SUNGARD HIGHER EDUCATION

What can we help you achieve?

Workflow Process Modeling

Workflow 4.3 Workbook

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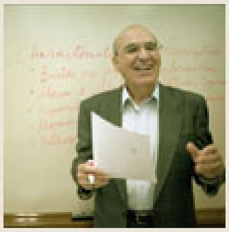

Section A: Introduction

Lesson: Overview

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Purpose

Use these materials to practice the tasks and processes described during the lecture portion of the training program.

Objectives

To give attendees the opportunity to practice the processes discussed during the lecture. The scenario exercises represent the types of daily activities encountered by most colleges and universities. They are useful as instructional aids when training others at your school.

Presentation format

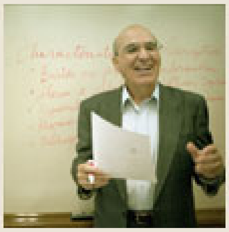
The format is hands on. Ask your instructor for guidance and assistance as you work through the exercises.

Approach

There are ten sets of exercises designed to introduce class participants to building workflows. The exercises focus on building three workflow models, each designed to introduce different workflow features. The instructions start out very detailed and are less detailed towards the last exercise.

The exercises are intended to be generic so that all participants can relate to the subject matter. The exercises are based on a "Welcome to the Institution" business process to welcome a new person to the institution, be it a student, faculty or employee.

- Workflow 1: Build a simple "Welcome" workflow. The workflow includes 4 simple activities including a manual activity.
- Workflow 2: Improve the business process and modify the workflow. Incorporate emails, automated activities, custom activity, business events, and business rules.
- Workflow 3: Improve the process once again by adding an approval activity.
- Supplemental workflows are used to demonstrate additional features in Workflow.



Section A: Introduction

Lesson: Log on to SunGard HE Workflow – Exercise 1

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Introduction

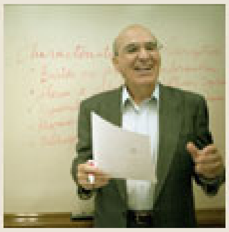
Throughout these exercises, you will be entering data that is specifics to you as a Workflow user. Whenever you see an **XX** (as in Step 2 under, "When the logon window opens, ….", you will need to enter your individual number in place of the **XX**. Your instructor will assign your unique number.

Procedure

Follow these steps to logon to SunGard HE Workflow.

Step	Action
1	Open an Internet Explorer window and enter your institution's Workflow URL
2	When the logon window opens, enter your training logon ID and password. This logon will allow you to perform the first portion of exercises. • **Training Logon** = wfuser**XX** (where **XX** equals your number 01-20) • **Password** = u_pick_it
3	Click **Submit**

Comment: If you have not accessed Workflow for 20 minutes or more during the training time, your workflow session may time out and you will be asked to log in to Workflow again. If this happens, repeat Exercise 1. If the Modeler window is open when your session times out, you will need to close the modeler window and reopen it after logging in. Any changes you made that were not saved will be lost.



Section B: Workflow Users and Roles

Lesson: Create a Role – Exercise 2

Jump to TOC

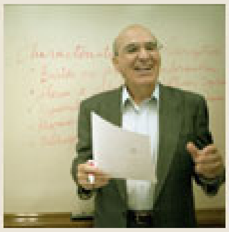
Purpose

The purpose of this exercise is to create a role.

Procedure

Follow these steps to open the Role Management window and enter role details.

Step	Action
Open the Role Management window	
1	In the Administration tab at the bottom of the left side of the workflow window, click Role Management
2	At the bottom of the window, click Add Role.
Enter role details	
3	Enter role of **Parking Authority XX** – where **XX** is your unique logon number. You will use this role in a later exercise.
4	Enter a **Description**: Parking permit authorization.
5	Click **Save Workflow Role**.



Section B: Workflow Users and Roles

Lesson: Modify a User Account – Exercise 3

Jump to TOC

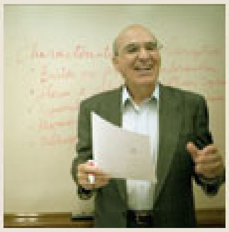
Purpose

The purpose of this exercise is to modify a user account.

Procedure

Follow these steps to open the User Management window.

Step	Action
1	In the **Administration** tab at the bottom of the left side of the workflow window, click **User Management**.
2	In the Search window, enter your workflow user **wfuserXX** in the Logon ID field.
3	Click **Search**.
4	Click your Logon ID when it appears at the top of the page. This will display user profile details for the user logon ID.
5	In the **Email** field, enter your email address.
6	Select **Yes** in the **Enabled** field to enable the user.
7	Select **Authentication,** select External Authentication to retrieve your user ID's password from an external application (Banner).
8	Select **Notifications**, select Yes for both Activity and Deadline options to receive emails regarding workflow activity and deadlines.
9	Select **Launching** and select the appropriate option for your site – client or web for INB.
10	Click **Save User**.



Section B: Workflow Users and Roles

Lesson: Associate Users/Roles – Exercise 4

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Purpose

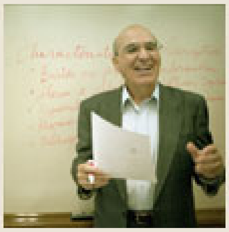
The purpose of this exercise is to assign roles to your user ID and demonstrate the association between a role and a user account.

In order to take part in a workflow, your user account must be assigned one or more roles. This is called a user-role assignment. The sample workflow has four roles.

Procedure

Follow these steps to assign roles to users.

Step	Action
1	You should still be in the User area of User Management. Scroll down to the Role Assignment area. You should see the Business Analyst and SysAdmin roles. These roles have been added to your *wfuser**XX*** user to give you the necessary permissions to do these exercises. You will be adding additional roles to your user account.
2	Click **Add Role Assignment** in the Role Assignments section of the window.
3	In the Role Assignment window, select the roles listed below from the drop down list in the Role Name field. Add each role listed below *one at a time*. Central Admin Email Admin Records Specialist Parking Authority XX
4	The “**Effective from**” date will default to the current date.
5	In the **Type** list, select **Primary**.
6	Click **Save**.
7	Repeat Steps 2-6 until all roles have been assigned to your *wfuser**XX*** logon ID.
8	When all roles have been entered, click **Save User**.
9	Click **Logoff** and then log in again with the same username. This will make the role assignments active.



Section C: Welcome Workflow

Lesson: Enter Workflow Definition – Exercise 5

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Purpose

The purpose of this exercise and exercises 6-10 is to build the simple Welcome workflow model.

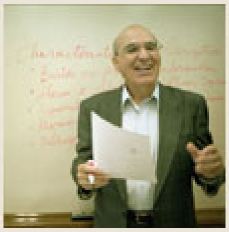
About the workflow

The workflow you will build is to welcome a new person coming to the institution. Keep in mind the workflow is more for demonstration purposes than best practice. This workflow will be enhanced in later exercises.

- Workflow 1 Scope: Create a workflow to enter a new person and complete a “Welcome to the Institution” process. This workflow will be started manually.
- Workflow 1 Steps: There are 4 activities in the first workflow:
  - Enter a new person in Banner
  - Enter Person information
  - Enter an email address for the person
  - Communicate to the originator that the process has been completed.

Comment: You should save your work often as you build your workflow. From the File menu, click Save or click the diskette icon  on the toolbar to save.

Comment: The instructions for building the workflow include tables showing the property sheets that will appear on the left side of the modeling canvas and comments added for these exercises. The property sheet columns include Property and Value fields that should be used for the workflow model and activities.



Section C: Welcome Workflow

Lesson: Enter Workflow Definition – Exercise 5 (Continued)

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Property Sheet

Column	Description
Property column	The name of the workflow field.
Value column	The value for the field. Enter the value as noted.
Comments column	Comments to the right of the property sheets provide instructions for populating the value field or if the value defaults. Comments have been added for these exercises and are not part of the Workflow product

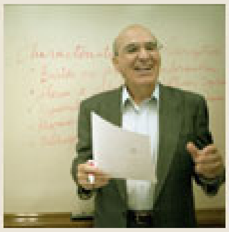
<u>Example of Property Sheet</u>:

Property	Value	Comments
Name	XX Welcome exercise	XX = *wfuser**XX*** number. This will be used later for searching.
Description	This is the simple welcome exercise.	
Version	0	Default value

Procedure

Follow these steps to complete the process

Step	Action
	<u>Comment:</u> When you see **XX**, remember to enter your unique number from Exercise 1.
Open the Workflow Modeler window	
1	In the Administration tab, click Workflow Modeler. <u>Comment:</u> The modeler canvas may take a few minutes to appear.
Create a new workflow definition and enter workflow details	
2	Enter the workflow definition details on the left side of the window to match the values found in the following table. <u>Comment:</u> Click on the Categorized tab to be sure the Properties are displayed in this order. You can also use the Alphabetized listing but remember that the Value fields will then be in a different order and must be adjusted to correspond to the appropriate Property fields.



Section C: Welcome Workflow

Lesson: Enter Workflow Definition – Exercise 5 (Continued)

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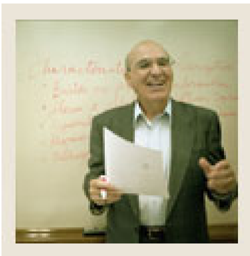
Property Sheet

Property	**Value**	**Comments**
Definition		
Name	XX Welcome Exercise	XX = unique number. This will be used later for searching.
Description	This is the simple welcome exercise	
Version	0	Default value.
Management		
Administrator	Central Admin	See Note 1 below.
Owner	SysAdmin	See Note 1 below.
Supplemental		
Context Parameters		See Note 2 below.
Document Tags		
Confidential	No	
Status	Development	
Best Practice	No	
Attribute Mappings		
Tracking		
Metrics Tracking	No	
Work Calendar		
Estimated Time	00:00	
Lagging Percentage		

Notes

Note 1: Enter the workflow Administrator and Owner roles

1. Click in the Value column for Administrator field. A button with three dots will appear. Click the  button to open the Find Role window.
2. Click Search in the Find Role window.
3. From the Search results list, select Central Admin.
4. Click OK or double click the selected role.
5. Repeat steps 1-4 above to select the SysAdmin role for the Owner.



Section C: Welcome Workflow

Lesson: Enter Workflow Definition – Exercise 5 (Continued)

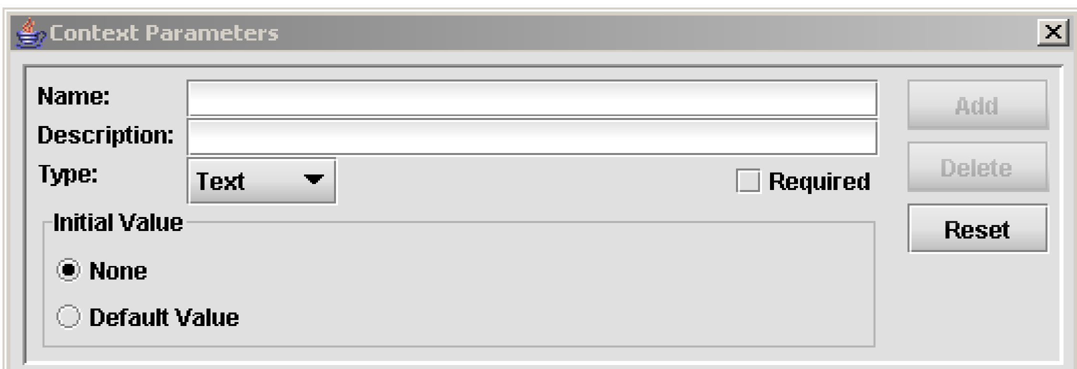
Jump to TOC

Notes, continued

<u>Note 2</u>: Enter context parameters

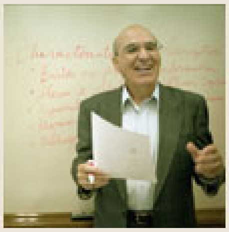
Context parameters are a list of all data needed for the entire workflow. Context parameters are workflow-specifics, not activity-specifics.

