WebSphere Education

Completing the process model

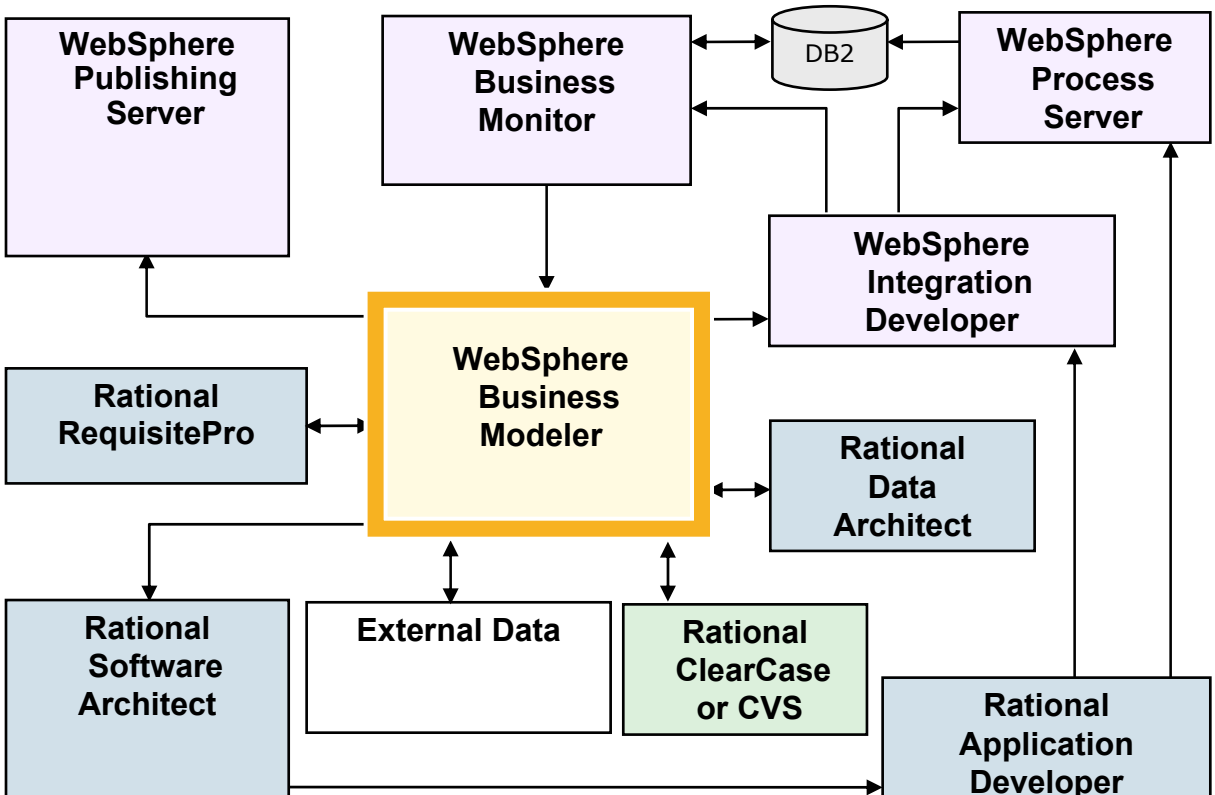
Unit 9

Unit objectives

After completing this unit, you should be able to:

- Use swimlane layout
- Explain the subprocesses
- Explain loops
- Define decision attributes
- Add documentation
- Clean up a diagram

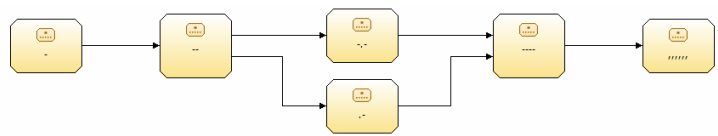
Completing a business process model



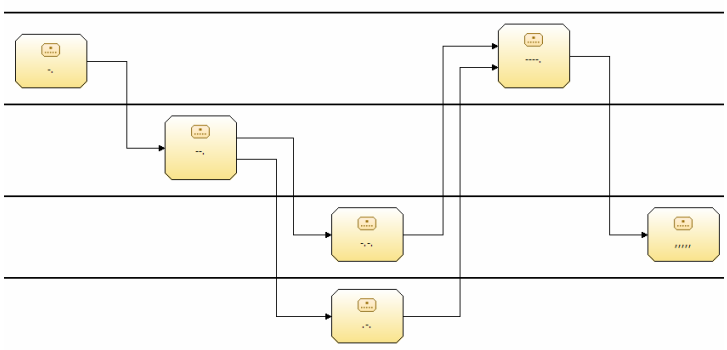
Free-form and swimlane

- Free-form
  - Set or change the position of elements within the diagram in any location
- Swimlane
  - Arranges the process flow in a way that allows you to focus on the interaction between:
    - Roles
    - Organization units
    - Locations
    - Classifiers
    - Individual resource definitions
    - Bulk resource definitions

