TIBCO Business Studio™ for Analysts

User’s Guide

Software Release 3.6.0
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Two-Second Advantage®

TIBCO®

Important Information

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

Contents

Preface

This guide is intended for business analysts and describes using the process modeling capabilities of TIBCO Business Studio for Analysts. No previous software experience is necessary, but a familiarity with Business Process Modeling Notation (BPMN) is useful (see http://www.bpmn.org).

Topics

Related Documentation

This section lists documentation resources you may find useful.

Third-Party Documentation

The Eclipse help contains useful information on the Workbench and the Eclipse user interface.

TIBCO Business Studio for Analysts supports the following standards:

- Business Process Modeling Notation (BPMN)

  http://www.bpmn.org

- XML Process Definition Language (XPDL)

  http://www.wfmc.org/standards/xpdl.htm

Typographical Conventions

The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
TIBCO_HOME *STUDIO_HOME*	Many TIBCO products must be installed within the same home directory. This directory is referenced in documentation as *TIBCO_HOME*. The default value of *TIBCO_HOME* depends on the operating system. For example, on Windows 7 systems, the default value is `C:\Program Files (x86)\tibco` TIBCO Business Studio for Analysts installs into a directory within <*TIBCO_HOME*>. This directory is referenced in documentation as *STUDIO_HOME*. The default value of *STUDIO_HOME* depends on the operating system. For example on Windows 7 systems, the default value is `C:\Program Files (x86)\TIBCO\studio-bpm-35`.
`code font`	Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example: Use `MyCommand` to start the foo process.
`bold code font`	Bold code font is used in the following ways: • In procedures, to indicate what a user types. For example: Type **`admin`**. • In large code samples, to indicate the parts of the sample that are of particular interest. • In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, `MyCommand` is enabled: `MyCommand [`**`enable`**` | disable]`
italic font	Italic font is used in the following ways: • To indicate a document title. For example: See *TIBCO ActiveMatrix BusinessWorks Concepts*. • To introduce new terms For example: A portal page may contain several portlets. *Portlets* are mini-applications that run in a portal. • To indicate a variable in a command or code syntax that you must replace. For example: `MyCommand` *PathName*

Table 1 General Typographical Conventions (Cont'd)

Convention	Use
Key combinations	Key name separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C. Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.
	The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.
	The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.
	The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.

Connecting with TIBCO Resources

How to Join TIBCOmmunity

TIBCOmmunity is an online destination for TIBCO customers, partners, and resident experts. It is a place to share and access the collective experience of the TIBCO community. TIBCOmmunity offers forums, blogs, and access to a variety of resources. To register, go to http://www.tibcommunity.com.

How to Access TIBCO Documentation

You can access TIBCO documentation here:

http://docs.tibco.com

How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, contact TIBCO Support as follows:

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

  http://www.tibco.com/services/support

- If you already have a valid maintenance or support contract, visit this site:

  https://support.tibco.com

  Entry to this site requires a user name and password. If you do not have a user name, you can request one.

Chapter 1 Getting Started for Analysts

TIBCO Business Studio for Analysts is a simplified version of TIBCO Business Studio useful for business analysts or those responsible for high level or abstract modeling. The ribbon-based toolbar provides a familiar, easy to use interface and allows the user to access all the artifacts from a single file.

- See How to Model a Simple Business Process in TIBCO Business Studio for Analysts on page 9 for a simple tutorial on using TIBCO Business Studio for Analysts.
- TIBCO Business Studio for Analysts allows the business analyst to use forms functionality to design and preview forms. See the *TIBCO Business Studio Forms User Guide* for more information.
- TIBCO Business Studio for Analysts allows business analysts to simulate processes and compare simulations. See How to Simulate a Simple Business Process in TIBCO Business Studio for Analysts, page 39 and the *TIBCO Business Studio Simulation Guide* for more information.

Topics

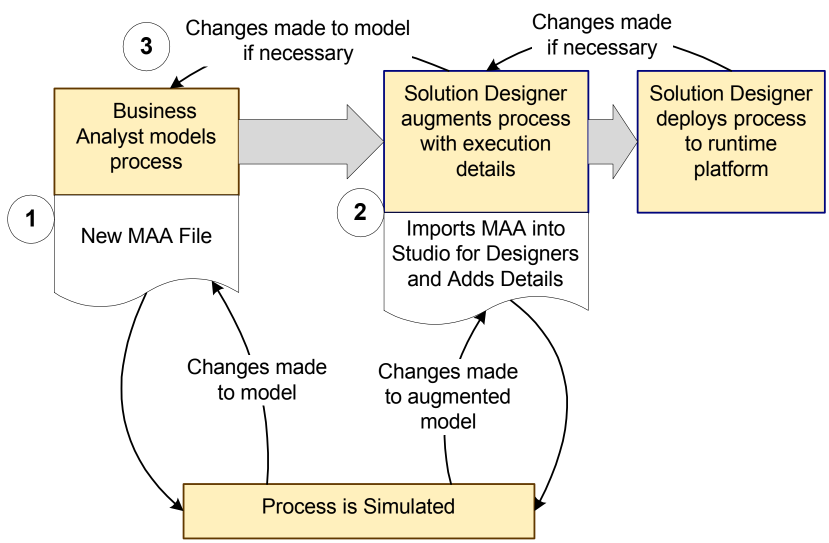
Modelled Application Archive

To enable the Business Analyst to access all the artifacts of a BPM project from a single location, TIBCO Business Studio saves the project as a Modelled Application Archive (MAA) file with a .maa file extension.

The MAA file contains information about the BPM project and its artifacts such as the organizational model, business object model, business processes, and packages.

Lifecycle of an MAA file

The following figure describes the lifecycle of a typical MAA file.



1. The Business Analyst models the process in TIBCO Business Studio for Analysts, and saves the project as an MAA file.
2. The Solution Designer imports the MAA into TIBCO Business Studio using the **Import > Existing MAA Files into Workspace** wizard.
3. If the model needs to be modified, the Solution Designer exports the updated MAA from the existing project and passes it to the Business Analyst. The Business Analyst makes the changes to the model and passes the updated MAA back to the Solution Designer. The Solution Designer then re-imports the MAA into TIBCO Business Studio.

Creating and Accessing MAAs

This section describes how MAAs are created and used.

