



WebSphere Education



# Defining human tasks and forms

## Unit 6



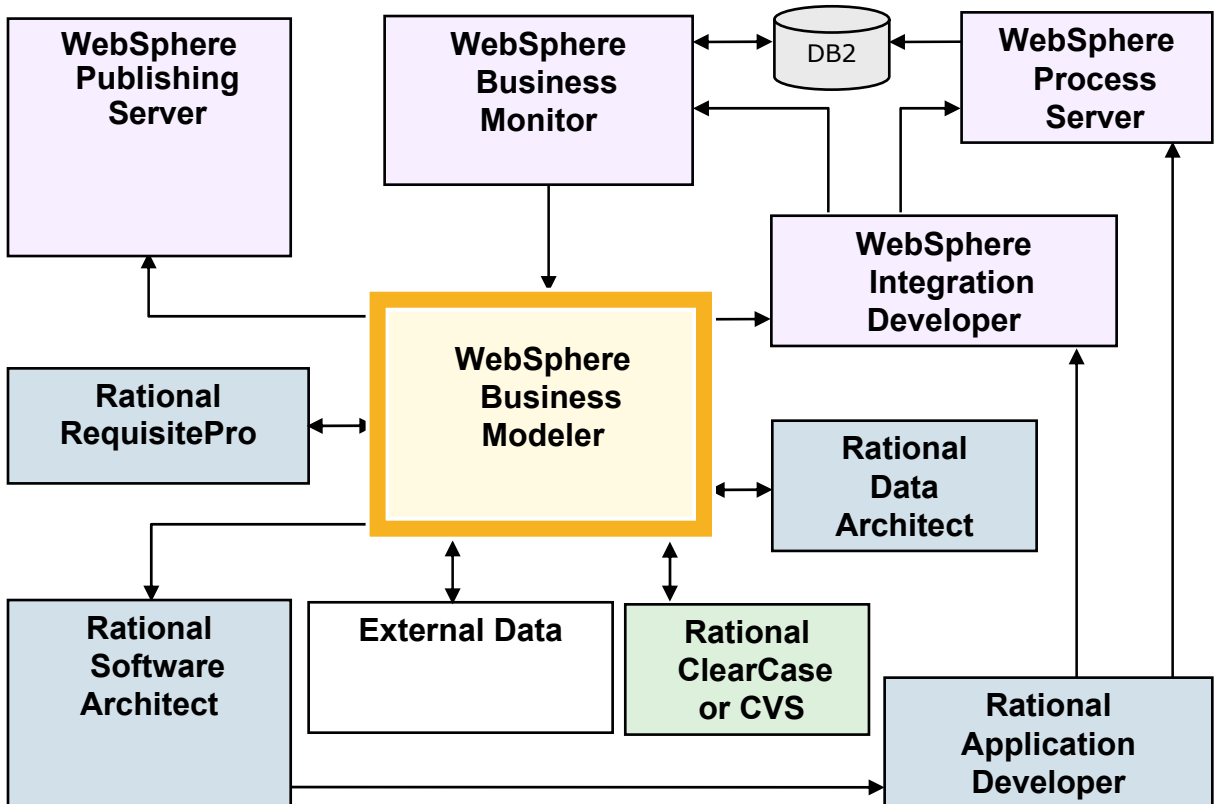
# Unit objectives

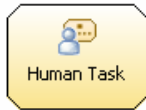
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After completing this unit, you should be able to:

- Explain human tasks
- Create and define human tasks in Modeler
- Define primary owner and escalations for human tasks
- Explain forms
- Create and associate forms with human tasks

# Defining human tasks and forms in modeler





# Human task (1 of 2)

- Specialized task a system assigns to a person for completion
  - Used to visually identify and document activities that must be performed by a human resource
- Can be global or local
  - Local task to local human task conversion
  - Local human task to global human task conversion
- All other normal task attributes
- Treated as a normal task during simulation
  - For process modeling and simulation purposes, you can specify the related cost, revenue, duration, additional resources, organizations, and classifiers

A screenshot of the "Attributes - Human Task" configuration window. The window has a tabbed interface with tabs for "General", "Cost and Revenue", "Duration", "Inputs", "Outputs", "Business Measures", "Static Analysis", and "Errors (Filter m)". The "General" tab is selected. Below the tabs, there is a section titled "General information" with the text "This section provides general information about this human task." Below this, there are two input fields: "Name" with the value "Human Task" and "Description" which is empty. To the right of the "General" tab, there is a yellow-bordered box containing four sub-tabs: "Forms", "Primary Owner", "Additional Resources", and "Escalations". To the right of this box, there are two more tabs: "Organizations" and "Classifiers".

Attributes - Human Task x Business Measures Static Analysis Errors (Filter m)

General Cost and Revenue Duration Inputs Outputs

Forms Primary Owner Additional Resources Escalations Organizations Classifiers

General information

This section provides general information about this human task.