Free-form



Swimlane



Modeling techniques

- Modeling techniques are similar in both layouts.
- Open a new model in either layout.
- Both layouts allow you to:
  - Add elements from the palette or from the project tree
  - Copy, paste, or delete elements on the diagram
  - Select elements in the diagram to display and edit their properties
  - Auto-layout
- Switch the layout as needed from the process editor.
- Printed diagrams are based on the layout that is displayed at the time of printing.
- The process editor opens a diagram using the layout the diagram had when it was last closed.

Swimlane — additional capabilities

- Additional functions
  - Change the size of the swimlane manually or automatically.
    - Manually drag the swimlane boundary.
    - Swimlane will automatically resize to accommodate new elements.
  - Insert, move, and remove swimlanes.
  - Unassigned elements are placed at the bottom in an unassigned row.
    - An unassigned row can be closed if there are no unassigned elements.

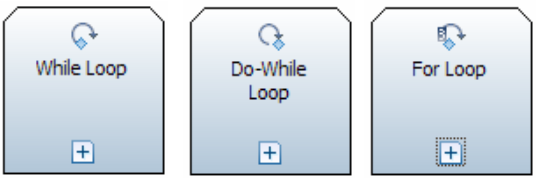
- Additional warning
  - An incorrect swimlane indicator — small red barred circle
    - Appears when the element's attributes do not match the swimlane

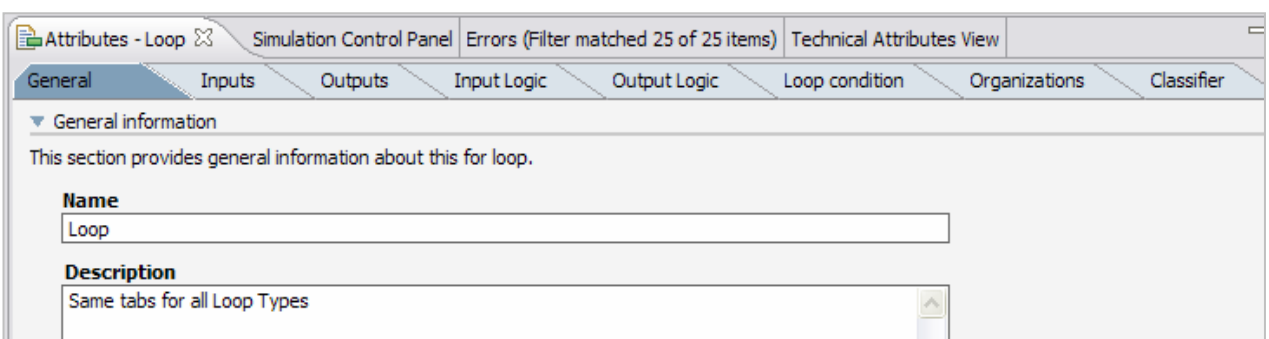
Swimlane layout determined by analytical needs

- The swimlane layout by classifier is unique.
  - You choose which classifier to use for the layout.
  - The swimlanes for the layout are based on its classifier values.
- The layout determines in which row the elements are placed.
  - The purpose of arranging element in rows is to easily identify unnecessary hand-offs between rows.
    - Aids in resolving bottlenecks and redundancies
- Different processes require different analyses.
  - Different processes can have different swimlane layouts.
- Customer row can be moved to the top.
  - Customer touch points are more visible.
- Multiple resources in one lane.
  - Used to show multiple resources working together to complete a task.
    - Each individual resource has its own row and a row for the combined work.
- Assign a system to a role.
  - If you want to show handoffs between human roles and systems:
    - Systems are typically assigned as resources for cost purposes, but you cannot put resources and roles on the same diagram.