1. Click in the Value column next to Context Parameters field. Click the ... button to open the Context Parameter window.



2. This table shows the parameter values that will be used in the workflow. Instructions for adding parameters are in steps 3-6 below.

Name	Description	Type	Required	Default
MaritalStatus	Marital status code	Text	No	
ID	Identification number	Text	No	
InitiatingUserID	Central Admin User logon id	Text	No	
FullName	Full Name	Text	No	
PIDM	Internal identification	Numeric	No	



Section C: Welcome Workflow

Lesson: Enter Workflow Definition – Exercise 5 (Continued)

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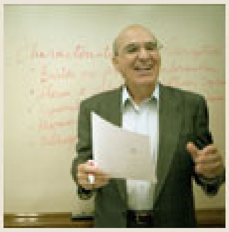
Notes, continued

Field	Instructions
Name	To enter a parameter name, type the first context parameter name in the **Name** box. As you type, the Add button will be activated. Do not enter spaces.
Description	This field is optional but recommended.
Type	Select the appropriate **Type** from the drop down list.
Required	If the parameter will be required to start the workflow, click in the **Required** check box.
Initial Value	If there is a default value for the parameter, click on the **Default Value** radio button. A box will be displayed; enter the default value. For the first

3. Once the parameter data is entered, click the **Add** button.
4. Continue adding parameters until you have entered the entire table as noted above.
5. If you need to change a parameter after it has been added, click on the parameter row. The parameter name will appear in the **Name** box. Notice that the **Add** button now says **Modify**. Make the necessary changes and click **Modify**.
6. When all the parameters are entered, click **OK** to return to the modeler window.



Section C: Welcome Workflow

Lesson: Create the Diagram – Exercise 6

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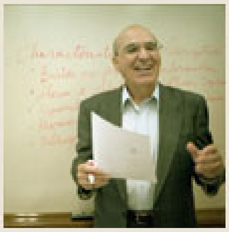
Purpose

In this exercise you will build the workflow diagram using the various workflow activities.

Drawing tools

These are the drawing tools you will use to diagram your workflow.

Tool	**Action**
Selector	Selects objects in the drawing area.
Activity	Places component activity in the drawing area.
Manual Activity	Places manual activity in the drawing area.
Approval Activity	Places approval activity in the drawing area.
Custom Activity	Places custom activities in the drawing area.
Email Activity	Places email activity in the drawing area.
Decision	Place decision box in the drawing area.
Parallel	Place parallel in the drawing area.
Transition	Inserts transitions between activities, parallels, start and stop.
Self Connector	Places self connector in the drawing area.
Stop	Place stop object in the drawing area.
Note	Places note in the drawing area.



Section C: Welcome Workflow

Lesson: Create the Diagram – Exercise 6 (Continued)

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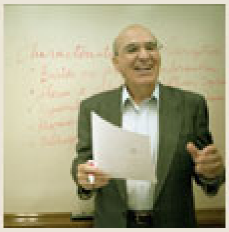
Helpful Modeling Hints

- You can place activity objects anywhere you wish. Your diagram does not have to look exactly like the sample diagram.
- Use the shift key to select multiple objects to copy, cut and paste, delete, or drop and drag.
- If you wish to delete an object, right-click it and select Delete OR click the Delete key on your keyboard.
- The transitions indicate the order in which objects are performed. Once you have drawn a transition between activities, you cannot move it. If you want to make a change, you need to delete the transition and insert a new one. You can reshape a transition by selecting and dragging it.
- Select the "Selector" tool at the top of the tool bar if you seem to be "stuck" in an unwanted mode (i.e., every time you click the canvas, you add another activity).
- Single click the object in the tool bar to add one of those objects to the drawing canvas.
- Double click the object in the tool bar to add multiples of the same object to the drawing canvas.
- The activity numbers are generated by the workflow system to give each activity a unique name. The activity name will be updated when you enter a name in the workflow property sheet.
- The activity names may alter the size of each activity "box". Therefore, you may want to wait to "reformat" your workflow model until after you have completed the entire model.
- Change the % on the tool bar to zoom in/out the model picture.



Section C: Welcome Workflow

Lesson: Create the Diagram – Exercise 6 (Continued)

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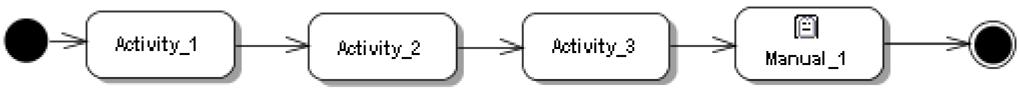
Create a diagram that looks similar to this one



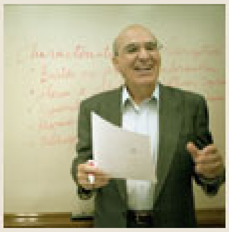
Notes

- The Start object, which is a black filled circle, is automatically entered into the top left corner of the drawing area. You will start your diagram with the first activity object.
- The activity numbers that appear on the canvas are system controlled. The activity name will be updated when you enter a name in the workflow property sheet.

Procedure

Follow these steps to complete the process

Step	Action
Enter activities	
1	Select the Activity tool, then click in the drawing area. This inserts an activity object into the workflow diagram. Repeat this step until there are three activities in the drawing area. Double clicking the object on the tool bar will allow you to place multiples of the same object on the drawing area.
2	Add a manual activity as the fourth activity in your workflow. Make sure you have selected the Manual Object from the modeler tool bar for this activity as the property sheets will differ.
3	When you have four objects in your diagram, select the Stop tool, and then click in the drawing area to insert a Stop object.
Connect objects	
4	Double click the Transition tool to connect all objects in the model.
5	Click the **Start** object (the black filled circle) and drag the mouse to the center of Activity 1. This draws a transition between the two objects which points toward Activity 1. When the transition changes color from red to blue, release the cursor and the two objects will be connected.
6	Connect the rest of the activities and the **Stop** object. When you are done, your model will resemble the diagram above.
7	Click the **Save** icon.



Section C: Welcome Workflow

Lesson: Define Properties for Activity 1 – Exercise 7

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Purpose

In this exercise and Exercises 8-10, you will define the properties for the workflow activities. Each activity type has specifics properties associated with it. Notice how the property sheet changes when you enter component activities and manual activities. Other activities used later in the exercises have different property sheets.

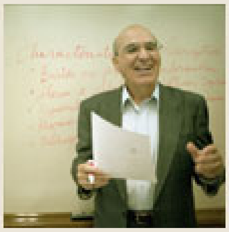
Procedure

Follow these steps to enter activity details.

Step	Action
1	Click the Selector tool at the beginning of the tool bar.
2	Click on Activity 1 to display Properties for activity 1 to the left of the drawing canvas.
3	Enter the following information in the Value column of the property sheet.

Property Sheet

Property	Value	Comments
Definition		
Name	CreateID_IDENform	
Description	Enter ID and name of new person	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Business Component		See Note 1 below
Component Type		See Note 1 below
Product Type		See Note 1 below
Release ID		See Note 1 below
Status		See Note 1 below
Parameter Mappings		See Note 2 below
Performer		
Role	Central Admin	See Note 3 below
Performer Rule		
Confidential	No	



Jump to TOC

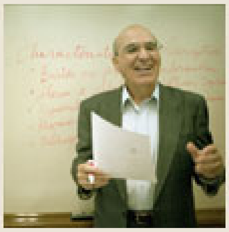
Property Sheet, continued

Supplemental		
Notification		
Mandatory	Yes	
Attribute Mappings		See Note 4 below
Tracking		
Metrics Tracking		
Estimated Time		
Lagging Percentage		

Notes

<u>Note 1</u>: Business Component

1. Click in the Value column to the right of **Business Component** field. Click the … button to open a Find Business Component window.
2. Enter search criteria:
   - Component Name: %AIDEN%
   - Category: WF Exercises (Select from the drop down list.)
   - Click Search
3. From the search Results window, select **one** of the following Identification forms for which you are most familiar in Banner. If you are unfamiliar with the Banner forms listed below, select SPAIDEN.
   - APAIDEN_Alumni/Development Identification Form_Ex
   - FOAIDEN_Person Identification Form_Ex
   - PPAIDEN_Employee/Applicant Identification Form_Ex
   - SPAIDEN_General Person Identification Form_Ex
4. Click **OK.**
5. Component Type, Product Type, Release ID, and Status will default from the component selected and cannot be entered or changed on the property sheet.



Section C: Welcome Workflow

Lesson: Define Properties for Activity 1 – Exercise 7 (Continued)

Jump to TOC

Notes, continued

Note 2: Parameter Mappings

This is a picture of the completed table. Instructions for building the table follow. The component data will default and cannot be entered or modified here.

Context Parameter		Component Parameter	Type
ID	←	KEY_BLOCK.ID	Text
FullName	←	KEY_BLOCK.FULL_NAME	Text

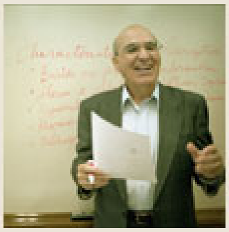
1. Click in the Value column for the **Parameter Mapping** field to open the Parameter Mapping window.
2. Click **Add** to add a new row.
3. Click in the **Component Parameter** field and select the KEY_BLOCK.ID parameter from the drop down list. You may need to expand the parameter column heading to view the full name. (To widen a field, place the cursor on the vertical line in the title bar next to the field name and move the cursor to the right.)
4. Repeat steps 2-3 until the all component parameters displayed in the table above are added to the parameter table.

For each component parameter that is used in this activity, you need to select the corresponding context parameter.

5. Click in the Context Parameter field *to the left of the first Component Parameter*. (*Do not* click in the Context Parameter button 

.) Select the context parameter that matches the component parameter. Repeat this step until all the parameters are mapped.

The order in which the parameters appear on your screen may differ from the order that is shown in the table above. Check the component parameter name before you select the context parameter to make sure that you are selecting the right parameter.



Section C: Welcome Workflow

Lesson: Define Properties for Activity 1 – Exercise 7 (Continued)

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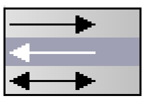
Notes, continued

6. Click on the arrow between the context parameter and component parameter and select the arrow that indicates output of the activity for each of the mapped parameters.

   You can identify component parameters as input or output by the direction of the arrow:



- For a component input parameter, the arrow points toward the component parameter.
- For a component output parameter, the arrow points away from the component parameter.
- If an arrow points in both directions, then the parameter value can be both input and output.

7. Click **OK**.

<u>Note 3</u>: Role

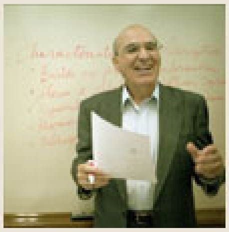
1. Click in the Value column for **Role**.
2. Click the … button to select a role.
3. Click **Search**.
4. In the **Find Role** window, select *Central Admin* from the search results.
5. Click **OK**.

<u>Note 4</u>: Attributes Mappings

This is a picture of the completed table. Instructions for building the table follow. The attributes will default from a set list of attributes and cannot be entered or modified here.