Creating an MAA

To create a Modelled Application Archive (MAA), do one of the following:

- When you first launch TIBCO Business Studio for Analysts, a dialog offering a number of options is displayed. Click the **Create new project** link and enter the name of the new project in the **New Project** dialog.
- Select the New... icon from the ribbon, click the **Create new project** link and enter the name of the new project in the **New Project** dialog.

The derived artifacts such as generated WSDLs, business objects, forms, etc are not included in the generated MAA file and may need to be regenerated when you import the generated MAA file to a different workspace.

In all the above cases, the project is saved as an MAA file.

Accessing an MAA

To access the .maa file, do one of the following:

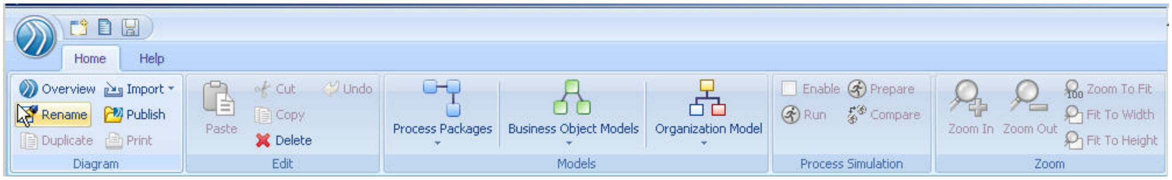
- Double-click the MAA file to open the project in TIBCO Business Studio for Analysts.
- Click the Open icon on the ribbon to look for an existing MAA file.
- Select the New... icon from the ribbon, click the **Open an existing MAA** link and browse to the MAA you want to open.

You can create an MAA file in TIBCO Business Studio for Analysts, save it and then import it as an existing MAA into TIBCO Business Studio. You can then work on the projects it contains and save it, and export it to MAA, and then access it again from TIBCO Business Studio for Analysts. You will not lose any data when you do this.

Alternatively, you can commit the projects into SVN, check them out in TIBCO Business Studio, work on the projects and re-commit into SVN and then update or check them out in TIBCO Business Studio for Analysts.

TIBCO Business Studio for Analysts Ribbon-Format Controls

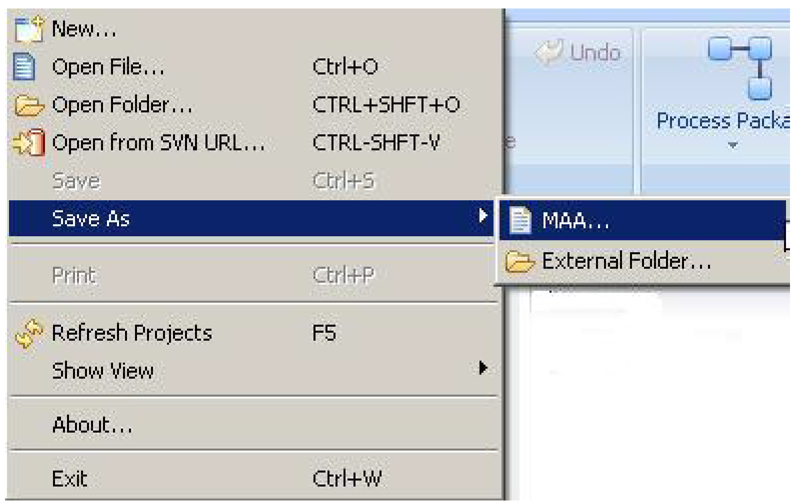
TIBCO Business Studio for Analysts provides controls in the ribbon format. Also, the related commands are organized into groups which are provided in the horizontal bar at the top of the application window.



Following are the controls available at the top left-hand end of the ribbon.

<table>
<tr><th>Control</th><th>Description</th></tr>
<tr><td></td><td>

The dropdown gives the following choices, most of which are described elsewhere in this document:



- **Save As** gives you the choice of saving the project/s to **MAA...** or to an **External Folder.**
  - — If you are editing an MAA then you have the option to **Save As** another MAA (make a copy of the current MAA) or **Save As External Folder** (copy the projects out to the given folder location).
  - — If you are editing projects from a folder location then you can only **Save As MAA** (create an MAA file for the projects).

</td></tr>
</table>

Control	Description
	Note: Save As will save all the projects to the chosen target (whether it is an MAA or folder) but you will continue to work on the current projects (and will not switch to the **Save As** location).
New...	Create a new MAA or open existing projects. When you click , the dialog appears with the following options: • **Create new project** The **New Project** dialog allows you to name the project, and add whichever of the following assets you want to add to the project: Business Process, Business Object Model, Organization Model. • **Open an existing MAA** You can open an existing MAA from the location of the last MAA you used, or browse to a location containing the MAA you want to use. • **Open projects from a folder location** Browse to a location to open an existing BPM project which has been created using TIBCO Business Studio. **Note:** Studio for Analysts import is only supported for BPM projects (any other TIBCO Business Studio artefact can be imported, but will be an empty container and cannot be used). • **Open projects from a SVN URL** The **Checkout from SVN** dialog allows you to check out projects from an SVN repository.
Open File	Opens an existing MAA or model. When you click , the **Select File to Open** dialog appears. You can do one of the following: • Select a .maa file - opens the MAA with the **Overview** tab as the active tab. • Identify another type of file to open using the dropdown **Files of type...** (*.bom, *.om, *.xpdl).Navigate to an individual model (or process package) and select it. This opens the selected model in the edit mode.

Control	Description
Save	Saves the BPM projects as an MAA file. When you save a new project for the first time, the **Save New Project** dialog allows you to choose the location of the MAA file. Subsequent changes to the project are saved to the file at the same location.

The **Home** menu provides access to the following groups:

Control	Description
Diagram	The controls in this group affect the selected model or package.
Edit	The controls in this group affect the selected object.
Models	The **Models** group consists of controls to create or edit **Process Packages**, **Business Object Models**, and **Organizational Model**. See "Working with Projects, Packages and Processes" in the *TIBCO Business Studio Process Modeling Guide* for more information.
Process Simulation	The **Process Simulation** group consists of controls to simulate processes. The *TIBCO Business Studio Simulation User's Guide* describes using simulation in detail.
Zoom	The controls in this group allow you to change the zoom level of the diagrams.

The following table describes the controls available within the group **Diagram**.

Control	Description
Overview	Shows the Overview view of the BPM projects.
Rename	Renames the selected project, model or package. The **Rename** dialog allows you to enter the new name for the selected project, model or package.
Duplicate	Creates a copy of the selected model or package and appends the text `Copy_Of_` to the original name.