Loop (1 of 2)

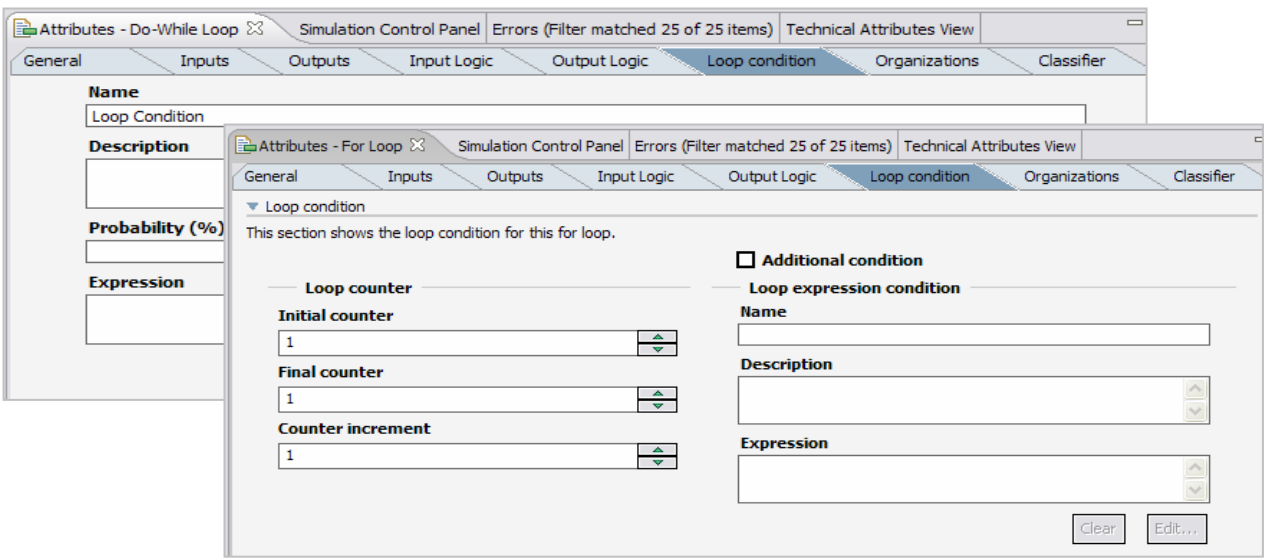
- A loop is a repeating sequence of activities contained within a process
- Three types of loops available:
  - For loop
    - Repeats the same sequence of activities a ***specified*** number of times
  - While loop
    - Repeats while some condition is satisfied, testing its condition at the ***beginning*** of every loop
    - The loop may never run
  - Do-while loop
    - Repeats while some condition is satisfied, testing its condition at the ***end*** of the loop
    - The loop will run at least once



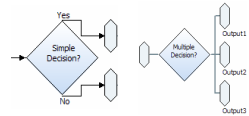


Loop (2 of 2)

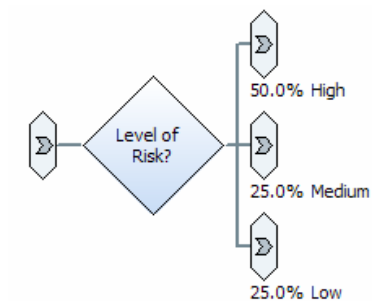
- Inputs into loops do not work the same way as inputs into subprocesses.
  - Inputs to loops can be checked by the loop condition, but they cannot be used as inputs by elements within the body of the loop.
  - To pass data into a loop, use a repository.
  - Use a local repository if you intend to use an expression.
    - Expression Builder cannot access global repositories

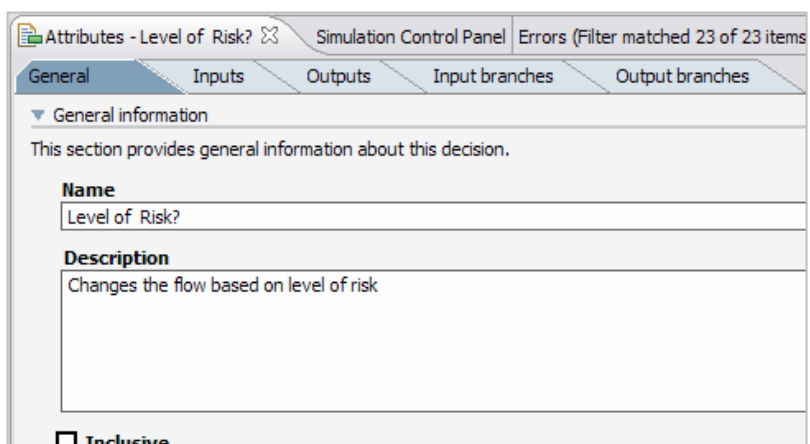


Decisions — detailed attributes (1 of 4)

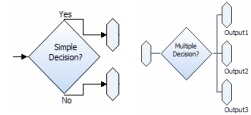


- Detailed attributes complete the definition of the decision
  - Simple and multiple attributes are similar
- Will use a multiple-choice decision example to explain attributes
  - Example: changing process flow based on level of risk
  - Probabilities can be displayed on the output branches
  - Names can be assigned to the output branches
- General
  - Inclusive check box
    - One or more outputs
    - The combination of outputs is determined by the expression





Decisions — detailed attributes (2 of 4)



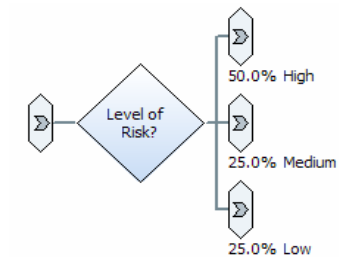
- Inputs: one or more business items

General | Inputs | Outputs | Input branches | Output branches

Input settings

This section provides detailed information about the inputs.