Context Parameter		Attribute	Type
InitiatingUserID	←	Performer Logon	Text

1. Click in the Value column for the **Attribute Mappings** field to open the Attribute Mappings window.
2. Click **Add** to add a new row.
3. Click in the **Attribute** field and select the Performer Logon parameter from the drop down list.
4. Click in the Context Parameter field *to the left of the first Attribute*. (*Do not* click in the Context Parameter button Context Parameters... .) Select the context parameter that matches the component parameter.
5. From the **File** menu, choose **Save** or click on the to save.



Section C: Welcome Workflow

Lesson: Define properties for Activity 2 – Exercise 8

Jump to TOC

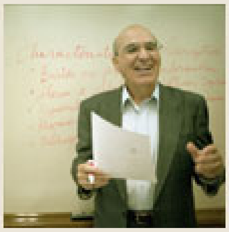
Procedure

Follow these steps to enter activity details.

Step	Action
1	Click the Selector tool at the beginning of the tool bar.
2	Click on Activity 2 to display **Properties** for Activity 2 to the left of the drawing canvas.
3	Enter the following information:

Property Sheet

Property	Value	Comments
Definition		
Name	EnterMaritalStatus_SPAPERS	
Description	Enter marital status for new person	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Business Component	SPAPERS_General Person Form_Ex.	See Note 1.
Component Type		
Product Type		
Release ID		
Status		
Parameter Mapping		See Note 2.
Performer		
Role	Central Admin	See Note 3.
Performer Rule		
Confidential	No	
Supplemental		
Notification		
Mandatory	Yes	
Attribute Mappings		
Tracking		
Metrics Tracking	No	
Estimated Time		
Lagging Percentage		



Section C: Welcome Workflow

Lesson: Define properties for Activity 2 – Exercise 8 (Continued)

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Notes

Note 1: Business Component

1. Click in the Value column for **Business Component**. Click the … button to open a **Find Business Component** window.
2. Enter component selection criteria:
   - Component Name: %SPAPERS%
   - Category: WF Exercises (Select value field from the drop down list)
   - Click **Search.**
3. From the **Search Results** window, select the SPAPERS_General Person Form Ex.
4. Click **OK**.

Comment: Component Type, Product Type, Release ID, and Status will default from the component.

Note 2: Parameter Mapping

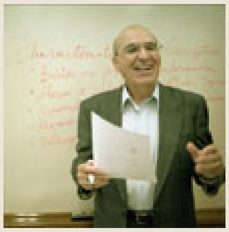
1. To map each context parameter to a component parameter, select these values:

Context Parameter		Component Parameter	Type
ID	→	KEY_BLOCK.ID	Text
MaritalStatus	←	SPBPERS.SPBPERS_MRTL_CODE	Text

2. Click OK.

Note 3: Role

1. Click in the Value column for **Role**.
2. Click the … button to select a role.
3. Click **Search**.
4. In the Find Role window, select *Central Admin* from the search results.
5. Click **OK**.
6. From the **File** menu, choose **Save**.



Section C: Welcome Workflow

Lesson: Define Properties for Activity 3 – Exercise 9

Jump to TOC

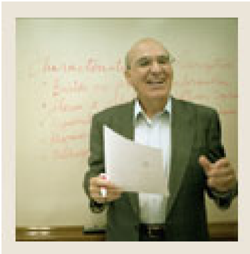
Procedure

Follow these steps to enter activity details.

Step	Action
1	Click the Selector tool at the beginning of the tool bar.
2	Click on Activity 3 to display Properties for activity 3 to the left of the drawing canvas.
3	Enter the following information:

Sheet

Property	Value	Comments
Definition		
Name	EnterEmail_GOAEMAL	
Description	Enter email address for new person	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Business Component	GOAEMAL_Email_Address_Form_Ex	See Note 1.
Component Type		
Product Type		
Release ID		
Status		
Parameter Mappings		See Note 2.
Performer		
Role	Email Admin	See Note 3.
Performer Rule		
Confidential	No	
Supplemental		
Notification		See Note 4.
Mandatory	Yes	
Attribute Mappings		
Tracking		
Metrics Tracking	No	
Estimated Time		
Lagging Percentage		



Section C: Welcome Workflow

Lesson: Define Properties for Activity 3 – Exercise 9 (Continued)

Jump to TOC

Notes

<u>Note 1</u>: Business Component

1. Click in the Value field to the right of **Business Component**. Click the … button to open a **Find Business Component** window.
2. Enter search criteria
   - Component Name: GOAEMAL%
   - Category : WF Exercises (Select from the drop down list)
   - Click Search.
3. Select the GOAEMAL_E-mail Address Form_Ex.
4. Click OK.

<u>Comment:</u> Component Type, Product Type, Release ID, and Status will default from the component.

<u>Note 2</u>: Parameter Mapping

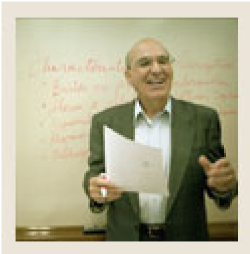
1. To map each context parameter to a component parameter, select these values:

Context Parameter		**Component Parameter**	**Type**
ID	→	KEY_BLOCK.ID	Text
PIDM	←	KEY_BLOCK.PIDM	Numeric

2. Click OK.

<u>Note 3</u>: Role

1. Click in the value field to the right of **Role**. Click the … button to select a role.
2. In the **Find Rol**e window, click **Search**, select Email Admin from the search results.
3. Click **OK**.



Section C: Welcome Workflow

Lesson: Define Properties for Activity 3 – Exercise 9 (Continued)

Jump to TOC

Notes, continued

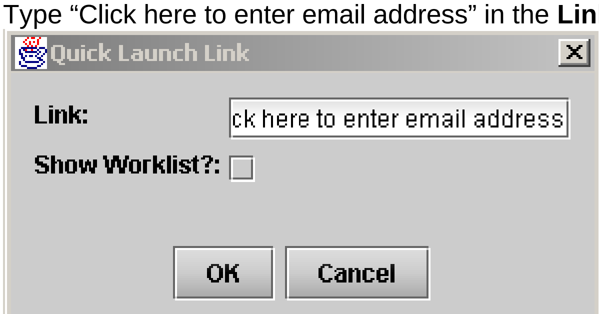
Note 4: Notification

1. Click in the Value field to the right of **Notification**. Click the … button to open the email window.
2. Click **From** button 

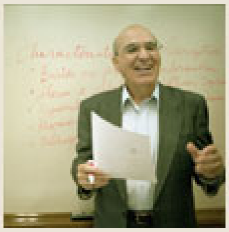
.
3. Click **Search**.
4. Select your user ***wfuserXX***.
5. Click **OK**.
6. Click **To** button 

.
7. Select the *Roles Tab*.
8. Click **Search**.
9. Select the role of *Email Admin*.
10. Click **OK**.
11. Click in the **Subject** field and enter “Email address needed for: ” (without quotes).
12. Stay in the **Subject** field and right click.
13. Click the **Context Parameters** box 

.
14. Select **FullName**.
15. Click in the email body portion of the window then right click, select **Quick Launch Link** 

.
16. Type “Click here to enter email address” in the **Link** field.


.
17. Uncheck the **Show Worklist** box to launch the work item directly.
18. Click **OK** in the Quick Launch Link window.
19. Click **OK** in the email window.
20. From the **File** menu, choose **Save**.



Section C: Welcome Workflow

Lesson: Define Properties for Manual Activity – Exercise 10

Jump to TOC

Purpose

A manual activity is a form of notification that appears on a worklist. The notification must be acknowledged before the workflow can continue advancing.

Make sure you have selected the Manual Object from the modeler tool bar for this activity. The property sheet should display the property fields listed below. If the property sheet in the modeler does not match the property sheet below, you have selected the wrong object from the tool bar.

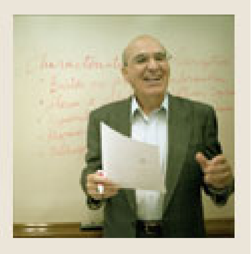
Procedure

Follow these steps to enter activity details.

Step	Action
1	Click the Selector tool at the beginning of the tool bar.
2	Click on Manual_1 to display **Properties** for the manual activity to the left of the drawing canvas.
3	Enter the following information:

Property Sheet

Property	Value	Comments
Definition		
Name	CompleteWelcomeProcess	
Description		
Presentation		
Background Color		
Foreground Color		
Image Name	Manual_activity.gif	Defaults for manual activity
Component		
Message		See Note 1.
Performer		
Role	Central Admin	See Note 2.
Performer Rule	InitiatingUserID	See Note 3.
Confidential	No	
Supplemental		
Notification		
Mandatory	Yes	
Attribute Mappings		



Section C: Welcome Workflow

Lesson: Define Properties for Manual Activity – Exercise 10 (Continued)

Jump to TOC

Notes

Note 1: Message

1. Click in the **Message** field. The body of the message may contain text as well as context parameters.
2. To add parameters into the body of a message:
    a. place your cursor in the body of the message where the parameter value should display and right click
    b. click Context Parameter
    c. select the parameter you wish to display. Parameters are automatically preceded by an @ sign when copied into the body of the message.
3. In the Manual Instructions window, enter the following message: "The Welcome process for @FullName is now complete."
4. Click **OK**.

Note 2: Role

1. Click in the Value field to the right of **Role**. Click the … button to select a role.
2. In the Find Role window, click **Search**, and select *Central Admin* from the search results
3. Click **OK**.

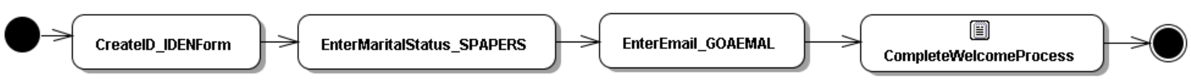
Note 3: Performer Rule

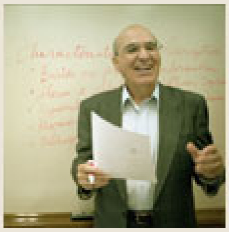
A Performer Rule is used to send the workitem to a particular user with the role specified. The Performer Rule can be either a context parameter or a user login. The value of the context parameter must be a Workflow user logon id. In this case, we want to use the Banner ID for the user who initially added the new person.

1. Click in the value field to the right of **Performer Rule**. Click the … button to select a rule.
2. In the Performer Rule window, select the **Context Parameter** option.
3. Select the *InitiatingUserID* context parameter from the search results.
4. Click **OK**.
5. Click **Save**.

Workflow 1 complete

Your diagram should look similar to this:





Section C: Welcome Workflow

Lesson: Validate and Change the Workflow Status – Exercise 11

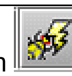
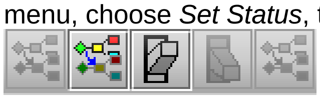
Jump to TOC

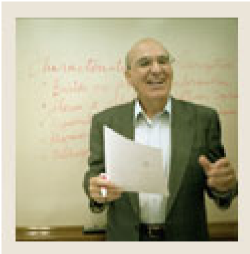
Purpose

The purpose of this exercise is to validate the workflow model. This will determine if your workflow syntax is correct.

Procedure

Follow these steps to complete the process.