Control	Description
Import	This is a drop-down button with two options: • **Import Nimbus Process Diagram...** Launches the Nimbus Import wizard as described in "Importing and Exporting Projects" in the *TIBCO Business Studio Process Modeling Guide*. The wizard will ask you to select the target project into which you want to to import the model. The choice of projects will be limited to projects with the "Business Process" asset configured. To be imported into TIBCO Business Studio, Nimbus Process Diagrams must be exported from the Nimbus Control application using the **Simplified XML export** format. See the TIBCO Nimbus Control documentation for more details. • **Others...** Launches an existing TIBCO Business Studio for Analysts export (you select the file to import).
Publish	Generates the documentation for all the assets in the BPM projects and saves it in the selected destination folder. If the **Open the documentation on completion** checkbox is selected, the generated documentation is opened in the default browser.
Print	Prints the selected model.

To delete, select what you want to delete, and then click **Delete** in the **Edit** group.

The following table describes the controls available within the group **Process Simulation**.

Control	Description
Enable	Opens the process in simulation mode. This will identify any problems in the process with problem markers. You should fix these problems before you attempt a simulation.
Prepare	Prepares the process for simulation. You will be warned if there are errors in the process which will prevent simulation.
Run	Runs the simulation.
Compare	Compares the results of different simulations of the process.

The **Help** menu provides access to the following:

Control	Description
Help Contents	Opens the TIBCO Business Studio Help system.
About	Opens the **About** dialog which provides information about the TIBCO Business Studio version, features and plug-ins, and configuration details.
Configuration Details	Opens a dialog to provide the configuration details. You can also access the configuration details from **Help** > **About** > **Configuration Details**.
Preferences	Opens the **Preferences** page which captures the user information and preferred settings for the project.

Chapter 2 How to Model a Simple Business Process in TIBCO Business Studio for Analysts

Topics

Overview

TIBCO Business Studio for Analysts is the version of TIBCO Business Studio that enables a business analyst to model a business process, design and preview forms, simulate the process, and store all the artifacts of the process in a single file. Its straightforward interface is suited to users doing high level or abstract modeling.

This tutorial shows you how to use TIBCO Business Studio for Analysts to rapidly model a simple **Motor Claims** business process that represents part of the business of an insurance company. In this process:

- A motor insurance claim is assessed, as to whether it involves a fault or is a no-fault claim.
- Depending on the result of that assessment, processing passes to either one of two user tasks, one for fault and one for no-fault claims.
- Each task references the data fields defined for the corresponding business objects.
- The participants responsible for carrying out the user tasks are mapped to positions in a corresponding organization model.

You should work through each section in turn to complete the tutorial.

Key Points Although it uses a very simple example, this tutorial demonstrates some of the fundamental points of the analysis phase for any business service:

- creating and assigning the business data required by the process
- designing the process flow
- creating and assigning the participants who will be involved in the process
- placing and describing tasks such as scripts (or services) that will be implemented later by the solution designer.
- saving the project as an archive file which you can pass on to a solution designer, who uses TIBCO Business Studio for the next stages of the development process

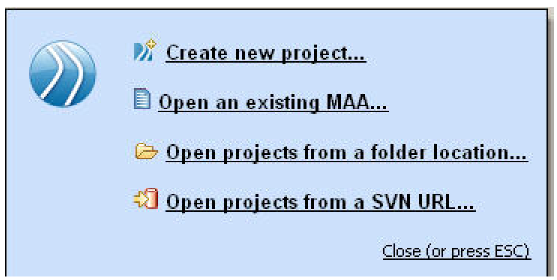
Next Step Creating a New Project

Creating a New Project

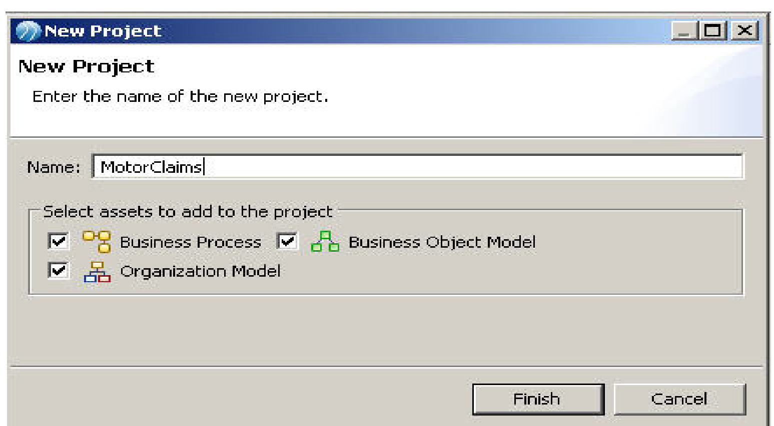
Key Points A project is the basic container that you use to store all the artifacts needed by your business process. The project you create here contains a basic organization model and a basic business object model. TIBCO Business Studio for Analysts saves a project as a Modeled Application Archive file with the extension .maa, which you can pass on to the solution designer for the next stages of the design process.

Procedure To create a new project:

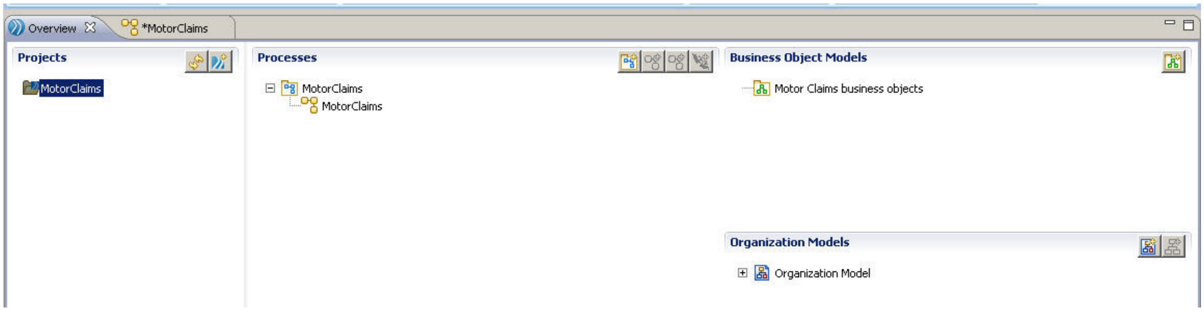
1. Start TIBCO Business Studio for Analysts (for more information, see the installation guide.
2. Click  , either on the dialog that displays when TIBCO Business Studio for Analysts opens, or on the ribbon at the top of the screen.