Name

Human Task

Description

# Human task (2 of 2)

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- IBM Lotus Forms
  - Associate electronic forms that are required for its completion
- Primary owner
  - Assign a particular role or resource to work on the task
  - Ability to define a criterion (known as a *Verb* in WebSphere Integration Developer) that determines the resource to be allocated as a primary owner
- Escalation
  - Define actions that should take place if some aspect of the human task does not complete on time
- Can have only one input criterion (set of inputs) and one output criterion (set of outputs)

# Primary owner

- Main human resource assigned to the human task
- Based on role or individual resource
- Primary owner must be specified when creating human task
- Criteria consist of predefined attributes
- Ability to browse elements created in Modeler when specifying attribute values of criteria
  - Example: A user can browse organization units when specifying the attribute values for the Members by department name criterion

The screenshot shows a software interface with a tabbed menu at the top. The tabs are: General, Cost and Revenue, Duration, Inputs, Outputs, Forms, Primary Owner (highlighted with an orange box), and Additional Resources. The 'Primary Owner' tab is active, displaying the following content:

**Primary Owner**

This section displays the primary owner (the resources or staff role that will perform the task).

**Description**

☒ **Individual resource definition**

☐ **Role**

**Time required**

Days	Hours	Minutes	Seconds	Milliseconds
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

**People assignment criteria**

You can specify an individual to be assigned this task at runtime, or you can specify a person with a particular role or from a particular organization to be assigned this task.

**Name**

Attribute name	Attribute value
<input type="text"/>	<input type="text"/>

# Primary owner: Example of attributes

## Primary Owner

This section displays the primary owner (the resources or staff role that will perform the task).

Description

☒ Individual resource definition

Person

Browse...

☐ Role

Browse...

Time required

Days	Hours	Minutes	Seconds	Milliseconds	
0	0	0	0	0	<input type="button" value="Clear"/>

### ▼ People assignment criteria

You can specify an individual to be assigned this task at runtime, or you can specify a person with a particular role or from a particular organization to be assigned this task.

Name

Members by department name



Attribute name	Attribute value	
Name	Accounting	
Name of alternative department 1	Finance	
Name of alternative department 2		

# Additional resources

- Additional resources can be assigned for simulation and analysis
- Additional resource information is not included in export

General Cost and Revenue Duration Inputs Outputs Forms Primary Owner **Additional Resources** Scal ◀ ▶

▼ Role requirements

This section displays the list of role requirements.

Name	Role	Time required	Quantity	Unit of measure	Resource definition

Add Remove Edit Qualifications

▼ Individual resource requirements

This section displays the list of individual resource requirements.

Name	Individual resource	Time required

Add Remove

▼ Bulk resource requirements

This section displays the list of bulk resource requirements.

Name	Bulk resource	Time required	Quantity	Unit of measure



# Escalation (1 of 2)

- A course of action that takes place when a human task does not reach an expected state within a specified time period
- Specify the condition under which the escalation should take place and the resulting action
- Use Advanced or WebSphere Process Server modeling mode
- Specify escalation notification type, such as e-mail notification
  - Define a criterion that determines the e-mail receiver
- Specify duration for repeating an escalation

General Cost and Revenue Duration Inputs Outputs Forms Primary Owner Additional Resources **Escalations**

Escalations

Work with escalations in either a table or tree format by clicking the Tree Format or Table Format icons. In the tree format, you can see and create relationships between the escalations. In the table format, you can quickly view your escalations.

Escalations

- Unclaimed [1 day]

Add Remove

▼ Details

Specify the escalation details and action.

**Name** Unclaimed

**Description** Escalation of this task occurs when it has not been claimed within one day.


# Escalation (2 of 2)

- Escalation format presented in table or tree format
  - In the table format, you can quickly review the escalations that you have created
  - In the tree format, you can see and create relationships between the escalations



## Escalations

Work with escalations in either a table or tree format by clicking the Tree Format or Table Format icons. In the tree format, you can see and create relationships between the escalations. In the table format, you can quickly view your escalations.



Name	Description
<input checked="" type="checkbox"/> Unclaimed	Escalation of this task occurs when it has not been claimed within one day.

### ▼ Details

Specify the escalation details and action.

<b>Name</b>	<input type="text" value="Unclaimed"/>
<b>Description</b>	<input type="text" value="Escalation of this task occurs when it has not been claimed within one day."/> <div>▼</div>
<b>If task is</b>	<input type="text" value="Ready"/> <div>▼</div>

# Sample escalation (1 of 2)

General	Cost and Revenue	Duration	Inputs	Outputs	Forms	Primary Owner	Additional Resources	Escalations	◀ ▶
---------	------------------	----------	--------	---------	-------	---------------	----------------------	-------------	-----

## Escalations

Work with escalations in either a table or tree format by clicking the Tree Format or Table Format icons. In the tree format, you can see and create relationships between the escalations. In the table format, you can quickly view your escalations.






	Name	Description
<input checked="" type="checkbox"/>	Unclaimed	Escalation of this task occurs when it has not been claimed within one day.

Add

Remove

## ▼ Details

Specify the escalation details and action.

<b>Name</b>	<input type="text" value="Unclaimed"/>
<b>Description</b>	<input type="text" value="Escalation of this task occurs when it has not been claimed within one day."/>  
<b>If task is</b>	<input type="text" value="Ready"/> 

# Sample escalation (2 of 2)

## Escalate when

Task is not

Claimed



After

Days

Hours

Minutes

Seconds

1



0



0



0



Clear

After escalation

No previous escalation



## Escalation action

Notify

Members by role name("Resource Manager")

Select...

Notification type



E-mail



Item on work list

E-mail message

Default e-mail message



Edit...