Step	Action
1	From the **Workflow** menu, choose Validate or click on the Validate icon . When you validate, you will see one of two things: • A message in the bar below the modeler drawing area, telling you the workflow is valid. • Error messages in the **Build** tab (below the modeler drawing area), telling you the workflow is invalid along with a list of errors.
2	If you have any errors, determine what corrective actions are necessary. Depending on the type of error you may be able to double click on the error message to enable the problem area.
3	Once you have a valid model, change the workflow status to Test. From the **Workflow** menu, choose *Set Status*, then choose **Test** OR click on the Test icon  on the toolbar. Be sure you select Test icon and not the Activate icon.



Section C: Welcome Workflow

Lesson: Start the Workflow from the Modeler – Exercise 12

Jump to TOC

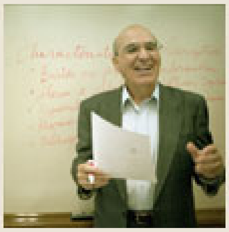
Purpose

The purpose of this exercise is to start the workflow manually to test your model.

Procedure

Follow these steps to complete the process.

Step	Action
1	From the Modeler window, click the **Start** icon  in the tool bar frame. <u>Comment:</u> If the Start icon is not enabled (is still grayed out) on your model, you did not successfully put the model in Test status (see Exercise 11).
2	A **Start Workflow** window will appear.
3	Enter *XX Welcome Workflow* in Workflow Specifics. (Remember **XX** is your unique number.) <u>Comment:</u> The workflow specifics name will appear in your worklist, much like a subject line in an email. This will help you identify your workflow.
4	Click **OK** to start the workflow.
5	Click **OK** in the Workflow has started Message window.
6	Close the Modeler window.



Section C: Welcome Workflow

Lesson: Respond to Work – Exercise 13

Jump to TOC

Purpose

The purpose of this exercise is to complete the workflow activities as they appear on your worklist.

Procedure

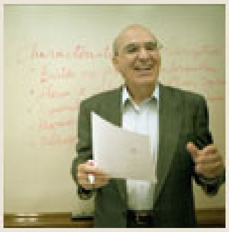
Follow these steps to complete the process.

Step	Action
1	Open the Worklist on the home page. Click **Worklist**. Comment: Because all class participants have the same workflow roles assigned to their usernames, you will see workitems submitted by other users. Be sure to start only your activities as you complete the exercises.

Respond to Activity 1 (Identification Form)

Follow these steps to complete the process.

Step	Action
1	Click on your workitem to start the activity.
2	The Identification form used in your workflow model should open in Banner. • Enter a new ID or click the *Generate ID* icon and select Next Block. • Enter Last Name and First Name.
3	Click the Workflow Submit button to save your data and tell Workflow the activity is complete. Banner should return to the GUAGMNU. If you are not returned to Workflow, click the Workflow button on the Taskbar to bring Workflow to the front.
4	In Workflow, if your workitem says “Performing,” click the *Worklist* option in the Home tab on the left side of the window or click on the browser refresh button.
5	The next activity from your model should appear on your worklist. Click the magnifying glass at the end of the workitem line to view options/details for the workitem.
6	On the Workitems Details page, select Status to view the progress of your workflow. A diagram of your model will open. The diagram has the following indicators: • Completed activities have a green checkmark . • Current activities flash red box with a "running man" I icon.
7	Click **Worklist** at the top of the options list on the left side of the window to return to the home page.



Section C: Welcome Workflow

Lesson: Respond to Work – Exercise 13 (Continued)

Jump to TOC

Respond to Activity 2 (SPAPERS form)

Procedure

Follow these steps to complete the process.

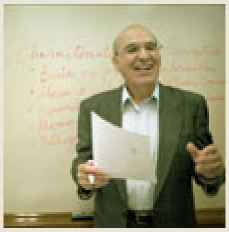
Step	Action
1	Select the workitem and click to start this activity.
2	The person form SPAPERS will open with the ID of the new person in the keyblock ID field. Select **Next Block**. If the Banner form does not appear, click on the Banner button on the Taskbar to bring the Banner window to the front.
3	Enter a marital status code and other bio / demographic information. Only the marital status code will be returned to Workflow.
4	Click **Workflow Submit** .
5	Return to Workflow and refresh your worklist. A new item should appear on your worklist.

Respond to Activity 3 (GOAEMAL form)

Procedure

Follow these steps to complete the process

Step	Action
1	This activity included an automatic Notification and you should receive an email informing you of your work. Check your email and click on the link in the email to launch this activity. If you have not received the email with the workflow link, check the status of your activity to determine why the email was not sent. Ask the instructor for help. Click the workitem in your worklist to start the activity.
2	The GOAEMAL form will open with the ID of the new person in the keyblock ID field. Select **Next Block**.
3	Enter an email address.
3	Check the **Preferred** checkbox. (This is important for the workflow.)
4	Click **Workflow Submit** .
5	Return to Workflow. A new item should appear on your worklist.



Section C: Welcome Workflow

Lesson: Respond to Work – Exercise 13 (Continued)

Jump to TOC

Respond to Activity 4 (Manual Activity)

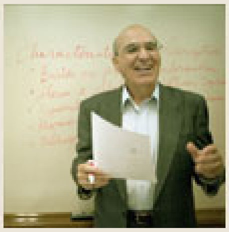
Purpose

This manual activity was directed to the person who entered the new ID. This workitem should only appear on the worklist of your Workflow User ID of *wfuser**XX***. This workitem should not be on other participants' worklists and you should not see any CompleteWelcomeProcess workitems from other participants on your worklist.

Procedure

Follow these steps to complete the process

Step	Action
1	Click the workitem in the worklist to start.
2	The text information and name you entered in Banner will appear in place of your worklist. Click **Complete**.
3	This completes the workflow.



Section C: Welcome Workflow

Lesson: Review Workflow Status – Exercise 14

Jump to TOC

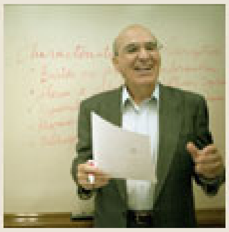
Procedure

Follow these steps to review workflow status.

Step	Action
1	In the navigation bar on the left of the window, select *Workflow Status Search*.
2	A search criteria window appears, enter "%*XX*%" in the **Workflow Name** field where ***XX*** is your *wfuser**XX***. Click Search to search for your workflow. Workflow uses % and * as wildcards. <u>Comment:</u> Leave all criteria blank and select Search to see all workflows.
3	Select your workflow to see the progress. When the picture is opened, every activity should be marked complete. Change the percentage in the tool bar above the model picture to zoom in/out.
4	Click the Workflow Details tab to view the information for this workflow instance.
5	Click on the Workflow Status tab again. Select an activity and click the Activity: and Workitem Details tabs to view information specifics to the activity.

End Workflow 1

Now that you have successfully built a simple workflow, we will be adding new activities to the model that more fully utilize the features within Workflow. Since you are now familiar with the navigation and concepts of building a model, the instructions will be less detailed as we move forward.



Section D: Business Processes

Lesson: Business Process Set Up – Exercise 15

Jump to TOC

Purpose

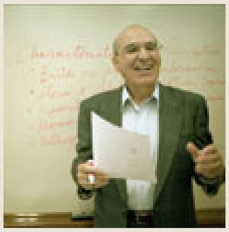
The purpose of this exercise is to create a business process. Business Processes control what workflow should start to complete the process. The My Processes option can be used to manually start a Business Process which starts a workflow; however, before a Workflow user will see any processes listed, s/he has to be in an Authorized Initiator role.

Procedure

Follow these steps to open the Enterprise Management window.

Step	Action
Open the Enterprise Management window	
1	Select **Enterprise Management** from the **Workflow Administration** options.
Create a business process	
2	Scroll down and click **Add Business Process**.
3	In the **Name** field, enter *XX Welcome Process*.
4	In the **Description** field, enter *Welcome new person workflow*.
5	From the **Status** list, select **Active**.
6	Click **Save Process**.
Add Workflow Association to a process	
7	Click **Add Workflow Association** in the **Associated Workflows** tab.
8	Select the **XX Welcome Exercise Complex** workflow from the drop-down list.
9	The current date will default.
10	Click **Save Association**.
Add Authorized Initiator	
11	Click on **Add Authorized Initiator**. (You may need to scroll down to see this tab.)
12	Select the Central Admin role from the drop down list.

Comment: Associated Events will be discussed in detail in a later exercise.



Section D: Business Processes

Lesson: Start Process – Exercise 16

Jump to TOC

Purpose

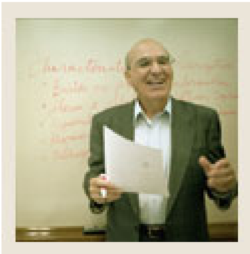
The My Processes option can be used to manually start a Business process which starts a workflow; however, before a Workflow user will see any processes listed, s/he has to be in an Authorized Initiator role. The purpose of this exercise is to set up the Authorized Initiators who can start a Business Process.

Procedure

Follow these steps to add an Authorized Initiator to your Welcome Process.

Step	Action
1	Click on **My Processes** and select your Welcome Process.
2	Enter a Workflow Specifics Name and any required parameters.
3	Click **Start Workflow**. Another message will appear indicating that the workflow was started successfully. Click on **OK**.
4	Complete workitems.

Comment: Any workflow user who has the role of Central Admin will now see your Welcome Process when they click on My Processes. Notice that the Guard Condition does not apply to processes that are started manually. Guard Conditions will be discussed in detail in a later exercise.



Section E: Complex Welcome Workflow

Lesson: Copy and Modify the Existing Workflow – Exercise 17

Jump to TOC

Purpose

The purpose of this exercise and Exercise 17 is to add new activities and more complex flow to the workflow you create in the earlier exercises. You will add business rules, an email activity, a custom activity, and parallel activities to your workflow.

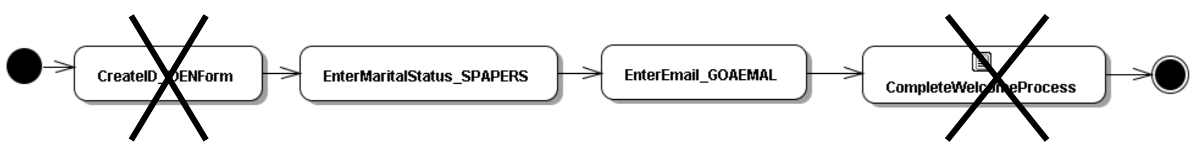
Procedure

Follow these steps to open the Workflow Modeler window.

Step	Action
1	Open the Workflow Modeler window.
2	Use Find in the File menu or click the magnifying glass icon  to select the workflow you created in the previous exercises: *XX Welcome Exercise*.
3	From the **File** menu, choose **Copy** or click the Copy icon . <u>Comment:</u> The copy function will copy the model as is, change the status to development and change the name to Copy of *model name*.
4	Modify the name of the newly copied model to ***XX** Welcome Exercise Complex*.

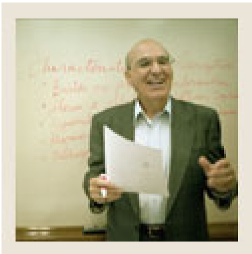
The first activity, CreateID_IDENForm, will be removed from the model and will be replaced by an external event which automatically starts the workflow. The CompleteWorkflowProcess manual activity will also be deleted and replaced by an email.

Current model: The first and last activities are no longer part of the model and can be deleted.