3. The **New Project** dialog displays. Enter **MotorClaims** as the **Project name** and accept the default selection of the assets to add to the project (Business Process, Business Object Model and Organization Model).



4. Click **Finish**. The **MotorClaims** project is created. It is shown in the left column, with Processes, Business Object Models and Organization Models in the right column.



The new project contains the following artifacts:

— An organization model, containing a single organization called **Organization1**

— A business object model, called **MotorClaims.bom.**

— A process package, containing a single process called **MotorClaims-Process**.

Each of these three artifacts is displayed on its own tab.

A fourth tab contains an overview of the project, as shown in the illustration above. The **Overview** page shows any error icons next to the relevant artifact, and the details of the error are shown in the Problems view.

If you close any of the other tabs, you can re-open it by clicking **Overview** in the Diagram group, from the **Overview** tab, or from the tools on the **Models** group of the ribbon.

Click once on each of the artifacts to display its properties in the Properties view. Double-click to open the editor for that artifact.

Click on the icon by an artifact to go to the wizard to create a new version of that artifact.

5. Click the **MotorClaimsProcess** process package tab. The Process Editor is displayed.

6. On the **Properties** tab for the business process, select the **Label** field. Change the label to **MotorClaims**. Click away from the field to save the label change.

7. Click the **Organization1** tab.

8. On the badge that shows the name of **Organization1**, click on the name and use **Rename** from the ribbon to rename it. Type **EasyAs** and click away from the field or press **Enter** to save your name change.

9. Click  or press **Ctrl+S** to save the changes you have made to the project.

10. You are prompted to select a location to save the file. Select a suitable folder and save the file as the default **MotorClaims.maa**. This is the archive file which, when the analysis phase of the project is complete, you would pass on to the solution designer.

Next Step Defining Business Data

Defining Business Data

Key Points

The business object model created in the project holds the business data, representations of business objects and the relations between them. The business process that you will define in later procedures uses this business data.

The simple business object model in this tutorial contains objects relating to a motor insurance claim:

- A **class** representing the claim itself
- **Classes** representing the two types of claim, fault and no-fault, which are subordinated to the claim class
- Connections between these objects

Classes can be embedded in a higher-level object, a **package**. The business object model itself is a package; intermediate packages are not necessary in simple models such as this example.

Procedure

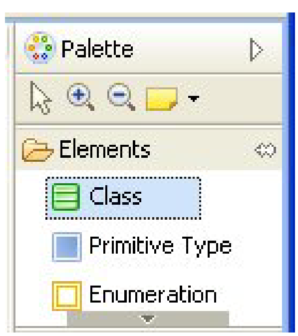
To create these business objects:

Task A Renaming the model

1. Click the **.bom** tab. The business object model editor opens.
2. In the Properties view for the model, select the text in the **Label** field. Type **Motor Claims business objects**.
3. Click away from the field to save your change.

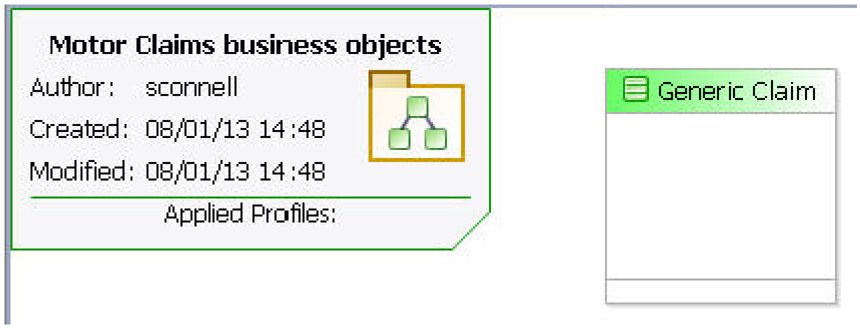
Task B Creating the Classes

1. Select the **Class** tool in the palette. s



Drag it on to the empty canvas of the editor and drop it. This places a class in the diagram.

2. The **label** field of the new class is automatically selected at this point. Type **Generic Claim** into the selected field. Click away from the field to save the label.



3. Create two more classes in the same diagram. Call them **Fault claim** and **No fault claim**.

4. Click  or press **Ctrl+S** to save the changes you have made to the project.

You can also save your process at any point while you are creating or editing it. If there are unsaved changes, an asterisk is displayed in the title of the editor tab.

It is advisable to save after completing each procedure.

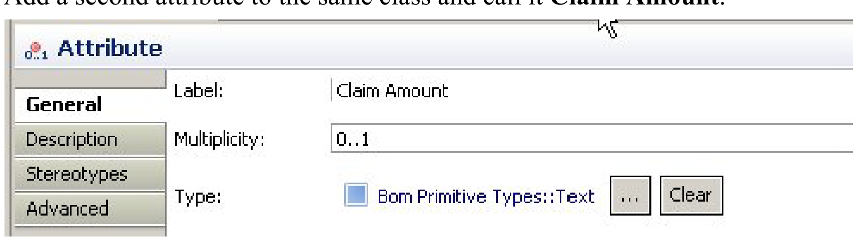
Task C Adding Attributes to the Classes

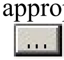
A class can contain attributes. Each attribute represents an individual piece of information. In this tutorial you will add a few attributes to the classes; a realistic model would have a great many more.

1. In the palette, select the **Attribute** tool. Drag it over the **Generic Claim** class in the diagram and drop it.

2. Select the attribute, and on the **General** tab of the **Properties** view, type **Claim Description** in the Label field.

3. Add a second attribute to the same class and call it **Claim Amount**.



4. Attributes default to a type of **Text**, as shown in the previous illustration. This is appropriate for the claim description, but not for the amount. Click the browse button  . The **Select Type** browser is displayed.
5. Click **Integer - Bom Primitive Types** and click **OK**.
6. Add an attribute called **Counterparty** to the **Fault claim** class, and an attribute called **Confirmation of no fault** to the **No fault claim** class. Keep the default **Text** type for both these.