☐ Repeat notification every

Days

Hours

Minutes

Seconds



Clear

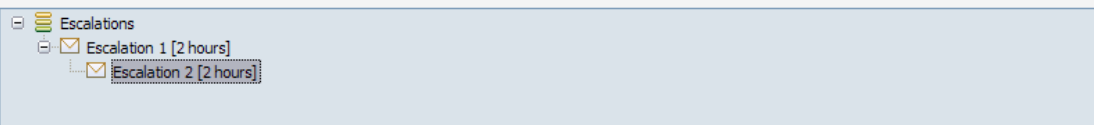
# Escalation chains and parallel escalations

- If adding more than one escalation to a human task, escalation chains can be used to define the required escalation paths
  - Escalations are chained by specifying that one escalation follows after another escalation.
  - Triggered at a time relative to the previous escalation
- Parallel escalations are triggered at a time relative to the starting point

## Escalations

You can work with escalations in either a table or tree format by clicking the Tree Format or Table Format icons. In the tree format, you can see and create relationships between the escalations.



```
graph LR; Escalations --> Esc1["Escalation 1 [2 hours]"]; Esc1 --> Esc2["Escalation 2 [2 hours]"];
```

Add  
Remove

### ▼ Details

This section shows the detailed information for each escalation.

Name	<input type="text" value="Escalation 2"/>
Description	<input type="text" value="Escalation 2 description"/>
If task is	<input type="text" value="Ready"/>

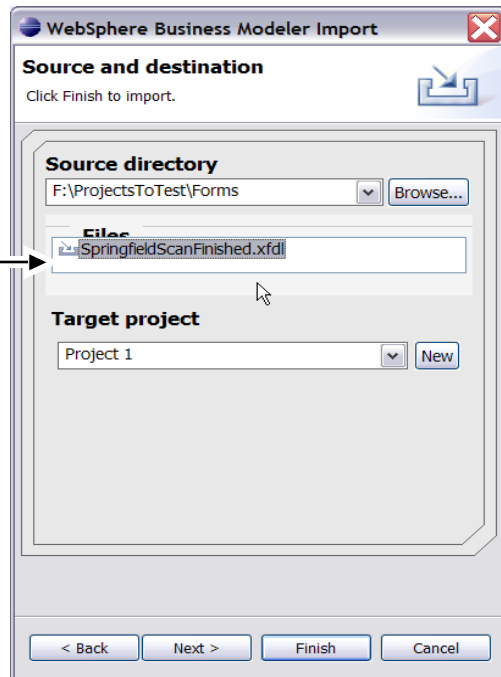
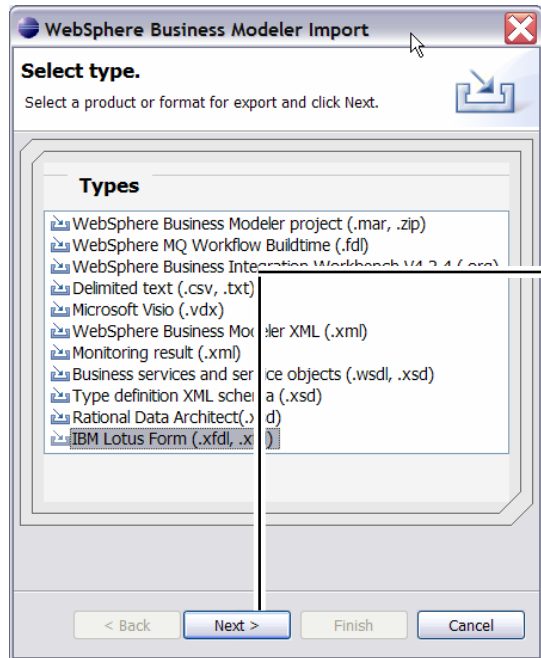
# IBM Lotus Forms

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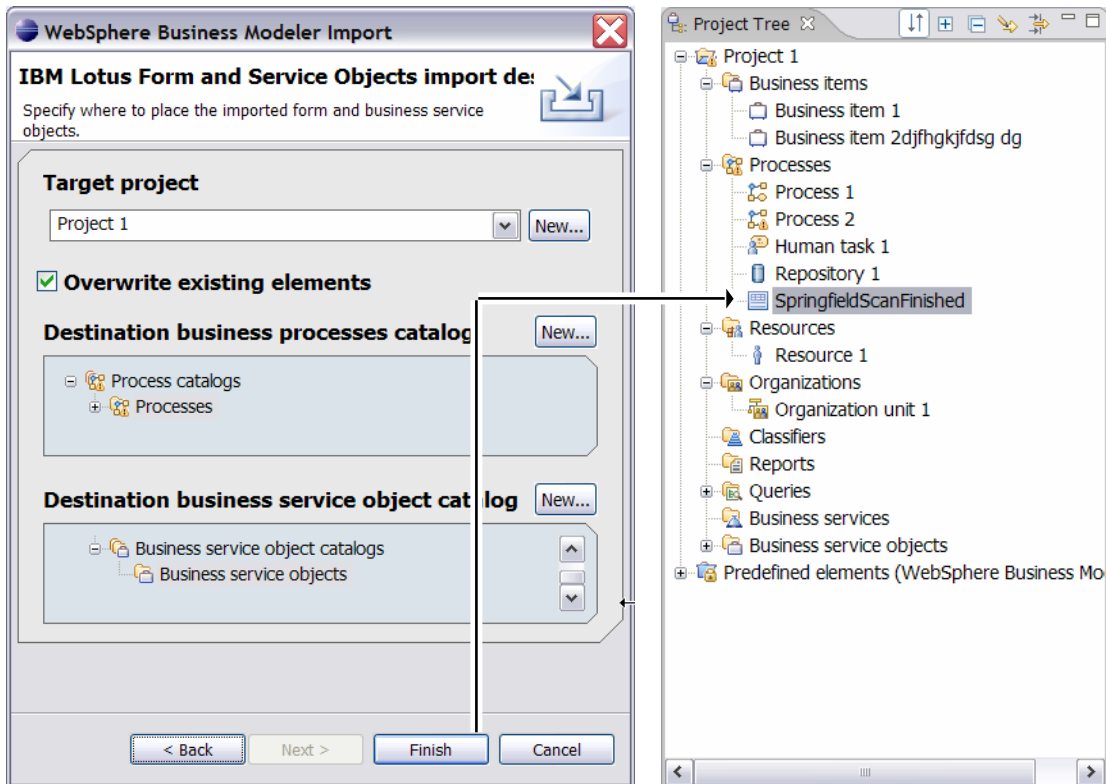
- Forms represent the electronic forms that people use to complete a human task
- Integrate IBM Lotus Forms into your modeling projects
- Forms can be imported into Modeler
- New forms can be created in Modeler
- Forms can be associated or disassociated with existing human tasks
- New human tasks can be created based on forms
- Forms in Modeler can be exported to WebSphere Integration Developer