Name	Associated data	Minimum
Input:2	Business item 1	1



- Outputs
  - The outputs match the inputs; no work is performed by a decision
  - One set of outputs for each branch
- Input branches

General | Inputs | Outputs | Input branches | Output branches

Output settings

This section provides detailed information about the outputs.

Name	Associated data	Minimum
Output	Business item 1	1
Output:2	Business item 1	1
Output:3	Business item 1	1

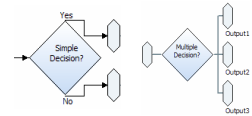
General | Inputs | Outputs | Input branches | Output branches

Input branches

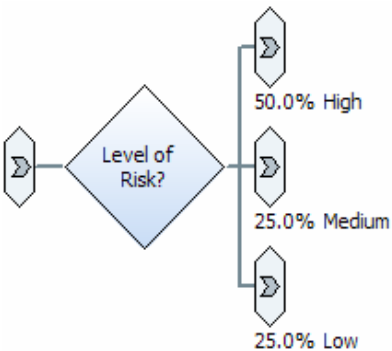
This section shows the input branches for this decision.

Name	Contents
Input Branch	Input:2

Decisions — detailed attributes (3 of 4)



- Output branches
  - Name the branches
  - Specify the probabilities
  - Create the expression to control the flow for each output path
  - Edit opens an expression editor



General | Inputs | Outputs | Input branches | Output branches

This section shows the output branches for this decision.

Name	Contents	Condition	Probability (%)
High	Output	High	50
Medium	Output:2	Medium	25
Low	Output:3	Low	25

Details

Name

High

Contents

Name	Associated data	Minimum	Maximum
Output	Business item 1	1	1

Decision Branch Condition

Name

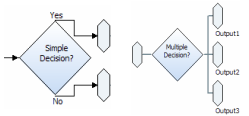
High

Description

Expression

'Process Catalog.Process 1.Level of Risk?.Input:2.Attribute' is equal to "High"

Decisions — detailed attributes (4 of 4)



Expression Tree:

Binary expression
'Process Catalog.Process 1.Level of Risk?.Input:2.A
is equal to
High

Expression name: High

Expression description:

Expression text: 'Process Catalog.Process 1.Level of Risk?.Input:2.Attribute' is equal to "High"

Expression Composer - Root expression

First term: Modeling artifact

First term details:

Process Catalog
Process 1
Repository
Level of Risk?
Input:2
Attribute
Input Criterion

Operator:

--Select operator--
is equal to
is not equal to

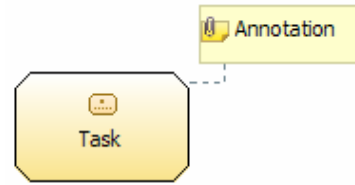
Second term: Text

Second term details: High

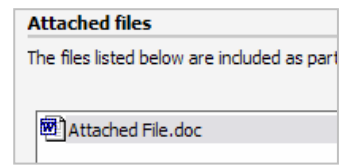
Expression editor
- Create the expression by selecting available choices
- Expression displayed in the expression tree
- Must "apply" to save and see the expression text
- Can create complex expressions

Additional process documentation

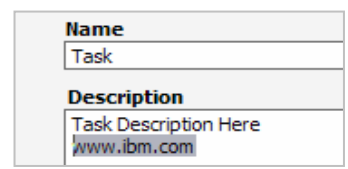
- Add annotations to diagrams
  - Add anywhere in a process, structure, or structure definition diagram
  - Attach annotations to any element



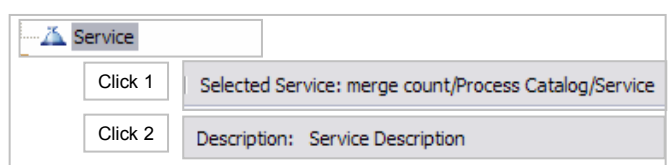
- Attach files to elements
  - Files can be attached to process elements that are displayed in the Project Tree.
    - The files become part of the element to which they are attached.
    - After attaching, a file can be opened by clicking the name.