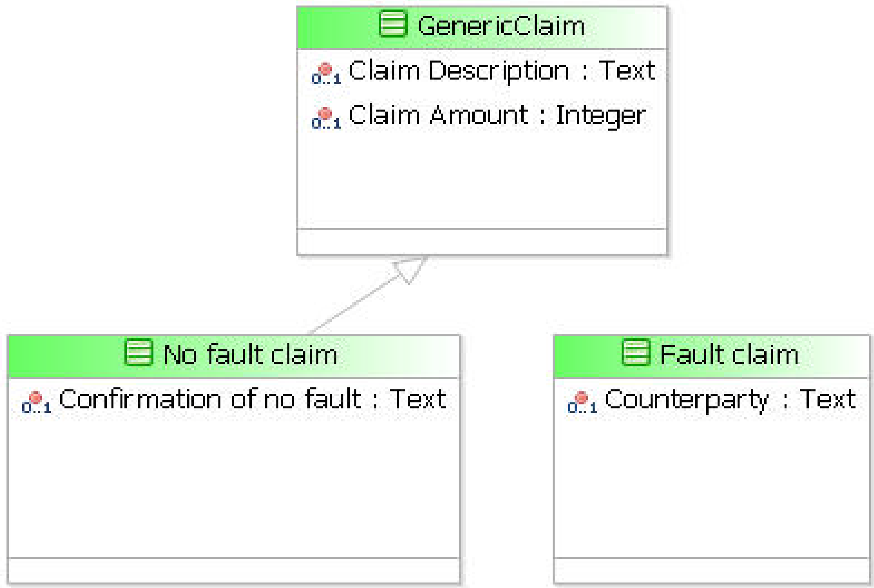
Task D Adding Relationships Between the Classes

Relationships indicate connections between objects in a business object model. Connections can be **generalizations** or **compositions**.

A generalization connects two classes, and it indicates that one of the two classes is a more general form of the other. Another way of describing it is that the more specialized class is a derived version of the more general class. In this procedure the **Fault claim** and **No fault claim** classes represent specific types of claim, and so are derived from the general **Generic claim** class. Both inherit the properties of **Generic Claim**, including the **Claim description** and **Claim amount** attributes. The additional attributes that **Fault claim** and **No fault claim** possess apply only to that one class each.

1. From the **Relationships** tool group on the palette, select the **Generalization** tool.

2. Click on the **No fault claim** class and drag the pointer to the **Generic Claim** class. This creates the generalization. Note that the **General** tab in the **Properties** view for the generalization indicates the classes that it links.



3. Link the **Fault claim** class to the **Generic Claim** class with a generalization in the same way.
4. Click  or press **Ctrl+S** to save the changes you have made to the project.

Next Step Outlining the Business Process

Outlining the Business Process

Key Points The Process Editor is where you create your business process. It includes a palette that contains the tools you use to create your process.

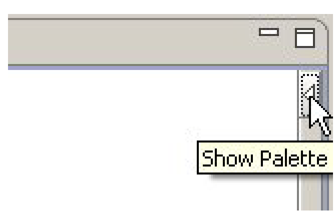
A default process is automatically displayed in the Process Editor when you create the project that contains it. The **MotorClaims** process is empty. It contains only a Start event, an End event, and a sequence flow between them.

You will now add the basic elements of the process:

- the Tasks that make up the process
- Gateways, where the flow of processing branches according to decisions taken
- and modify sequence flow, which shows the flow of activities through the process, to fit with the tasks and gateways.

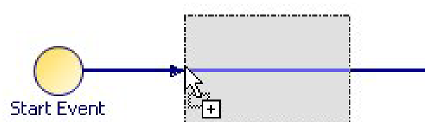
Procedure To add these elements to the process:

1. Click the **Show Palette** arrow at the top right-hand corner of the Process Editor to display the palette:



The palette contains a number of drawers, each of which contains a set of tools.

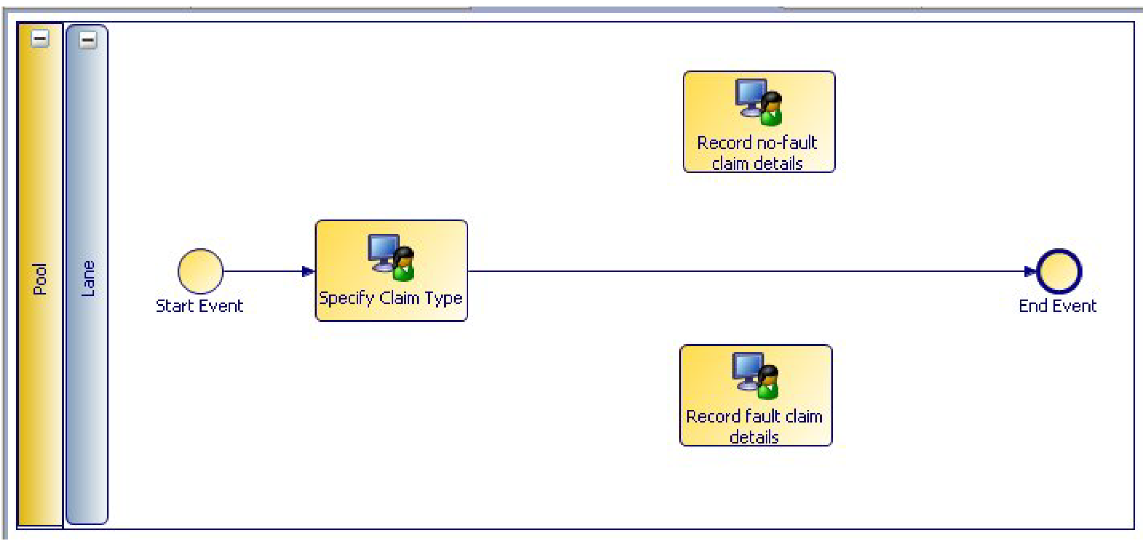
2. Click the **Tasks** drawer in the palette to open it.
3. Click the **User Task** tool  .
4. Position the mouse pointer after the start event. The guide line displays again.



Click to add the user task.

5. Change the user task label to **Specify Claim Type** and click away from the field to save the change.

6. On the canvas of the Process Editor, between the existing task and the End event, add two more User Tasks. Place one above the other, and call them **Record fault claim details** and **Record no-fault claim details**. Your process should now look like this.