# Importing forms into Modeler (1 of 2)

- Business service objects created based on form data
- New form located in Project Tree under process catalog



# Importing forms into Modeler (2 of 2)





# Creating a new form (1 of 7)

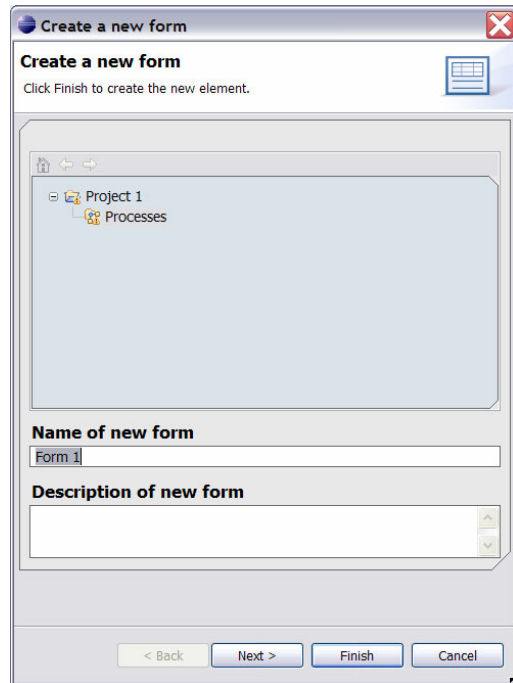
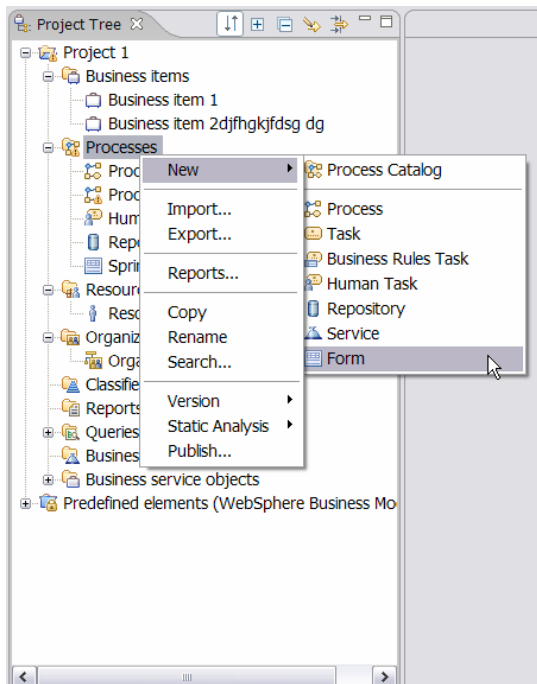
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Two ways to create a form:

- Created within process catalog
  - Blank (with no data) if used for layout purpose
  - With data based on business items
- Created from human task
  - Blank (with no data) if human task has no input/output data
  - With data based on human task's input/output data
  - Newly created forms associated with human task