- Add web address in description
  - Links can be added to a description field in an editor or in the Attributes view.
    - To open link, highlight the link, right-click, and select Browse



- Viewing descriptions of elements in the Project Tree
  - Click twice to see description in status bar at bottom
    - The first time to display the path in the tree
    - A second time to display the description
  - Double-click to open the element in the editor
    - View and edit the description

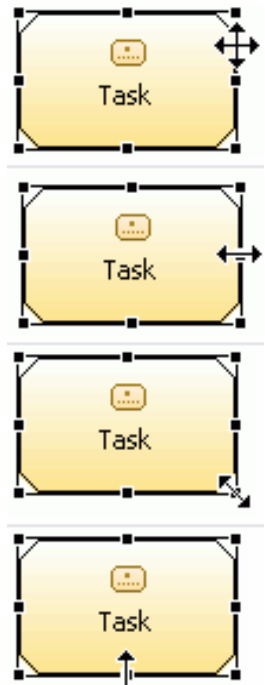


Organizing the diagram (1 of 3)

- Using gridlines to create the diagram
  - The gridlines can be toggled on and off as needed.
    - New elements will be laid on the diagram where you put them.
    - Dragging elements will snap to the grid.
- Auto-layout allows the system to arrange the diagram
  - Select Auto-layout Left to Right
    - Arranges the layout of the diagram so that the direction of flow goes from left to right, and cleans up any overlapping nodes or connections.
    - In swimlane layout, this also moves all elements to their correct swimlanes, creating new swimlanes if necessary.
    - Auto-layout will undo any user layout.
- Aligning multiple elements in a diagram
  - To align two or more elements so that your diagram is easier to read and looks more presentable
    - Select elements to align and select from the alignment options
    - Last element selected is the anchor point

Organizing the diagram (2 of 3)

- Moving or resizing elements using the keyboard
  - Arrow keys on the keyboard can be used to move or resize
    - Select the element you want to move.
    - Press the Period key (.) until the cursor changes to the desired pointer.
    - Use the arrows keys to move or resize the element.
    - Press the Enter key to accept the change.
  - Toggle grid on editor must be off



Organizing the diagram (3 of 3)

- Fix overlapping and crossing connections
  - Uncross connectors by moving the input or output nodes up or down
  - Move task inputs and outputs
    - Right-click, select Input and Output, select Modify Input or Output Order
    - Retains any criteria assigned to it and its connections to other process elements
  - Move decision or fork branches
    - Select, right-click, and select Modify Output Branches Order
    - Retains any values assigned to it and its connections to other process elements
  - Move merge or join input branches
    - Select, right-click, and select Modify Input Branches Order
    - Retains any values assigned to it and its connections to other process elements

Making the diagram more meaningful

- Displaying labels
  - Labels can be displayed on the diagram to show information associated with process elements.
  - Labels are a convenient way to view important attributes.
    - Labels contain the attribute information.
    - Two labels can be specified (top and bottom) for any element.
- Adding colors
  - Colors can be added to resource definitions, roles, organization units, locations, and classifier values.
    - When you then associate these items with elements in the process diagram (such as tasks), you can color-code the diagram to see at a glance which elements are associated with specific values.
- Color-coding by classifiers
  - After creating classifiers and assigning classifier values to process elements, you can color-code the diagram based on the classifiers.

Checkpoint: Completing the process model

Your instructor will review these questions with you as a group. If time permits, the instructor may provide you time to answer the questions on your own before the group discussion.

1. What is the advantage of displaying a process diagram in swimlane layout?
2. What is the relationship between a local process and a subprocess?
3. In which loop does it repeat while some condition is satisfied and it tests its condition at the end of the loop?
4. Where in in Modeler do you specify a multiple-choice decision that has one or more outcomes?
5. What types of attachment can be added to the process model?

Checkpoint solutions: Completing the process model

1. Arranges the process flow in a way to focus on the interaction between:
   - Roles
   - Organization units
   - Locations
   - Classifiers
   - Individual resource definitions
   - Bulk resource definitions
2. A subprocess is a local process within another process.
3. Do-while loop
4. Under the general tab of Decision attributes view, check the “Inclusive” box.
5. In additional to web address, files such as html, documents, spreadsheet, or PDF can be attached.

Unit summary

Having completed this unit, you should be able to:

- Use swimlane layout
- Explain the subprocesses
- Explain loops
- Define decision attributes
- Add documentation
- Clean up a diagram

Exercise overview

In this exercise, you will:

- Define decision expressions
- Switch to swimlane layout
- Add web addresses to description
- Attach a file to the process
- Use search and used by functions