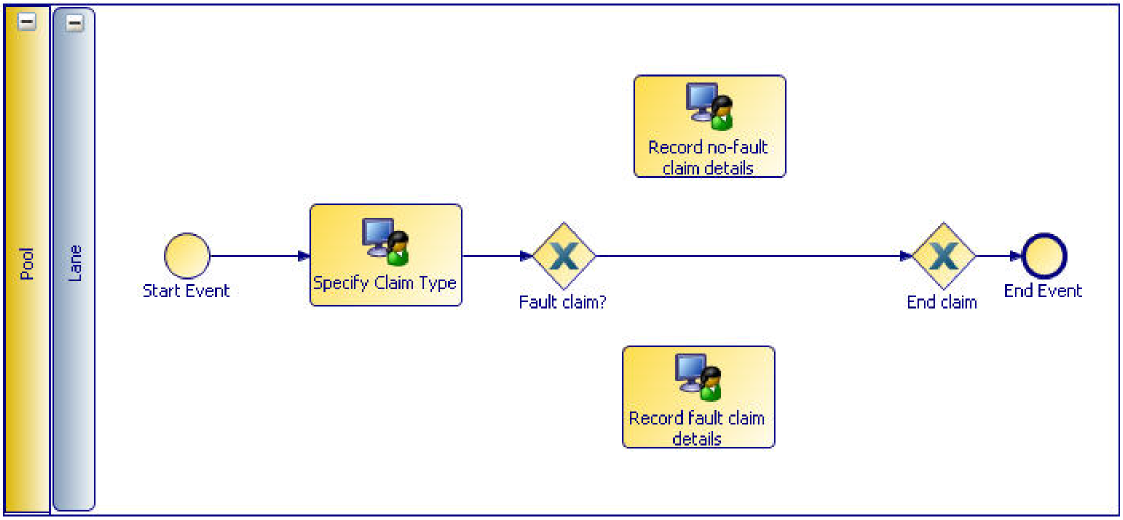


7. Next, you will indicate the way that these tasks are connected. The result of the **Specify claim type** task is a decision whether the claim is a fault or a no-fault claim. If it is a fault claim, the **Record fault claim details** task is executed; otherwise, the **Record no-fault claim details** task is executed.

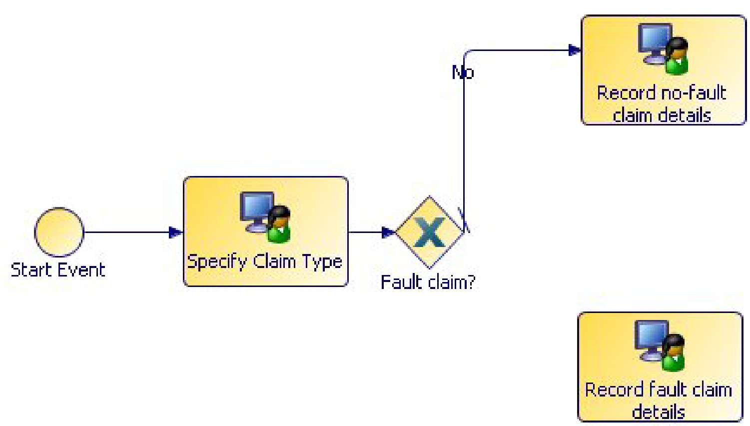
   You use a gateway to indicate this branching in the processing flow. Open the **Gateways** drawer in the palette and click on  .

8. Position the pointer on the sequence flow to the right of the **Specify Claim Type** task and click to place the gateway. Call the gateway **Fault claim?**.

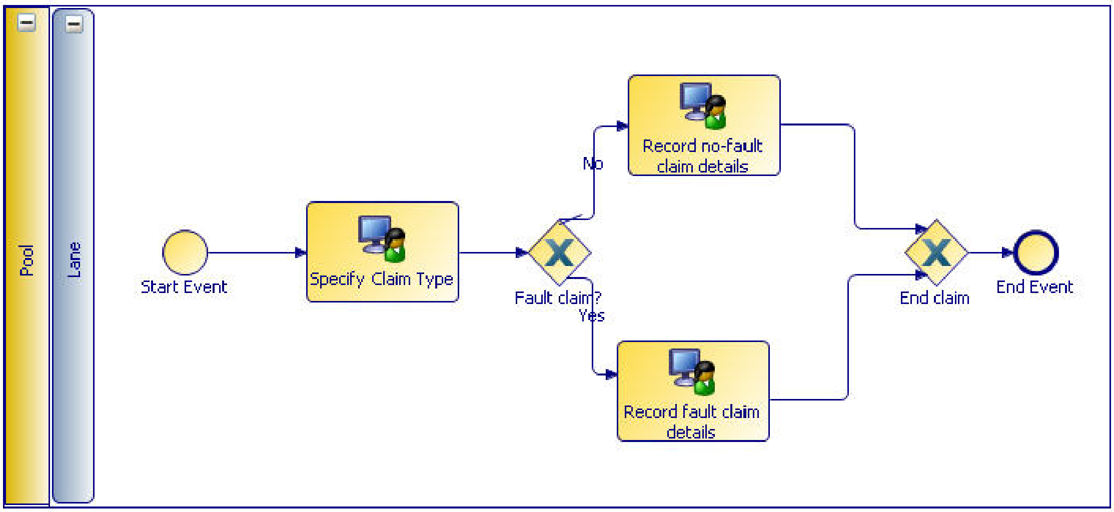
9. Add another gateway to the left of the End event. Call the gateway **End claim**.



10. To delete the section of the process flow that runs between the two gateways, right-click on it and select **Delete** from the popup menu.
11. The flow of processing branches after the **Fault claim?** gateway, and one of the two paths must be designated as the default. Open the **Connections** drawer in the palette and click on the **Default Flow** tool  .
12. Move your pointer to the **Fault claim?** gateway, click on it, drag the pointer over to the **Record no-fault claim details** task, and release it.
13. Type **No** in the **Label** field on the **Properties** tab, to identify the connection.



14. In the palette, click on the **Conditional Flow** tool .
15. Draw a connection from the **Fault claim?** gateway to the **Record fault claim details** task, and type **Yes** in the **Label** field on the **Properties** tab.
16. Draw unconditional connections, using the **Sequence Flow** tool, from the two user tasks to the second gateway (**End claim**). Your process should now look like the following illustration.



17. Click or press **Ctrl+S** to save the changes you have made to the project.

You have now completed the outline of the process.