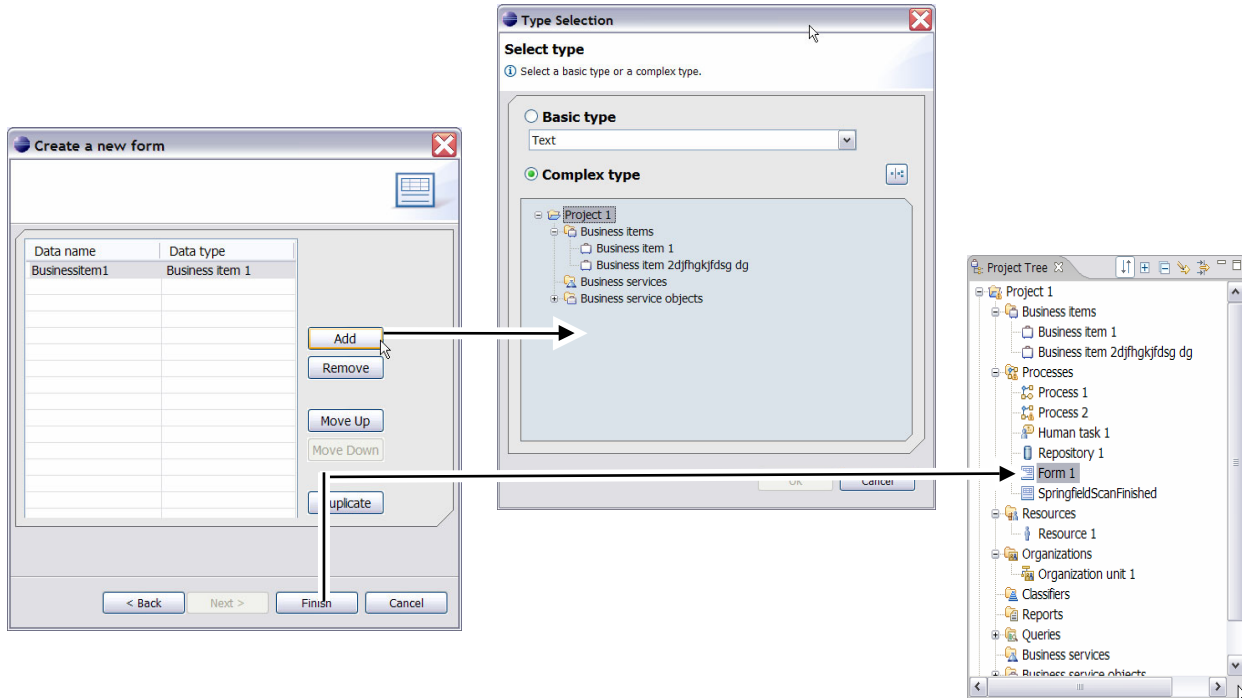
# Creating new form (2 of 7)

- From process catalog



## Creating new form (3 of 7)

- Data name column presents the business item name as it would appear on the form



# Creating new form (4 of 7)

- From global human task

**Create a form**

Click Finish to create the new element in the location selected below.

**Create a form**

Project 1  
Processes

**Name of form**  
Form 5

**Description of form**

**Forms**

You can associate a form with a human task as the task input, the task output, or task input and output.  
If the human task inputs or outputs do not match the form data, they will be replaced by the form data.

☒ Use the input form as the output form

**Input form**

New... Browse... Edit... Disassociate

Field name	Type

**Output form**

New... Browse... Edit... Disassociate

Field name	Type

Errors (Filter matched 1 of 26 items) | Simulation Control Panel

Finish Cancel

# Creating new form (5 of 7)

- From global human task

**Human task 1**

**Forms**

You can associate a form with a human task as the task input, the task output, or both task input and output.  
If the human task inputs or outputs do not match the form data, they will be replaced by the form data.

☐ Use the input form as the output form

Input form:  [New...](#) [Browse...](#) [Edit...](#) [Disassociate](#)

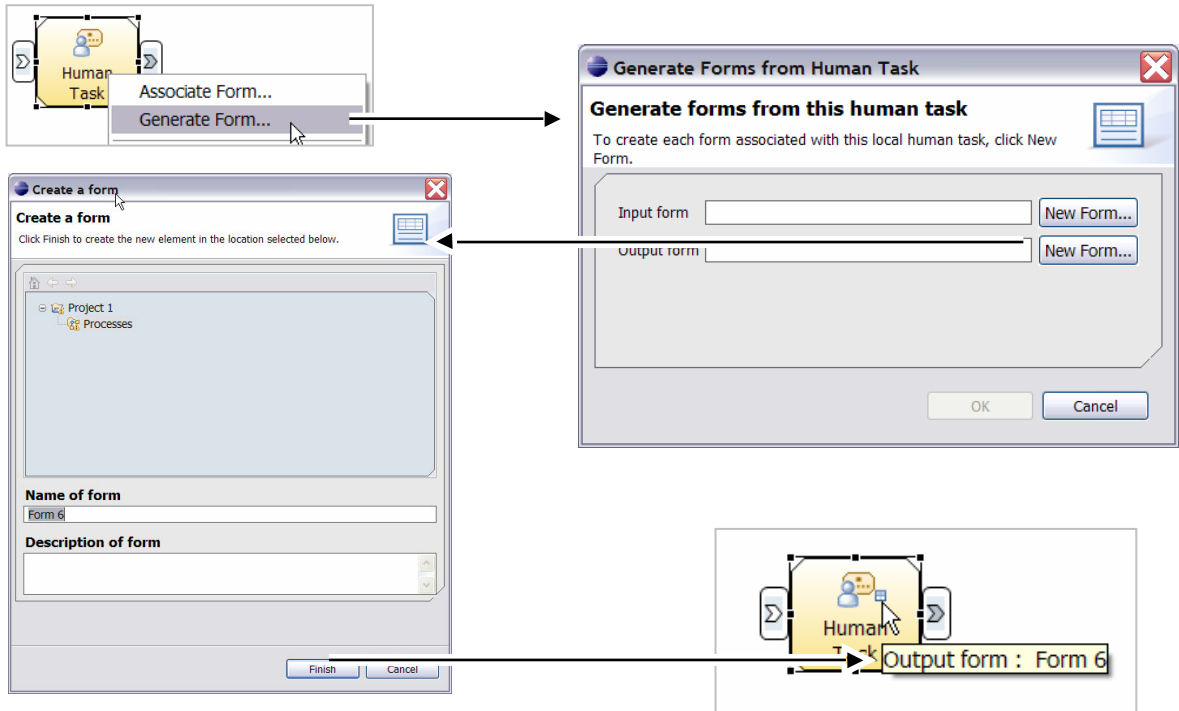
Field name	Type
Businessitem1	Business item 1

