Process Administrator to find and unlock a work item.

1. In Process Administrator, click New Search to reset the Criteria and Results Options tabs.



2. Set up the following search conditions to find locked work items.



Item	Value
Look for	Work Items
In	Work Queue
Select one	LoanOfficer
Search mode	Edit (all fields)
<b>Criteria tab</b>	
Search Fields	F_LockUser (Integer)
Operator	not equal
Value	0

3. Run the search and examine the results.
- Click Find Now to display the search results.
  - Verify that the F\_LockUser column has the value 61 (olivia) and that the customer\_name value matches the work item you opened, confirming that this work item is the one that you locked.



### Important

The Process Engine uses integers to identify users and workflow groups, and the user olivia has been assigned the number 61 by the system. If you need to perform a search for a specific user or workflow group, you can use the `environment` command in `vwtool` to look up the ID for the user or group.

4. Unlock the locked work item.
- Select the row for the locked item.
  - Notice that when you select the item, the Unlock Selection  button is disabled, but the Lock Selection  button is available.
  - Click the Lock Selection button. A window opens indicating that the item is already locked by a different user.
  - Click OK to override the lock.
  - Verify that the F\_LockUser column now lists *p8admin* as the user that has the item locked.
  - Click the Unlock Selection button.
5. Run the same search again and verify that there are no search results.
6. Leave Process Administrator open for the next activity.
7. Close the step processor window that you left open in Internet Explorer.
8. Log out of Workflow Author Desktop, but leave Internet Explorer open.

## Procedure 4: Verify assigned work

Use the following procedure to assign work from a public queue to a specific user and to reassign work that is in a user's inbox to a different user.

1. Ensure that you are signed in to Administration Console as the p8admin user.
2. Use Internet Explorer to log on to Workflow Author Desktop as p8admin.
  - User name: p8admin
  - Password: IBMFileNetP8
3. Verify that the Loan Officer public inbox contains a work item for the loan L007.
  - a. In Workflow Author Desktop, open the Work View.
  - b. Open Loan Officer > Loan Officer Inbasket.
  - c. Verify that a work item named *Manage Work in Progress* is listed with a Loan ID value of L007.



### Important

If the work item for loan L007 does not exist, choose another work item, make a note of the Loan ID value, and use that value instead of L007 in steps 4 and 13.

4. Log out of Workflow Desktop.
5. Verify that the inbox for the user mary contains a work item for the loan L010.
  - a. Using Internet Explorer, log on to Workflow Author Desktop as the user mary.
    - User name: mary
    - Password: filenet
  - b. Open the Work View.
  - c. Open the Inbox.
  - d. Open the *Manage Work in Progress-Multiple Participants* work item.
  - e. Verify that the loan\_id value is L010 and then click Close.
  - f. Log out of Workflow Author Desktop.
  - g. Close Internet Explorer.

## Procedure 5: Reassign work

1. Use Process Administrator to run the following search in order to return the work items for the loans L007 and L010.

Item	Value
Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
<code>loan_id = 'L007' or loan_id = 'L010'</code> (The loan_id values are case-sensitive.)	
<b>Results Options tab</b>	
Selected Columns	loan_id

2. In the search results pane, select the work item found in the LoanOfficer queue.
3. From the Tasks menu, select Assign/Reassign Work.
4. Select the work item in the From field at the top of the Assign/Reassign window.
5. Change the participant assignment to the user olivia.
  - a. In the *Starts with* field, type `oli` and then click the Search button.
  - b. Select olivia in the To field and click OK to assign the work to the user olivia.
6. In the search results pane, select the work item found in the inbox for the user mary.  
The Queue column value is `Inbox(0)`, and the `F_BoundUser` value is `59 (mary)`.
7. From the Tasks menu, select Assign/Reassign Work.
8. Select the work item for mary in the From field.
9. Change the participant assignment to the user mabel.
  - a. In the *Starts with* field, type `ma` and then click the Search button.
  - b. Select mabel in the To field and click OK to reassign the work to the user mabel.
10. Verify that the inbox for the user olivia contains a work item for the loan L007.
  - a. Open Internet Explorer and log on to Workflow Author Desktop as the user olivia.
    - User name: `olivia`
    - Password: `filenet`
  - b. Go to Work View > Inbox and open the *Manage Work in Progress* work item.
  - c. Verify that the `loan_id` value is L007 and then close the work item.
  - d. Log out of Workflow Author Desktop, but do **not** close the window.
11. Verify that the inbox for the user mabel contains a work item for the loan L010.
  - a. In Internet Explorer, log on to Workflow Author Desktop as the user mabel.