Next Step Creating a Conditional Script

Creating a Conditional Script

Key Points

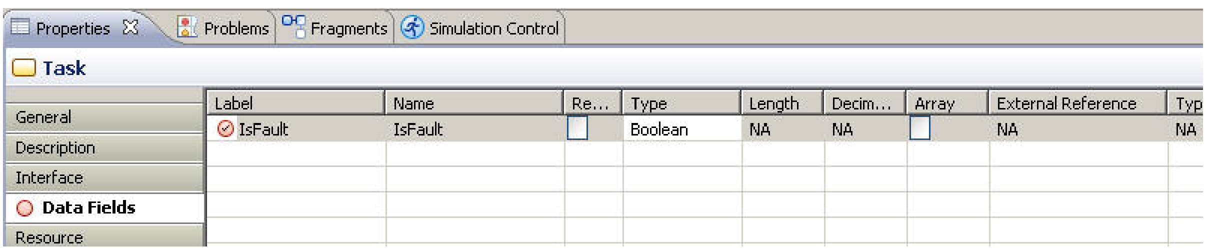
The flow of processing branches at the **Fault claim?** gateway depending on whether a fault claim or a no-fault claim is being made. You will create a data field **IsFault** which, if set to **True** (meaning that the claim *is* a fault claim), directs the flow down the conditional flow connection to the **Record fault claim details** task.

If the field is set to **False** (meaning that the claim is not a fault claim), processing follows the default flow connection to the **Record no-fault claim details** task.

Procedure

To create the data field:

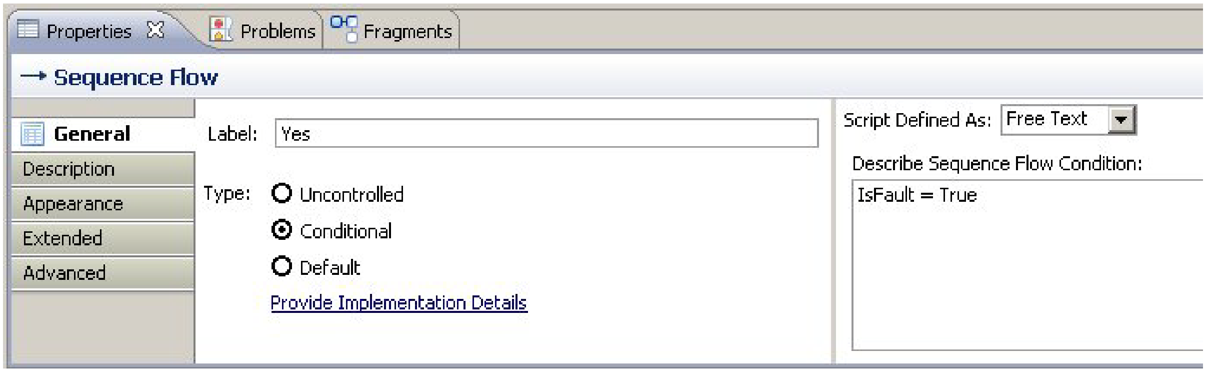
1. Click on the **Specify Claim Type** task. The **Properties** tab at the base of the window displays the properties for that task.
2. In the **Properties** tab, click on **Data Fields**.
3. Click the plus sign  at the right of the **Data Fields** tab.
4. Click in the Label column and change the label from the default **Field** to **IsFault**.
5. Click in the Type column and select **Boolean** from the drop-down list.



To attach a script to the conditional flow:

1. In the Process Editor, select the conditional flow object (the connection that runs to the **Record fault claim details** task).

2. In the **General** tab of the Properties view, select **Free Text** instead of the default **Undefined** from the **Script Defined As** drop-down list.



3. In the **Describe Sequence Flow Condition** field, type:

   IsFault = True

Because this is free text, which a solution designer would interpret as the analyst's requirement for implementing a script, the exact format does not matter. The designer can then implement the script using JavaScript or some other syntax that is appropriate to the environment on which the process will be executed.

Next Step Adding Data to the Process

Adding Data to the Process

Key Points

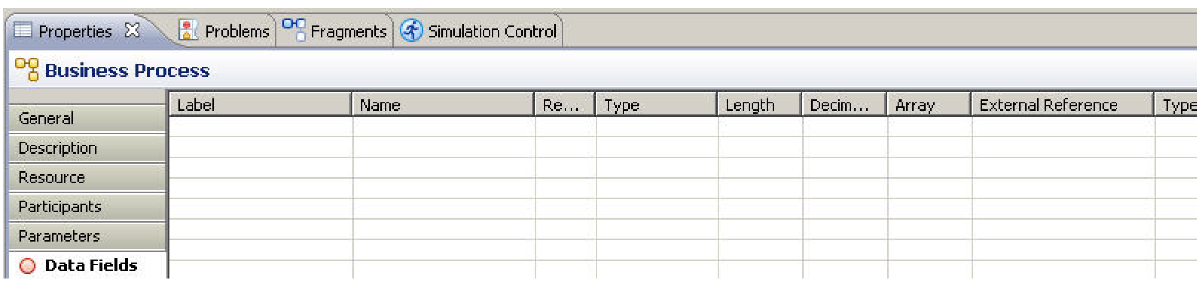
- Data is input to a process using parameters.
- Data fields can be assigned to user tasks to obtain and display information. In the runtime version of a business process, the data fields associated with a user task would be reflected in the forms produced for that task.
- Data fields can also be manipulated in script tasks.

Procedure

To add the data to the process, you must first define the required fields, then assign them to the user tasks.

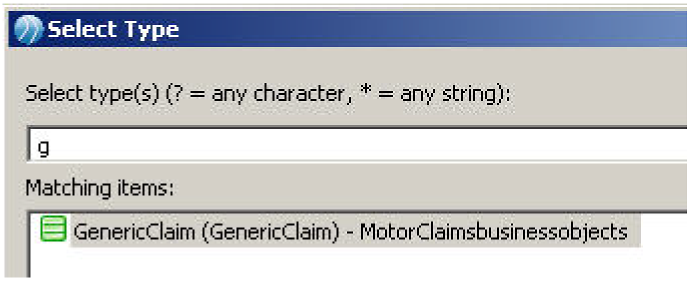
Task A Define the Fields

1. Click on the background of the Process Editor. The **Properties** tab at the base of the window displays the properties for the **MotorClaims** business process itself, rather than the properties for any element within it.
2. In the **Properties** tab, click on **Data Fields**.



3. Click the plus sign at the right of the **Data Fields** tab. A new field displays.
4. Click in the Label column and change the label from the default **Field** to **Generic claim data**.
5. Change the **Type** to **External Reference**. This allows you to map the field to an object defined outside the process, in this case to a class in the business object model.
6. Select the **External Reference** field. Because you specified **External Reference** in the **Type** field, a browse button ... becomes available. Click it.