<u>Comment:</u> To delete an activity, select the activity and select **Clear** from the **Edit** menu; or select the activity, right click and select **Cut.**

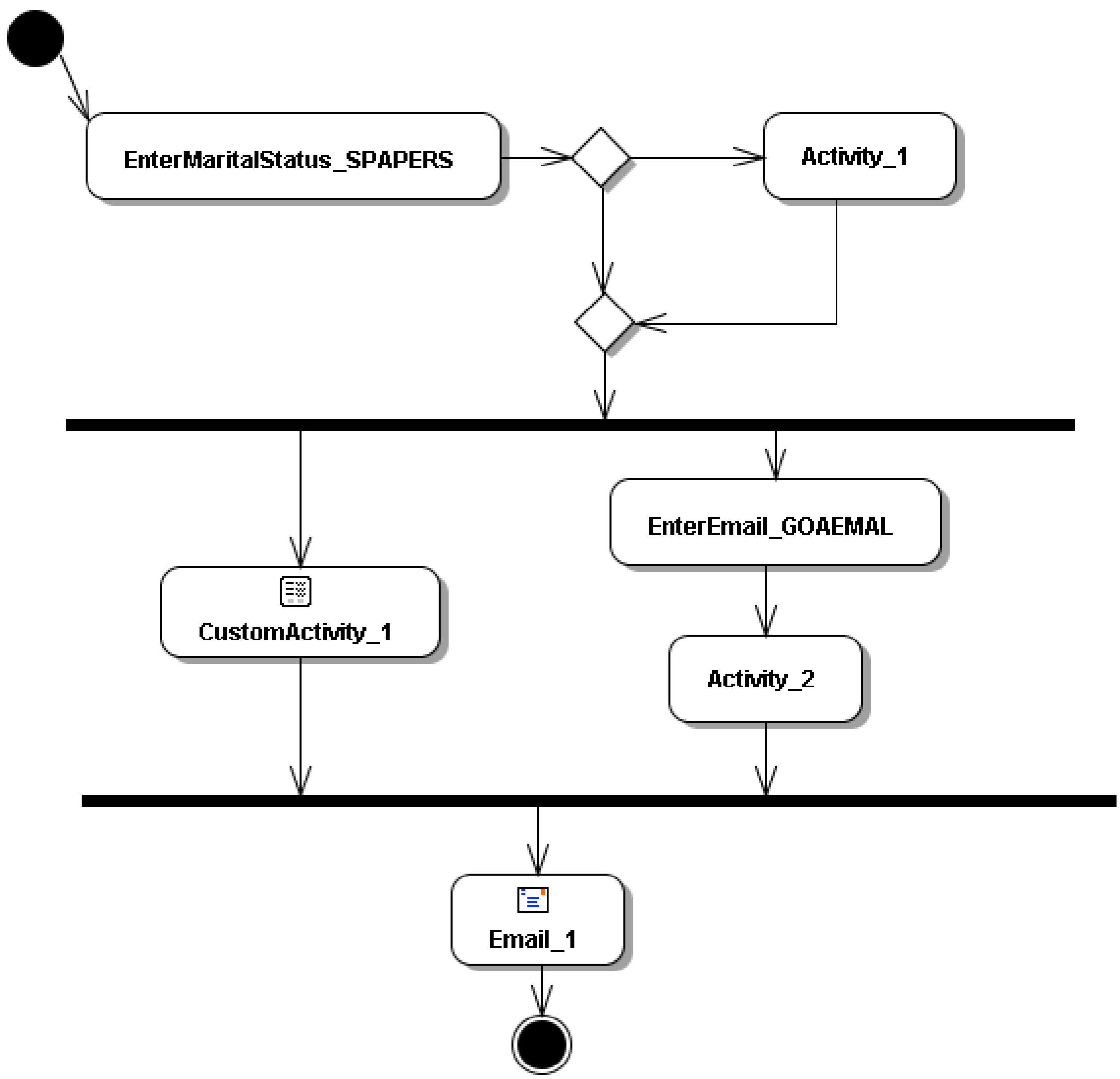
<u>Comment:</u> While you work with the Workflow Modeler, remember to save your work often.

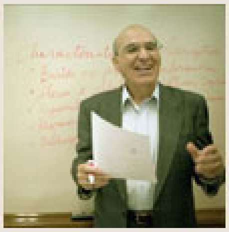


New Model

Using the modeler tools, modify the workflow model to look similar to the following picture. Detailed instructions for changing the picture are not provided in the instructions. (Property sheet details for each new activity are defined below.)

The new model should look like this:





Section E: Complex Welcome Workflow

Lesson: Update the Context Parameters – Exercise 18

Jump to TOC

Introduction

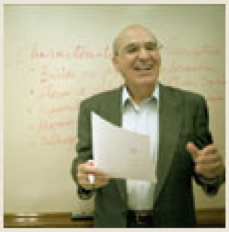
Because this workflow will be started from a Business Event, some context components will be required when the workflow is started.

Procedure

Follow these steps to update required parameters.

Step	Action
1	Click on the Context Parameter value field and open the Context Parameter window.
2	Click on the ID field in the lower section of the Context Parameter window. The ID information will be displayed in the upper section.
3	Click in the **Required** box and then click the **Modify** button.
4	Update the FullName field.
5	Add the parameter EmailAddr.
6	Delete the InitiatingUserID parameter.

Name	Description	Type	Required	Default
MaritalStatus	Marital status code	Text	No	None
ID	Identification number	Text	Yes	None
FullName	Full Name	Text	Yes	None
PIDM	Internal identification number	Numeric	No	None
EmailAddr	Email Address	Text	No	None
ParkingType	Parking Permit	Text	No	Unknown
LicenseNo	License Number	Text	No	Unknown



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Parking Permit Activity – Exercise 19

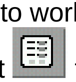
Jump to TOC

Purpose

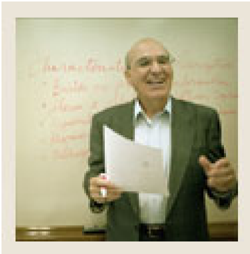
New activities added to the workflow model now need to be defined.

Enter properties for the custom activity – Parking Information

The custom activity is a feature that allows you to build your own custom form in a workflow model. The form options include radio buttons, drop down lists, text boxes, and data fields. Each field that you add corresponds with data that must be passed into workflow context.

1. Make sure you selected the Custom Activity object  from the modeler tool bar for this activity.

Property	Value	Comments
Definition		
Name	ParkingInformation	
Description	Enter parking information	
Presentation		
Background Color		
Foreground Color		
Image Name	custom_activity.gif	
Component		
Custom Activity Designed		See Note 1.
Parameter Mappings		See Note 2.
Performer		
Role	Parking Authority **XX**	Select your specifics parking authority role from Exercise 2
Performer Rule		
Confidential	No	
Supplemental		
Notification		
Mandatory	Yes	
Attributes Mapping		
Tracking		
Metrics Tracking		
Estimated Time		
Lagging Percentage		



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Parking Permit Activity – Exercise 19 (Continued)

Jump to TOC

Notes

Note 1: Customer Activity Details

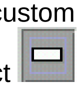
1. Click in Value column of **Custom Activity Designer** field.

   Comment: The Value field should display “Untitled Form” before you update the custom activity fields. When you save the custom activity form, the form name will be shown in this field.

2. Complete the Custom Activity Property Sheet as shown:

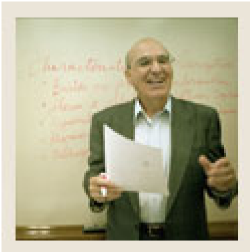
Property	Value	Comments
Supplemental		
Title	Parking Request	
Parameters		System-generated value
Show Attachments	No	

Comment: Each field on the custom page will have a separate property sheet.

3. Click the Data Field object  from the tool bar to add to the canvas. Add **two** fields – one for ID and one for Name. Complete the data field property sheet for ID and Name field as noted below. There will be separate property sheet for each field.

Property	Values for ID field
Definition	
Name	ID
Description	ID
Parameter	
Type	Text
Required	Yes
Guaranteed	No
Supplemental	
Read-only	Yes
Label	ID
Width	10

4. Click **Apply.**



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Parking Permit Activity – Exercise 19 (Continued)

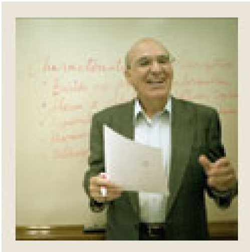
Jump to TOC

Parking Information Notes, continued

Property	Values for Name field
Definition	
Name	Name
Description	Name
Parameter	
Type	Text
Required	Yes
Guaranteed	No
Supplemental	
Read-only	Yes
Label	Name
Width	60

5. Click **Apply**.
6. On the tool bar, select the Radio Button Group object. Enter the following in the radio group object property sheet.

Property	Value	Comments
Definition		
Name	ParkingPermit	
Description	Type of parking permit request	
Parameter		
Type	Text	
Required	No	
Guaranteed	Yes	
Supplemental		
Label	Parking Permit	
Choices	**XX** items	See Choices below.
Height	3	You can choose height to format the data.



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Parking Permit Activity – Exercise 19 (Continued)

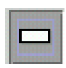
Jump to TOC

Parking Information Notes, continued

Choices

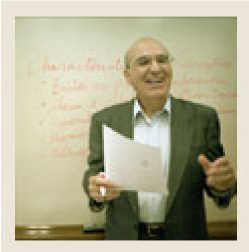
Click in the Choice value field to open *Choices* window. Click **New** to add and label the radio group choices. Enter a value for each radio group choice. You can build your own choices – here are some suggestions:

- Faculty Parking
- Student Parking
- Staff Parking
- Handicap

7. Click **OK**.
8. Click the Data Field object  from the tool bar. Complete the data field property sheet for license number:

Property	Values for License field
Definition	
Name	LicenseNumber
Description	License plate number
Parameter	
Type	Text
Required	No
Guaranteed	Yes
Supplemental	
Read-only	No
Label	License Number
Width	10

9. Click **Apply.**
10. Repeat Step 8 to enter additional data fields as desired. Try using radio buttons or drop down fields. Some options might be:
    - Make of Car
    - Year
    - Color
11. Click **Apply** after each field definition is added.
12. After all fields are entered, click **OK** to return to the workflow model.
    Comment: If you want to remove a field from the custom activity form, select the field and right click. Then click Delete.



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Parking Permit Activity – Exercise 19 (Continued)

Jump to TOC

Parking Information Notes, continued

Note 2: Custom Activity Details – Parameter Mappings

Each field added to the Custom form is associated with a parameter that must be mapped to a workflow context parameter.

1. On the custom activity property sheet, click in the **Parameter Mappings** field to open the parameter mapping window. You should see a row for each parameter that you designated as “required” on the custom form.
2. Click in the Context Parameter field and select the appropriate parameter name from the drop down list to map the parameter to the required component parameter.
3. Click **Add** several times.
4. Click in the **Component Parameter** field to display the drop-down list of all the parameters that were entered on the custom activity form. Be sure you have a parameter line for each parameter used in the custom component.

Comment: New parameters entered on the custom activity form have not been included in the workflow context parameter list. You need to add these parameters to the context parameter list and then complete the mapping.

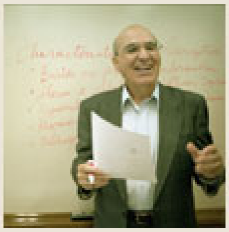
5. Click on the **Context Parameters** button 

.
6. Add a context parameter for each new field on the custom form. For each parameter, click the Default Value radio button and enter “N/A” or another value.
7. Click **OK** to close the Context Parameter window.
8. Map the appropriate context parameter to each custom activity (component) parameter. Remember to change the arrow to match the flow of data.
   - Required yes – the arrow (and data) goes from the context parameter to the component parameter
   - Guaranteed yes – the arrow (and data) points from the component parameter to the context parameter.