- b. Go to Work View > Inbox and open the *Manage Work in Progress-Multiple Participants* work item.
  - c. Verify that the loan\_id value is L010 and then close the work item.
12. Log out of Workflow Author Desktop, but do not close the window. You use this second browser window in the next procedure.

### Procedure 6: Delete work items

The customer with loan\_id L010 has decided to cancel the loan application. Use the following procedure to delete all of the work items associated with this loan application.

1. Verify that the inbox for the user matt contains a work item for the loan L010.
  - a. In Internet Explorer, log on to Workflow Author Desktop as the user matt.
    - User name: matt
    - Password: filenet
  - b. Go to Work View > Inbox and open the *Manage Work in Progress-Multiple Participants* work item.
  - c. Verify that the loan\_id value is L010 and then close the work item.
  - d. In the second browser window, log out of Workflow Author Desktop, but do **not** close the window.



#### Note

In the previous procedure, you verified that the user mabel also has a work item for the loan L010 in her inbox.

2. Use Process Administrator to run a search in Edit mode that finds all of the work items in the LoanRoster that have the loan\_id value of L010.

Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
loan_id = 'L010' (The loan_id values are case-sensitive.)	
<b>Results Options tab</b>	
Selected Columns	loan_id



## Information

The search returns three work items. When you have a step with multiple participants in a workflow, one work item is created for each participant for that step, and another work item (for system implementation reasons) waits in the Delay queue.

3. Delete all of the work items returned by the search.
  - a. Select all the rows in the search results.
  - b. Click Tasks > Delete Work.
  - c. Click OK to confirm that you want to permanently delete the work items.
  - d. Verify that the work items are removed from the search results pane.
4. Rerun the search to verify that the work items have been removed from the users' inboxes.

## Procedure 7: Add a tracker to workflows

Use the following procedure to add a tracker to three active workflows.

1. Verify that the user mary is not a tracker for any active workflows.
  - a. In the Internet Explorer browser window, log in to Workflow Author Desktop as the user mary.
    - User name: mary
    - Password: filenet
  - b. Go to Work View > Supervised Loan Status and verify that no items are listed.
  - c. Minimize but do **not** close the Internet Explorer browser window.
2. Use Process Administrator to run a search in Edit mode that finds all of the workflows in the LoanRoster that have loan\_id values from L006 to L008, inclusive.

Look for	Work Items
In	Workflow Roster
Select one	LoanRoster
Search mode	Edit (all fields)
<b>Criteria tab</b>	
loan_id >='L006' and loan_id <= 'L008'	
(The loan_id values are case-sensitive.)	
<b>Results Options tab</b>	
Selected Columns	loan_id

3. Add mary as a tracker for these workflows.
  - a. Select all of the workflows in the search results pane.
  - b. Click Tasks > Trackers. The Manage Trackers window opens.

- c. Click inside the *Starts with* field, type *ma*, and then click Search.



### Important

If you do not see the *Starts with* search field in the Manage Trackers window, the IBM Content Navigator session has probably timed out. You need to close the open windows and start again at step 1.

- d. Select the user mary in the Available Users pane.
  - e. Click the single right arrow between the two panes and then verify that the user mary is listed in the Selected Users pane.
  - f. Click OK to close the Manage Trackers window.
  - g. Close Process Administrator.
  - h. Log out of Administration Console.
  - i. Leave the Internet Explorer browser window open that is running Workflow Author Desktop where you signed in as the user mary.
4. Verify that the user mary has been assigned as a tracker to the workflows.
    - a. Return to the browser window running the Workflow Author Desktop application where you signed in as the user mary.
    - b. On the Work View > Supervised Loan Status page, click Refresh.
    - c. Verify that the tracker items that you assigned mary to in the Process Administrator are listed.
  5. Log out of Workflow Author Desktop and close the browser window.

## Lesson 1.4. Manage workflow exceptions

### Overview

### Why is this lesson important?

A running workflow has encountered a business process exception, and there is a work item in the Conductor queue. As the workflow administrator, you must determine what caused the exception and enable the workflow to be completed.

### Activities

- Activities preparation, on page 1-43
- Manage a workflow exception, on page 1-45

### User accounts

Type	User ID	Password
Workflow system administrator	p8admin	IBMFileNetP8



#### Note

Passwords are always case-sensitive.