Output form:  [New...](#) [Browse...](#) [Edit...](#) [Disassociate](#)

Field name	Type

# Creating new form (6 of 7)

- From local human task: Context menu in the process editor



# Creating new form (7 of 7)

- From local human task: Forms tab in the attributes view

The screenshot displays the IBM Business Process Manager interface. At the top, a diagram shows a yellow 'Human Task' icon. Below the diagram, a tabbed interface is visible with tabs for 'Diagram', 'Specification', 'Visual Attributes', and 'Page Layout'. The 'Visual Attributes' tab is active, showing a sub-tabbed interface for 'Attributes - Human Task'. The sub-tabs include 'General', 'Cost and Revenue', 'Duration', 'Inputs', 'Outputs', 'Forms', 'Primary Owner', 'Additional Resources', and 'Escalations'. The 'Forms' sub-tab is selected, displaying a 'Forms' section with a mouse cursor pointing to the title. Below the title, a text block states: 'You can associate a form with a human task as the task input, the task output, or both the task input and output. If the human task inputs or outputs do not match the form data, they will be replaced by the form data.' A checkbox labeled 'Use the input form as the output form' is present. Below this, there are two form configuration panels. The left panel is for the 'Input form' and the right panel is for the 'Output form'. Each panel has a 'New...' button highlighted with an orange box, along with 'Browse...', 'Edit...', and 'Disassociate' buttons. Below the buttons, there is a table with columns 'Field name' and 'type'.

Diagram Specification Visual Attributes Page Layout

Attributes - Human Task Business Measures Errors (Filter matched 4 of 26 items) Simulation Control Panel

General Cost and Revenue Duration Inputs Outputs **Forms** Primary Owner Additional Resources Escalations

**Forms**

You can associate a form with a human task as the task input, the task output, or both the task input and output. If the human task inputs or outputs do not match the form data, they will be replaced by the form data.

☐ Use the input form as the output form

Input form **New...** Browse... Edit... Disassociate

Field name	type

Output form **New...** Browse... Edit... Disassociate

Field name	type

# Associating form with human task

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- Form can be associated as either an input form or an output form, or both
- Human task inputs are generated based on input form data
- Human task outputs are generated based on output form data
- Human task inputs and outputs are not removed when form is disassociated



# Associating form with global human task

- Form can be associated with global human task on the Forms page

The screenshot shows the 'Human task 1' configuration page in the IBM Business Process Manager console. The left sidebar contains a tree view with the following nodes: Specification, General, Cost and Revenue, Duration, Inputs, Outputs, Forms, Resources, Primary Owner, Additional Resource, Escalations, Organizations, and Classifiers. The 'Forms' section is selected in the tree.

**Forms**

You can associate a form with a human task as the task input, the task output, or both the task input and output. If the human task inputs or outputs do not match the form data they will be replaced by the form data.

☐ Use the input form as the output form

Input form:  [New...](#) [Browse...](#) [Edit...](#) [Disassociate](#)

Field name	Type
Businessitem1	Business item 1

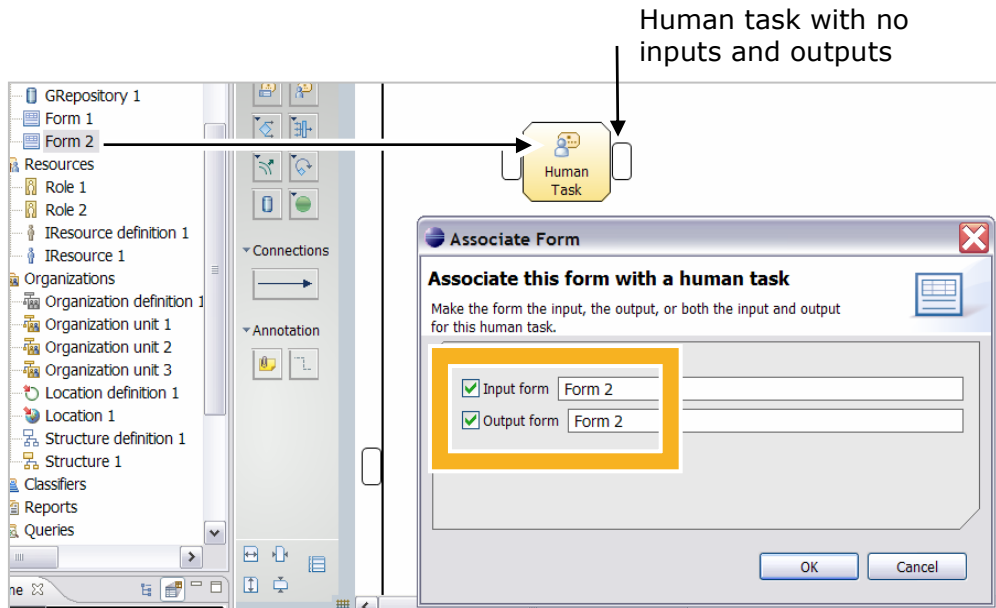
Output form:  [New...](#) [Browse...](#) [Edit...](#) [Disassociate](#)