   Your parameter mapping window will look similar to this. You may have additional parameters if you added more fields on the custom form.

Context Parameter		Component Parameter	Type
ID	⟶	ID	Text
FullName	⟶	Name	Text
ParkingPermit	⟵	ParkingPermit	Text
LicenseNo	⟵	LicenseNumber	Text

9. Click **OK**.
10. Click **Save**.



Section E: Complex Welcome Workflow

Lesson: Define Guard Condition – Exercise 20

Jump to TOC

Add business rules (Guard Conditions)

To make the workflow efficient and "smart", add business rules to launch the emergency contact form only if the person is not married.

Decision: Is the person married?

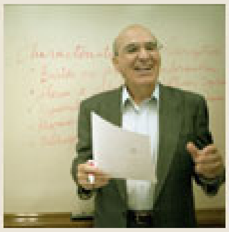
- No – Person is not married, move onto the parallel activities in the workflow.
- Yes – Person is married, enter emergency contact information before moving on to the parallel activities in the workflow.

Comment: If you are using status code or values other than "M" for Married, rules below may need to be modified to use your institution's values. Speak to the instructor.

Procedure

Follow these steps to complete the process.

Step	Action
Business rule 1 (Married)	
1	Right-click on the transition line between the first *decision* (diamond shape) and the EmergencyInfo_SPAEMRG activity. Click in the Guard Condition field. (Refer to the workflow model in Exercise 16.)
2	In the Transition Properties window, enter the following: • Enter description: Married • Click the **Parameters** folder listed at the lower left portion of the window • Select the MaritalStatus parameter. • Click the **Paste** button or double click MaritalStatus. (This will add the selected item to the rule canvas in the middle of the window.) • Click the = button. • Enter "M" after the equal sign in rule. Include the double quote marks. The rule should look like this: MaritalStatus = "M" (Marital Status equal to "M")
3	Click **OK**.
4	Select the same transition. Right-click on the transition, then select *Show Guard*.
5	When the *Married* description appears, drag it near the transition.
6	Click **Save**.



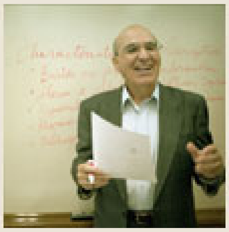
Section E: Complex Welcome Workflow

Lesson: Define Guard Condition – Exercise 20

Jump to TOC

Procedure, continued

Step	Action
Business rule 2 (Not Married)	
1	Right-click on the transition between the first *decision* and the second *decision*. Click in the Guard Condition field. (Refer to workflow model diagram again if necessary.)
2	In the Transition Properties window, enter the following: • Enter description: Not Married • Click the **Parameters** folder • Select the MaritalStatus parameter • Click the <> button • Enter “M” after the not equal sign in rule. Include the double quote marks The rule should look like this: MaritalStatus <> “M”
3	Click **OK**.
4	Select the same transition. Right-click on the transition, then select *Show Guard*.
5	When the *Not Married* description appears, select and drag it near the transition.
6	You can display the guard description vertically by right clicking on the description and selecting “Display Guard Vertically”.
7	Click **Save**.



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Emergency Contact Activity – Exercise 21

Jump to TOC

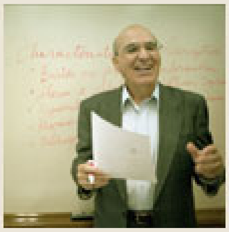
Procedure

Select each new activity and change the activity name and description as shown below. Then enter the properties for each activity as shown in the following property sheet descriptions.

1. Activity_1: EmergencyInfo_SPAEMRG; Description: Enter emergency contact information for married person.

Enter properties for EmergencyInfo_SPAEMRG

Property	Value	Comments
Definition		
Name	EmergencyInfo_SPAEMRG	
Description	Enter emergency contact info for new person.	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Business Component	SPAEMRG_Emergency Contact Ex	
Component Type		
Product Type		
Release ID		
Status		
Parameter Mappings		See Note 1.
Performer		
Role	Records Specialist	
Performer Rule		
Confidential		
Supplemental		
Notification		
Mandatory	Yes	
Attributes Mapping		
Tracking		
Metrics Tracking	No	
Estimated Time		
Lagging Percentage		



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Emergency Contact Activity – Exercise 21

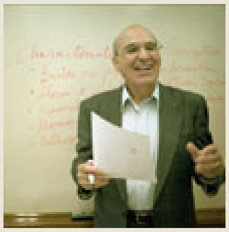
Jump to TOC

Notes

Note 1: Parameter Mapping

1. To map each context parameter to an component parameter, select these values:

Context Parameter		**Component Parameter**	**Type**
ID	→	KEY_BLOCK.ID	Text



Section E: Complex Welcome Workflow

Lesson: Define Properties for Automated Activity – Exercise 22

Jump to TOC

Enter properties for AA_RetrieveEmailAddr

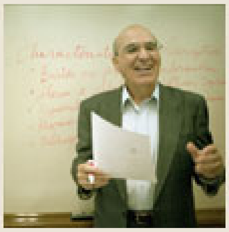
Property	**Value**	**Comments**
Definition		
Name	AA_RetrieveEmailAddr	
Description	Automated activity to retrieve email address	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Business Component	WFPKG_GOREMAL	
Component Type		
Product Type		
Release ID		
Status		
Parameter Mappings		See Note 1.

Notes

Note 1: Parameter Mapping

1. To map each context parameter to an component parameter, select these values:

Context Parameter		**Component Parameter**	**Type**
PIDM	→	pidm	Numeric
EmailAddr	←	emailAddr	Text



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Email Activity – Exercise 23

Jump to TOC

Enter properties for the Email activity

1. Make sure you selected the Email object from the modeler tool bar for this activity.

Property	Value	Comments
Definition		
Name	WelcomeEmail	
Description	This is a welcome email being sent to the new person.	
Presentation		
Background Color		
Foreground Color		
Image Name	email_activity.gif	
Component		
From		See Note 1.
To	@EmailAddr	See Note 1.
CC		Enter your email address
BCC		
Subject	Welcome to SGHE University	Enter your institution's name
Body		See Note 1.
Attachments		
Sending Failure		See Note 2.
Supplemental		
Attribute Mappings		

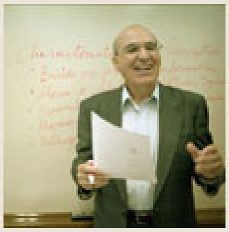
Notes

Note 1: Email properties

1. Click in the **From** value field to display the email property sheet.
2. In the **Email Properties** window, click the **From:** button.
3. Click Search to display the logon IDs with email addresses in Workflow.
4. Select your userid, click **OK**.
5. Right click in the field to the right of the **To:** button.
6. Click **Context Parameters** to display the context parameters.
7. Select the **EmailAddr** context parameter. @EmailAddr will appear in the **To:** box.

   Comment: This is the email address that you entered on GOAEMAL. It is returned to the workflow from the automated activity AA_RetrieveEmailAddr.

8. Click in the **CC** field and enter your email address.



Section E: Complex Welcome Workflow

Lesson: Define Properties for the Email Activity – Exercise 23

Jump to TOC

Email activity Notes, continued

9. Add the following to the email body:
   - Click in the email body field. Type “Dear” (without the quotes).
   - Right click and then click on the Context Parameters button. Select FullName. Continue adding text and parameters to the email body.

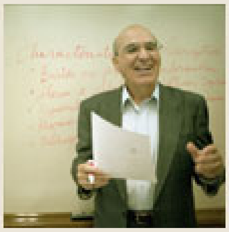
> Dear @FullName,
>
> Welcome to SGHE Institution! You will be receiving a letter in the mail shortly providing some important information. Please contact the central office if you have any questions.
>
> Parking Information: @ParkingPermit
>
> License number: @LicenseNo

10. Click **OK**.
11. Click **Save**.

<u>Note 2</u>: Sending Failure

1. Click in the **Sending Failure** value field.

Select **Stop** from the drop down list.



Section E: Complex Welcome Workflow

Lesson: Validate Model – Exercise 24

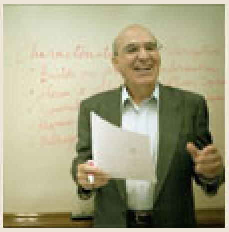
Jump to TOC

Procedure

Follow these steps to complete the process.

Step	Action
1	From the **Workflow** menu, choose *Validate*. This will validate your workflow syntax.
2	Correct any errors.
3	Once you have a valid model, change the workflow status to Test: from the **Workflow** menu, choose **Set Status**, choose **Test**.

<u>Comment:</u> Do **not** submit your workflow yet. The next set of exercises will show you how to test your workflow and then how to set up the Business Event that will start the workflow when a specifics data entry is completed in Banner.



Section F: Business Events and Processes

Lesson: Business Event Set Up – Exercise 25

Jump to TOC

Purpose

To use a business event to start this workflow, several steps must be completed prior to testing the workflow or starting it automatically from an outside event. These steps are listed below and in Exercise 21.

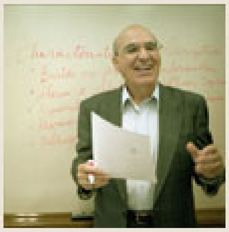
Procedure

Follow these steps to assign a workflow to a Business Event.

Step	Action
1	Select **Business Events** from the Workflow Administration options.
2	Click on **Business Event Definitions**.
3	Click **WF_WELCOME**.
4	Scroll down to the **Associated Workflows** tab.
5	Click **Add Workflow Association**.
6	Select your **XX Welcome Exercise Complex** from the drop-down list and click **Save**.
7	On the **Workflow Association** window, map the event parameters to the workflow context parameters as shown below. The parameters may appear in a different order.

Event Parameters		Context Parameter
ID	→	ID
FULLNAME	→	FullName

8	Click **Save Parameter Mappings**. <u>Comment:</u> The Event Parameters have already been set up to correspond to the data being passed by the Event Queue Dispatcher. All context parameters in your workflow are displayed in the Parameter Mapping tab. Only parameters that are required at the start of the workflow are mapped to event parameters.



Section F: Business Events and Processes

Lesson: Modify Business Process – Exercise 26

Jump to TOC

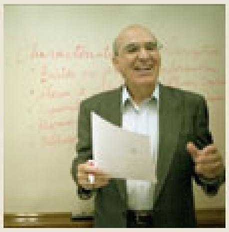
Purpose

The purpose of this exercise is to create a business process.

Procedure

Follow these steps to open the Enterprise Management window.

Step	Action
Open the Enterprise Management window	
1	Select **Enterprise Management** from the **Workflow Administration** options.
Modify a business process	
2	Find and click on the business process you created earlier.
Add Workflow association to a process	
3	Click on the workflow name in the **Associated Workflows** tab
4	Click in the Effective To field to enter an end date and time.
5	Click **Save Association.**
6	Click **Add Workflow Association** in the **Associated Workflows** tab.
7	Select the **XX Welcome Exercise Complex** workflow from the drop-down list.
8	The current date will default.
9	Click **Save Association**.
Add Event association to a process	
10	Scroll to the **Associated Events** tab.
11	Click **Add Event Association.**
12	Select the **WF_WELCOME** Event from the drop down list.
13	Click **Save Association**.



Section F: Business Events and Processes

Lesson: Modify Business Process – Exercise 26 (Continued)

Jump to TOC

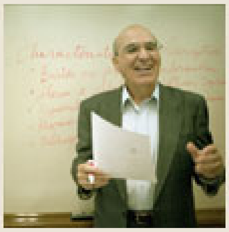
Add a guard condition

Since everyone in the class is using the same event, one event will initiate all the Welcome workflows. To prevent this, add a guard condition to start just your workflow. Create a guard condition rule that will start your workflow only if your Banner User ID is used as the initiating User ID that adds the new person to the Banner database.