#### Note

Unless otherwise noted, use Firefox to access student system URLs.





## Activities preparation



### Important

This activity is required to continue with lesson exercises.

## Introduction

In order to complete the activities for this lesson, you must launch a workflow that contains a workflow business processing exception. A sample workflow that contains an error has been provided. You launch this workflow in order to create a problem work item to use in the subsequent activities.

## Procedures

Procedure 1, "Launch a workflow to create an exception," on page 1-43

### ***Procedure 1: Launch a workflow to create an exception***

Use the following procedure to launch a workflow that causes an exception.

1. Use Firefox to log in to Workflow Author Desktop as p8admin.
  - User name: p8admin
  - Password: IBMFileNetP8
2. Open Process Designer:
  - a. Right-click the LoanProcess object store.
  - b. Select Open Process Designer.
3. Open the Exception Workflow.pep file, located in C:\Labs\Case Foundation 5.2.1 Administration\Manage Work in Progress.
4. Transfer the workflow:
  - a. Click File > Transfer Workflow Collection.
5. Complete the *Save the workflow definition to an object store* wizard using the values in the following table.

Item	Value
Object store > Folder	LoanProcess > Workflows
Document Title	Exception workflow
Security Settings	<Use default settings.>

6. Close Process Designer.
  - a. Click File > Exit.
  - b. Cancel the checkout when you are prompted.

7. Launch the Exception workflow.
  - a. Open the Workflows folder.
  - b. Right-click the Exception workflow.
  - c. Select Workflow > Launch Workflow.
8. Complete the launch step processor by clicking Launch Workflow.

The workflow data fields have been filled in for you. Do **not** modify them.

customer_name: ?	<input type="text" value="Julius C"/>
monthly_payment: ?	<input type="text" value="0"/>
number_of_payments: ?	<input type="text" value="0"/>
total_amount_due: ?	<input type="text" value="12000"/>

9. Log out of Workflow Author Desktop.

# Manage a workflow exception

## Procedures

Procedure 1, "Identify a work item in an exception state," on page 1-45

Procedure 2, "View a work item information stack," on page 1-46


Procedure 3, "Correct a workflow exception," on page 1-46

### ***Procedure 1: Identify a work item in an exception state***

In this activity, you search for work items that are in an exception state.

1. Log on to Administration Console as p8admin.
  - User name: p8admin
  - Password: IBMFileNetP8
2. Open Process Administrator from the LoanProcess object store.
3. Perform a search of the Conductor queue, which is where workflow exceptions are sent.
  - a. In Process Administrator, enter the search conditions specified in the following table and run the search.

Parameter	Value
Look for	Work Items
In	Work Queue
Select one	Conductor
Search mode	Edit (all fields)

4. In the search results pane, observe the exception icon  that indicates that the work item is in an exception state.
5. Note the values of the following data fields for customer Julius C.
  - total\_amount\_due
  - number\_of\_payments
  - monthly\_payment



#### **Important**

The workflow calculates the monthly\_payment value using the following method:

monthly\_payment = total\_amount\_due divided by number\_of\_payments

6. Leave Process Administrator open for the next procedure.

**Procedure 2: View a work item information stack**

In this activity, you view the information stack for a workflow in an exception state and determine the cause of the problem.

1. Select the work item in the results pane.
2. View the information stack for the work item.
  - a. Right-click the work item and click View Information Stack.
  - b. Select the work item in the top pane of the Information Stack window.
  - c. Examine the information displayed in the Information Stack pane and answer the following questions:
    - At what step did the error occur?
    - What was the cause of the error?
3. Close the Information Stack window and leave Process Administrator open for the next procedure.

**Procedure 3: Correct a workflow exception**

In this activity, you correct the work item that is in an exception state in the Conductor queue and send the work item to complete its processing.

1. Ensure that the Process Administrator is open with the Julius C work item in the Conductor queue displayed in the results pane.
2. Modify the work item workflow field value.
  - a. Use the skills that you learned in a previous lesson to change the value of the number\_of\_payments field from 0 to 12.
  - b. Save the change.
  - c. Unlock the work item.
  - d. Use the skills that you learned in a previous lesson to complete the work item in Process Administrator.
  - e. The corrected work item is sent back to continue in the workflow.
  - f. Close Process Administrator.
3. Verify that the error is corrected by rerunning the search.
4. Close Process Administrator.
5. Log out of Administration Console and close the browser.