Field name	Type
INSTANCE1	INSTANCE1

Specification

# Associating form with local human task (1 of 4)

- Form can be associated with local human task by dragging it from the Project Tree and dropping it onto a local human task in the process editor or on the Forms tab of the attributes view



# Associating form with local human task (2 of 4)

- Human task input and output generated based on form data

The screenshot shows the IBM Business Process Manager console. At the top, a diagram shows a 'Human Task' node with a label 'Input form : Form 2 / Output form : Form 2'. Below the diagram, the 'Forms' tab is selected in the configuration pane. The 'Forms' section contains the text: 'You can associate a form with a human task as the task input, the task output, or both the task input and output. If the human task inputs or outputs do not match the form data, they will be replaced by the form data.'

Two orange boxes highlight specific configuration options:

- The first box highlights the checkbox 'Use the input form as the output form', which is checked.
- The second box highlights the 'Output form' field, which is set to 'Form 2'.

Below these fields, there are two tables showing the mapping of form fields to task inputs and outputs.

Field name	Type
Businessitem1	Business item 1

Field name	Type
Businessitem1	Business item 1

# Associating form with local human task (3 of 4)

Human task with existing inputs and outputs

The screenshot displays the IBM Business Process Manager interface. On the left, a tree view shows the project structure, with 'Form 4' selected under the 'Forms' folder. In the center, a process diagram shows a 'Human Task' node. An arrow points from the 'Form 4' entry in the tree to the 'Human Task' node. On the right, the 'Associate Form' dialog box is open. The dialog has a title bar with a close button. The main text reads 'Associate this form with a human task'. Below this, a sub-header says 'Make the form the input, the output, or both the input and output for this human task.' There are two checked options: 'Input form' and 'Output form', both set to 'Form 4'. A yellow-bordered box highlights a warning message: 'The human task inputs and outputs do not match the form data. The form data will replace the current task inputs and outputs.' At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Form 2  
Form 3  
Form 4  
Resources  
Role 1  
Role 2  
IResource definition 1  
IResource 1  
Organizations  
Organization definition  
Organization unit 1  
Organization unit 2  
Organization unit 3  
Location definition 1  
Location 1  
Structure definition 1  
Structure 1  
Classifiers  
Reports  
Queries

Connections  
Annotation

**Associate Form**

**Associate this form with a human task**

Make the form the input, the output, or both the input and output for this human task.

☒ Input form Form 4  
☒ Output form Form 4

The human task inputs and outputs do not match the form data.  
The form data will replace the current task inputs and outputs.

OK Cancel

# Associating form with local human task (4 of 4)

- Human task inputs/outputs replaced by form data

The screenshot displays the IBM Business Process Manager interface. At the top, a diagram shows a yellow 'Human Task' icon with a tooltip that reads 'Input form : Form 4 / Output form : Form 4'. Below the diagram, the 'Forms' tab is selected in the 'Attributes - Human Task' section. The 'Forms' section contains the following text:

You can associate a form with a human task as the task input, the task output, or both the task input and output. If the human task inputs or outputs do not match the form data, they will be replaced by the form data.

The checkbox 'Use the input form as the output form' is checked. Below this, there are two tables for 'Input form' and 'Output form', both associated with 'Form 4'. Each table has columns for 'Field name' and 'Type'.

Field name	Type
Businessitem2	Business item 2

Field name	Type
Businessitem2	Business item 2

# Creating human task based on form

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- Global human task creation wizard allows specifying forms
  - Creation of human task will be based on this form
- Drag a form from the project onto a process editor to create a local human task
- Inputs and outputs created on a new human task are based on form data

# Creating global human task based on form

- Global human task creation

The screenshot shows a dialog box titled "Create a new human task" with a close button (X) in the top right corner. Below the title bar, the text "Create a new human task" is displayed, followed by the instruction "Click Finish to create the new element." and a small icon of a person with a document. The main area of the dialog contains a tree view on the left with "Project 1" and "Processes" under it. Below the tree view, there is a checkbox labeled "Associate form with this human task" which is checked. To the right of this checkbox are two input fields: "Input form" with the value "Form 1" and a "Browse..." button, and "Output form" with the value "SpringfieldScanFinished" and a "Browse..." button. Below these fields is a section titled "Name of new human task" with a text field containing "Human task 2". Below that is a section titled "Description of new human task" with a large text area. At the bottom of the dialog are two buttons: "Finish" and "Cancel".

**Create a new human task**

Click Finish to create the new element.