Procedure

Follow these steps to add a guard condition

Step	Action
1	Click on the **WF_Welcome** event in the Associated Events tab to add a guard condition.
2	Double click on *USERID* in the Event Parameters column. This will paste the parameter name in the guard condition rule block. Double click "=" in the Operators column, then enter your Banner User ID in UPPER case with double quotes.
3	Double click on OR in the Operators column.
4	Repeat steps 1 and 2 using your *wfuser**XX*** User ID. <u>Comment:</u> Your guard condition rule should look like this: USERID = "LOGINID" or USERID = "WFUSERXX". LOGINID is your Banner User logon in upper case. The value of this user id is case sensitive and must be in UPPER case even though you log onto Banner and Workflow using a lower case or mixed case username.
4	Click **Save Association**.



Section F: Business Events and Processes

Lesson: Test the Improved Workflow – Exercise 27

Jump to TOC

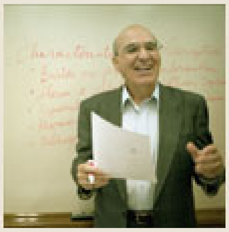
Purpose

Most workflows are started by external events either in Banner or in other applications that create event records in the Event Queue tables. Prior to starting a workflow via an external event, we can test the Workflow business event and workflow model.

Procedure

Follow these steps to initiate the workflow.

Step	Action
1	Click on **Business Events** in the Administration tab.
2	Click on **Business Events Definitions**.
3	Click on **WF_Welcome** event.
4	Click on the **Simulate Event** button.
5	Enter **XX Welcome Test** in the Workflow Specifics Name field.
6	Enter the appropriate values in the Business Event Parameters fields. If you don't have the necessary values, use the Workflow Status Search to review a previous workflow run and use the same parameter values here.
7	Click the **Post Event** button.
8	Click on **Worklist** on the Home tab to view your worklist.



Section F: Business Events and Processes

Lesson: Respond to Work – Exercise 28

Jump to TOC

Procedure

Log into Workflow using your Banner login. You should see the workflow you started in the Worklist. The workitem should have the proxy indicator next to it. This means that the workitem is on your worklist because you are acting as the proxy for another workflow user.

Follow these steps to respond to the first activity – EnterMaritalStatus_SPAPERS

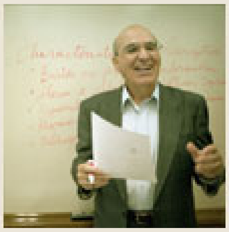
Step	Action
1	Click **Worklist** on the Home Tab.
2	You should see the workflow you started in the Worklist.
3	Click the workitem to start the activity.
4	Banner will open the SPAPERS form. The ID and name will appear in the key block. Select Next Block and enter a value in the marital status code. • If you enter a value other than M, the workflow will take the path labeled **Not Married**. • If you enter a value of M, the workflow will take the path labeled **Married** and launch Emergency Contact form – SPAEMRG.
5	Click **Workflow Submit**.
6	Refresh your worklist. You should not see any other workitems.

Log out of Workflow and log in again using your *wfuserXX* login. You should see the EmergencyInfo_SPAEMRG activity on your worklist.

If you did not enter a value of M in the marital status code, the EmergencyInfo_SPAEMRG activity should **not** appear on your worklist. Proceed to the parallel activities.

Follow these steps to respond to the next workflow activity – EmergencyInfo_SPAEMRG

Step	Action
1	In the worklist, select the EmergencyInfo_SPAEMRG activity for the worklist for your workflow.
2	This will launch the Banner General International Form SPAEMRG with the ID and name of the new person in the keyblock.
3	Enter data in the required fields. Select data from validation tables where appropriate.
4	Click **Workflow Submit**.



Section F: Business Events and Processes

Lesson: Respond to Work – Exercise 28 (Continued)

Jump to TOC

Procedure, continued

Both activities, EnterEmail_GOAEMAL and ParkingInformation, will appear on your worklist at the same time because of the parallel processing.

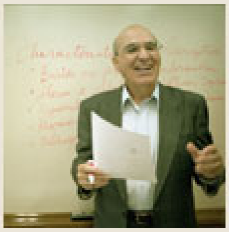
Follow these steps to respond to the email activity – EnterEmail_GOAEMAL

Step	Action
1	In the Worklist, click the EnterEmail_GOAEMAL activity.
2	This will open the GOAEMAL form. The ID you entered should appear in the ID field in the key block.
3	Enter an email address. Select the Preferred checkbox. This is important for the workflow to work.
4	Click **Workflow Submit.**

Follow these steps to respond to the Parking activity – ParkingInformation

Step	Action
5	In the Worklist, click the Parking Information activity.
6	The custom form that you built should appear. Enter the necessary data and click **Complete.**

The last two activities in the workflow model will not appear on the worklist. AA_RetrieveEmailAddr is an internal activity that will be completed by workflow. The final activity will send an email to you as the "new person". Check your email to be sure that you receive the Welcome email.



Section F: Business Events and Processes

Lesson: Start the Improved Workflow – Exercise 29

Jump to TOC

Purpose

The event that triggers the workflow is the insert of a new ID in Banner with a name type of WFLW. The person can be added from any of the IDEN forms (SPAIDEN, PPAIDEN, FOAIDEN, or APAIDEN).

Procedure

Follow these steps to start the workflow from a Business Event.

Step	Action
1	Logon to Banner with your normal Banner logon ID.
2	In the Form Name field in the Banner menu, enter the identification form for which you have permission to add people to Banner (SPAIDEN, PPAIDEN, FOAIDEN, or APAIDEN).
3	Enter the ID, Name type (WFLW), Last name, and First name.
4	Save the record.

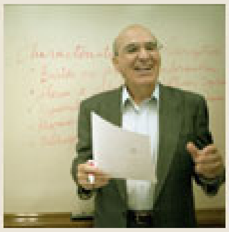
Your workflow should now be started but there will be no indication of the workflow on the Banner form itself.

When you logon to Workflow using your *wfuserXX* ID, a Welcome workitem should appear on your worklist. The name of the person you added to Banner will appear as part of the workflow name in your worklist. If your workflow does not appear, please speak to the instructor.

Procedure

Respond to the workitems on your worklist for your new person. Follow these steps when the EnterEmail_GOAEMAL activity appears on your worklist.

Step	Action
1	In the Worklist, click the EnterEmail_GOAEMAL activity.
2	Enter an ***invalid*** partial email address such as yourname (omitting @institution.edu)
3	Select the **Preferred** checkbox.
4	Click **Workflow Submit.**



Section F: Business Events and Processes

Lesson: Start the Improved Workflow – Exercise 29 (Continued)

Jump to TOC

Purpose

Entering an invalid email address will cause an error when the email is sent from Workflow to the email server.

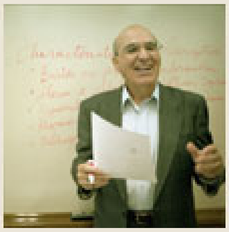
Procedure

Follow these steps to view the Alert.

Step	Action
Open the Workflow Alerts window	
1	Select **Workflow Alerts** from the **Workflow Administration** options.
2	Your workflow should appear on the Alerts list. Click on your workflow to open the Status window.

Comment: If you set the email failure at Warn, the alert will not show on the Workflow Alerts list but the alert message will be displayed in the Workflow Status window.

End Workflow 2



Section G: Attachments

Lesson: Disassociate the Workflow – Exercise 30

Jump to TOC

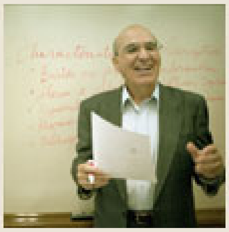
Purpose

Before you can modify the workflow, you will have to disassociate it from the business process and business event.

Procedure

Follow these steps to disassociate the workflow.

Step	Action
Disassociate the workflow from the process and event Comment: Since a business event was used to start the workflow automatically, there are two associations that now must be undone before you can modify the workflow.	
Unassign the workflow from the Business Process	
1	Open the **Enterprise Management** window.
2	Click the **XX Welcome Process** Process.
3	Scroll down to the Associated Workflow window.
4	Click in the check box next to your workflow **XX Welcome Exercise Complex**.
5	Click *Delete Selected Workflow Associations*.
Open the Business Event window	
6	Click Business Event.
Unassign the workflow from the Business Event	
7	Open **Business Events** window.
8	Click on **Business Events Definitions**.
9	Select the **WF_Welcome** event.
10	Scroll down to the Associated Workflows window.
11	Click in the check box next to your workflow **XX Welcome Exercise Complex**.
12	Click *Delete Selected Workflows*.



Section G: Attachments

Lesson: Create a Global Attachment – Exercise 31

Jump to TOC

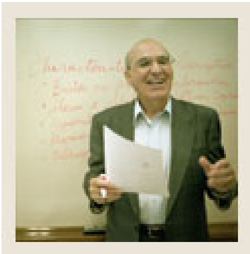
Purpose

Global attachments are static documents that are uploaded into Workflow and can be attached to workflows.

Procedure

Follow these steps to create a global attachment.

Step	Action
1	Create a simple Word document or other electronic file on your desktop for use in this exercise or select a general document that can be attached to your workflow. Suggestion: Download the campus map from your school's website.
2	Open the Workflow Modeler.
3	Select Global Attachments from the View drop down menu.
4	Click on Upload, select your Word document or file and click on **Close**.



Section G: Attachments

Lesson: Add Attachment to Email – Exercise 32

Jump to TOC

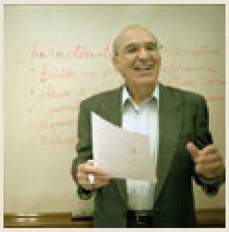
Purpose

A global attachment added to an email activity will send the attachment whenever the email is sent.

Procedure

Follow these steps to modify the workflow model to add the global attachment to the email.

Step	Action
1	Search for your complex Welcome exercise model in the Workflow Modeler.
2	Select the WelcomeEmail activity and open the email body.
3	Click on the Attach button .
4	Select your file from the list of Global Attachments and click on the Attach button.
5	Click **OK** to close the Email Attachments window.
6	Save the changes.



Section G: Attachments

Lesson: Create and Use a Document Tag – Exercise 33

Jump to TOC

Purpose

Document tags are placeholders for documents that will be attached to a workflow at runtime.

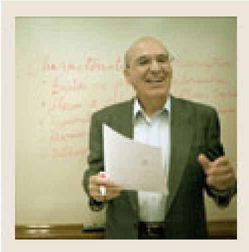
Procedure

Follow these steps to modify the workflow model and create a Document Tag.

Step	Action
1	Create a “Special Parking Instructions” Word document on your desktop.
2	If your workflow model is not open, search for your complex Welcome model in the Workflow Modeler.
3	On the workflow property sheet, click in the Value field to the right of Document Tags.
4	Click **Add** and enter a document tag “Parking Instructions” name and description.
5	Click **OK**.
6	Select the WelcomeEmail activity and open the email body.
7	Click on the Attach button .
8	Select the tag from the list of Documents Tags and click on the Attach button.
9	Click **OK** to close the Email Attachments window.
10	Click **OK** to close the Email Properties window.
11	Select the Parking custom activity and open the Custom Activity Designer.
12	Select Yes in the Show Attachments Value on the Custom Activity Property Sheet. A box with *Workflow Attachments Here* will appear at the bottom of the custom form.