Project 1  
Processes

☒ Associate form with this human task

Input form: Form 1 [Browse...](#)

☐ Use the input form as the output form

Output form: SpringfieldScanFinished [Browse...](#)

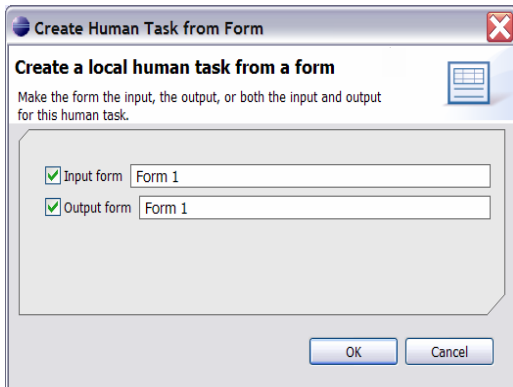
**Name of new human task**  
Human task 2

**Description of new human task**

[Finish](#) [Cancel](#)

# Creating local human task based on form

- Local human task creation



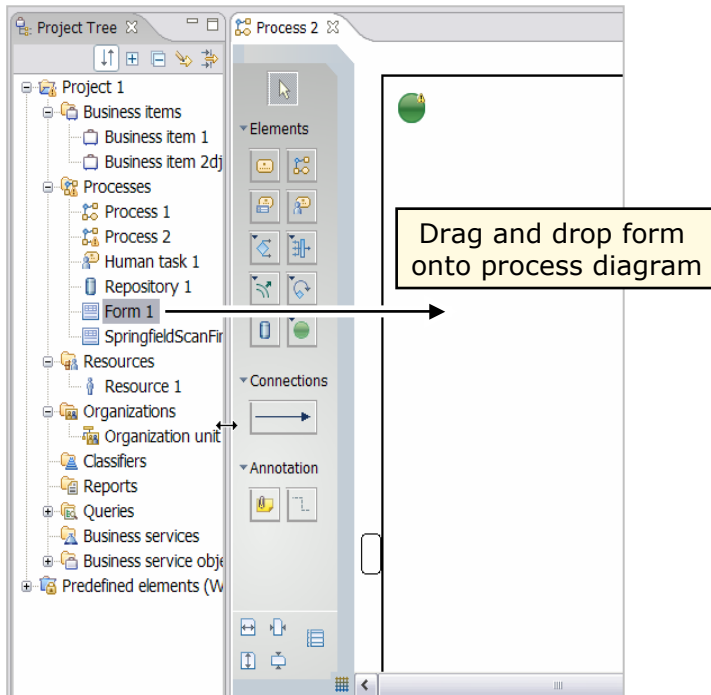
**Create Human Task from Form**

**Create a local human task from a form**

Make the form the input, the output, or both the input and output for this human task.

☒ Input form

☒ Output form





# Lotus Forms Designer in WebSphere Business Modeler

The screenshot displays the Lotus Forms Designer interface within the WebSphere Business Modeler environment. The main workspace shows a form design for "SPRINGFIELD GENERAL HOSPITAL". The form is structured with a header section, followed by a table for patient information, and a section for medical details.

**Form Structure:**

- Header:** SPRINGFIELD GENERAL HOSPITAL
- Table 1:**

ADMISSION DATE	TIME	CHART NO.
----------------	------	-----------
- Table 2:**

MEANS OF ARRIVAL	ER	OPD	INPAT	DAY
------------------	----	-----	-------	-----
- Table 3:**

PERSON TO BE NOTIFIED	TELEPHONE	RELATIONSHIP
-----------------------	-----------	--------------
- Table 4:**

ADDRESS	NOTIFIED
---------	----------
- Table 5:**

ATTENDING DOCTOR (CONSULTANT)	TIME
-------------------------------	------
- Table 6:**

FAM. REF. PHYSICIAN	PHONE NO.
---------------------	-----------
- Table 7:**

PRESENTING COMPLAINT
----------------------
- Table 8:**

TRIAGE	EMERG	URGENT	ALLERGIES
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**Left Panel (Project Tree):**

- Project 1
  - Business Items
    - Business Item 1
    - Business Item 2djfhgkjfdsg dg
  - Processes
    - Process 1
    - Process 2
    - Human task 1
    - Repository 1
    - Form 1
    - SpringfieldScanFinished
  - Resources
    - Resource 1
  - Organizations
    - Organization unit 1
  - Classifiers
  - Reports
  - Queries
  - Business services
  - Business service objects
  - Predefined elements (WebSphere Business Mo

**Right Panel (Palette):**

- Select
- Marquee
- Standard Li...
- Page
- Toolbar
- Table
- (Repeat) By Wizard
- Pane (Group)
- Case
- Label (Output)
- Line
- Field (TextArea)
- Date Picker
- Input
- Button
- Trigger
- Check (Input)
- Radio (Non-XForms)
- Slider (Range)
- Popup (Select1)
- Combobox (Select1)
- List (Select)
- CheckGroup (Select)
- RadioGroup (Select1)
- Choice (Item)

**Bottom Panel (Design View):**

- Design
- Source
- Viewer
- Webform Server
- Attributes
- Business Measures
- Error View

# Checkpoint: Defining human tasks and forms

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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 a human task?
2. When creating a human task, what needs to be specified in order to identify who should perform the task?
3. What is an escalation?
4. What is the purpose of associating human tasks with forms?

# Checkpoint solutions: Defining human tasks and forms

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1. Specialized tasks that a system assigns to a person to perform
2. Primary owner
3. A course of action that takes place when a human task is not completed within the specified time period
4. Forms represent the electronic forms that people use to complete a human task

# Unit summary

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Having completed this unit, you should be able to:

- Explain human tasks
- Create and define human tasks in Modeler
- Define primary owner and escalations for human tasks
- Explain forms
- Create and associate forms with human tasks

# Exercise overview

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In this exercise, you will:

- Create a human task
- Associate forms
- Assign a primary owner
- Define escalations
- Convert a local task to a local human task