Property	Value
Supplemental	
Title	Parking Request
Parameters	(6)
Show Attachments	Yes

13	Click the **Display Area** object from the tool bar.
14	Click in the **Label** field and delete *Unlabeled*. Leave this field blank.
15	Click in the **Text** field and enter instructions to the user to select a file to attach to the workflow.
16	Click **OK** to close the Output Text box and click **OK** to close the Custom Activity Designer box.
17	**Save** the workflow.
18	**Validate** the workflow and change the status to **Test.**



Section G: Attachments

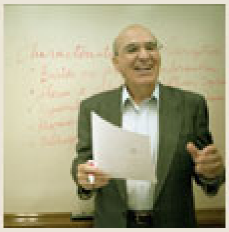
Lesson: Re-associate the Workflow to Process and Event – Exercise 34

Jump to TOC

Procedure

Follow these steps to re-associate the workflow to the Business Process and Event.

Step	Action
Open the Enterprise Management window	
1	Select Enterprise Management.
2	Search for the process you created earlier: **XX Welcome Complex** process.
Assign a workflow to process	
3	Click **Add Workflow Association**.
4	Select the **XX Welcome Complex** workflow.
5	The current date will default.
6	Click **Save Association**.
Add a guard condition	
7	Follow the instructions in Exercise 21 to add your guard condition rule to the event.
Open the Business Events window	
1	Select Business Events Definitions.
2	Click **WF_WELCOME** event to re-assign the updated workflow to the event. If you do not remember how to assign a workflow to a business event, refer to Exercise 20 for complete instructions.



Section G: Attachments

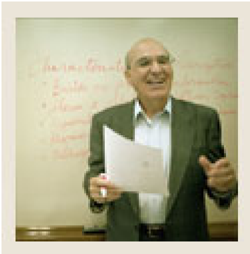
Lesson: Run Improved Workflow – Exercise 35

Jump to TOC

Procedure

Follow these steps to complete the document tag attachment.

Step	Action
Start workflow and respond to worklist items.	
1	When the Parking Information activity appears on your worklist, click on Attach File button.
2	Click on **Browse** and select your Special Parking instructions file.
3	Click on the document tag radio button.
4	Click Attach button.
5	Complete remaining activities.
6	When the workflow is completed, check your email. You should have two attachments.



Section H: Documentation

Lesson: Document a Workflow – Exercise 36

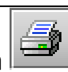
Jump to TOC

Purpose

Once a workflow is created, you can create a documentation file that includes information on the workflow model, the activities, the parameters, and the components used. The documentation can be printed or saved as reference material.

Procedure

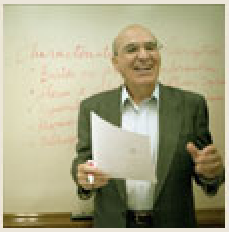
Follow these steps to create a documentation file.

Step	Action
1	Open the Workflow Modeler and open one of your workflow models.
2	Click on the printer icon .
3	Click on the **File (PDF)** radio button.
4	In the Workflow Definition Option block, click **Fit to Page** option and click **OK**.
5	Select a location to save your pdf file and enter a file name.
6	Click **Save**.

Procedure

Follow these steps to document the custom form.

Step	Action
1	Click on the printer icon .
2	Click on the **File (PDF)** radio button.
3	In the Workflow Definition Option block, uncheck the **Model** and **Workflow Report** boxes
4	In the Custom Activity Options block, click **Form** and **Fit to Page** and click **OK**.
5	Select a location to save your pdf file and enter a file name.
6	Click **Save**.
7	Select **Preview**.



Section I: Welcome Workflow with Approval

Lesson: Approval Activity – Optional Exercise

Jump to TOC

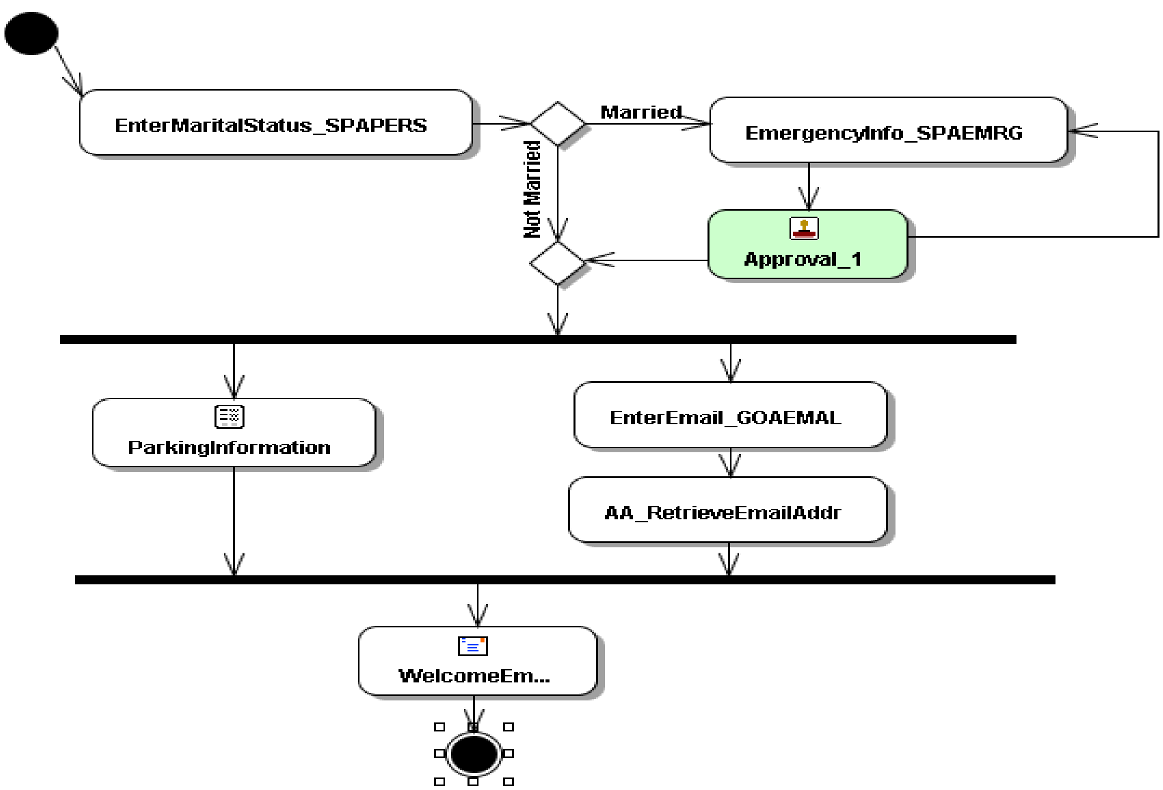
Purpose

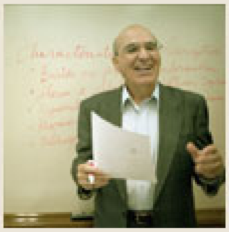
This exercise adds an approval component to the workflow. If the workflow is associated to a business process and business event, disassociate it before adding the approval activity.

Procedure

Follow these steps to add the approval activity.

Step	Action
Modify the workflow	
1	Open the Workflow Modeler window.
2	Use Find to select the workflow that your workflow **XX Welcome Exercise Complex**.
3	From the Workflow menu, select **Update Status**, select **Development**.
4	Add an approval activity (indicated as the shaded activity below) to the workflow model. The approval activity is located on the modeler tool bar .





Section I: Welcome Workflow with Approval

Lesson: Approval Activity – Optional Exercise (Continued)

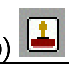
Jump to TOC

Add context parameter for Approval activity

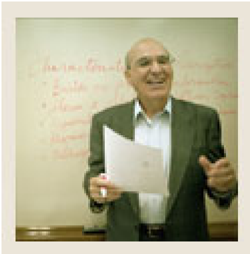
The approval activity requires a response from the user that indicates approve, reject, or return for rework. This response must be placed into workflow context and used in the business rules to determine the path of the workflow.

Procedure

Follow these steps to enter properties for the Approval activity.

Step	Action
1	For the Approval activity, enter these properties: Comment: The approval activity is in the modeler tool bar (with the approval stamp) 

Property	Value	Comments
Definition		
Name	Approve_Emergency_Info	
Description	Approve emergency information	
Presentation		
Background Color		
Foreground Color		
Image Name		
Component		
Approved Message		See Note 1.
Approved Activity	EmergencyInfo_SPAEMRG	See Note 2.
Parameter Mappings		See Note 3.
Performer		
Role	Records Specialist	
Performer Rule	wfuser**XX**	Select your specifics logon id
Confidential	No	
Supplemental		
Notification		
Mandatory	Yes	
Attributes Mapping		
Tracking		
Metrics Tracking	No	
Estimated Time		
Lagging Percentage		



Section I: Welcome Workflow with Approval

Lesson: Approval Activity – Optional Exercise (Continued)

Jump to TOC

Notes

<u>Note 1</u>: Approval Message

1. Click the value field for the Approval Message option. Enter the following text for the body: Please approve the emergency contact information entered for @FullName (ID: @ID).
2. Click **OK**.

<u>Note 2</u>: Approval Activity

1. Click the value field for the **Approval Activity** option.
2. From the drop down list select the **EmergencyInfo_SPAEMRG** activity to review/approve during the process

<u>Note 3</u>: Parameter Mappings

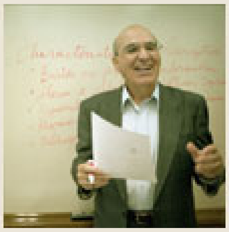
1. Add a context parameter of **ApprovalInd** for the approval response. The parameter type will be text and will be output from the approval activity. If you do not remember how to add a context parameter, refer back to the custom activity instructions in Exercise 17.

Context Parameter		Component Parameter	Type
ApprovalInd	←	AprovalChoice	Text

Procedure

Follow these steps to add a business rule (Rework)

Step	Action
1	Select the Selection tool.
2	Right-click the transition between the Approve_Emergency_Info activity and the EmergencyInfo_SPAEMRG activity, then select **Guard Condition** in the properties list.
3	Enter these properties: • Enter Description: *Rework* • Open the **Parameter** folder, select *Approve Indicator* • Click the **<>** button. • Open the **Constants** folder, select ApprovalChoice, select Approve Your business rule should be: ApprovalInd <> “Approve” • Click OK.
4	Select the same transition. Right-click the transition, then select *Show Guard Label*.
5	When the **Rework** description appears, select and drag it near the transition.
6	Click **Save**.



Section I: Welcome Workflow with Approval

Lesson: Approval Activity – Optional Exercise (Continued)

Jump to TOC

Procedure

Follow these steps to add a second business rule (Approve).

Step	Action
1	Right-click the transition between the *Approve_Emergency_Info* activity and the decision box, then select *Guard Condition*.
2	Enter these properties: • Enter Description: Approve • Enter a rule: ApprovalInd = "Approve" • Click **OK**.
3	Select the same transition. Right-click the transition, then select *Show Guard Label*.
4	When the *Approve* description appears, select and drag it to above the transition.
	Click **Save**.

Procedure

Follow these steps to complete the workflow.

Step	Action
1	Select the Validate icon and validate the workflow. If your workflow has any errors which you are not able to correct, ask the instructor for help.
2	Change the workflow status to **Test**.
3	Close the Workflow Modeler window.
4	Complete the workflow association in the business event and business process

Release Date

Jump to TOC

This workbook was last updated on 01/29/2007.