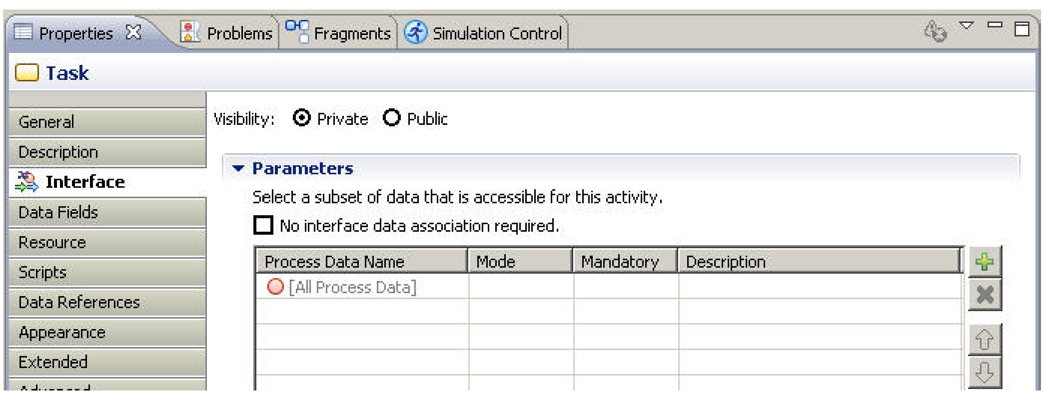
7. The **Select Type** dialog is displayed. Type **g** in the **Select type** box to narrow your search.



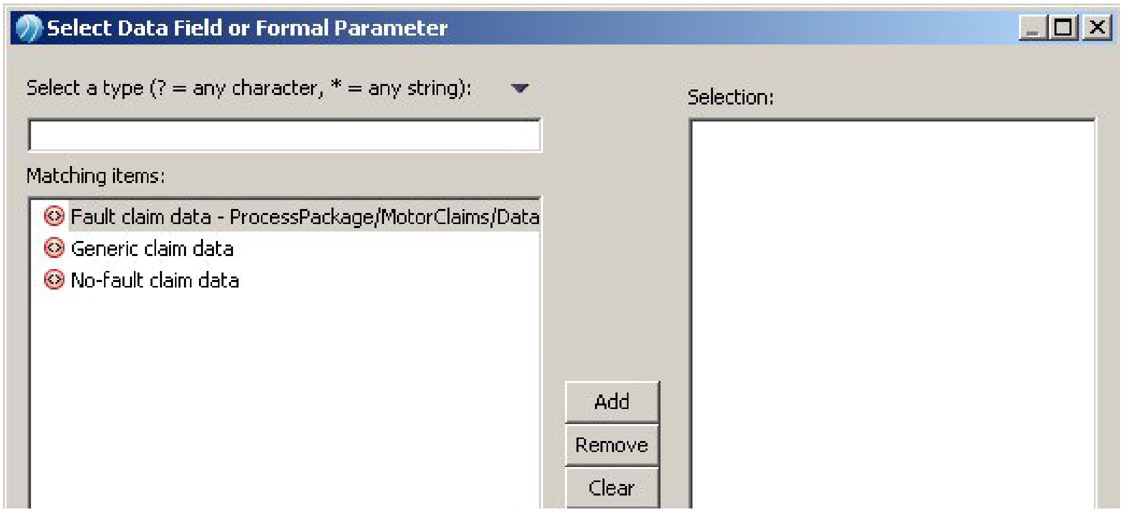
8. Select the **Generic Claim** class and click **OK**.
9. Similarly, add the following fields:
   — **Fault claim data**, mapped to the **Fault claim** class
   — **No-fault claim data**, mapped to the **No fault claim** class
10. Click  or press **Ctrl+S** to save the changes you have made to the project.

Task B Map the Fields to User Tasks

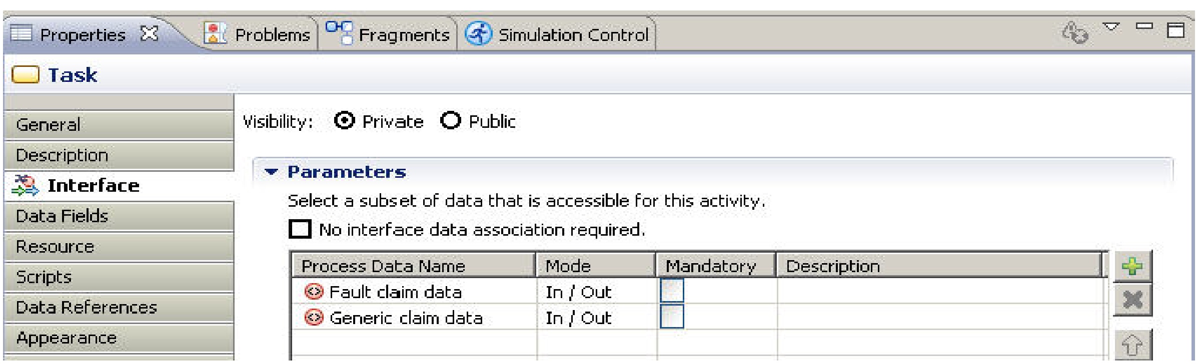
1. In the **Properties** view for the **Record fault claim details** user task, click on **Interface**.



2. Click the plus sign at the right of the **Interface** tab. The **Select Data Field or Formal Parameter** dialog displays.



3. Select **Fault claim data** and press **Add**.
4. Then select **Generic claim data** and press **Add** (alternatively you can multi-select and add both **Fault claim data** and **Generic claim data** at the same time).
5. Press **OK**. This gives the **Record fault claim details** user task access to the data fields included in both the **Generic claim** and the **Fault claim** business objects; that is, to all the data about a fault claim.



6. Similarly, for the **Record no-fault claim details** user task, add the same **Generic claim data** field, and also add the **No-fault claim data** field.
7. Click or press **Ctrl+S** to save the changes you have made to the project.

Next Step Defining an Organization Model for the Process

Defining an Organization Model for the Process

Key Points

An organization model captures and defines information about how an enterprise is organized. The model represents the different entities in the organization (such as positions, organization units or groups), their organizational structure and the relationships between them.

The model can also describe characteristics that can be possessed by those entities—such as privileges, capabilities or location—but this simple tutorial does not include any of these characteristics.

A process designer can use the information defined by the organization model to ensure that the process sends the right work to the right people at the right time.

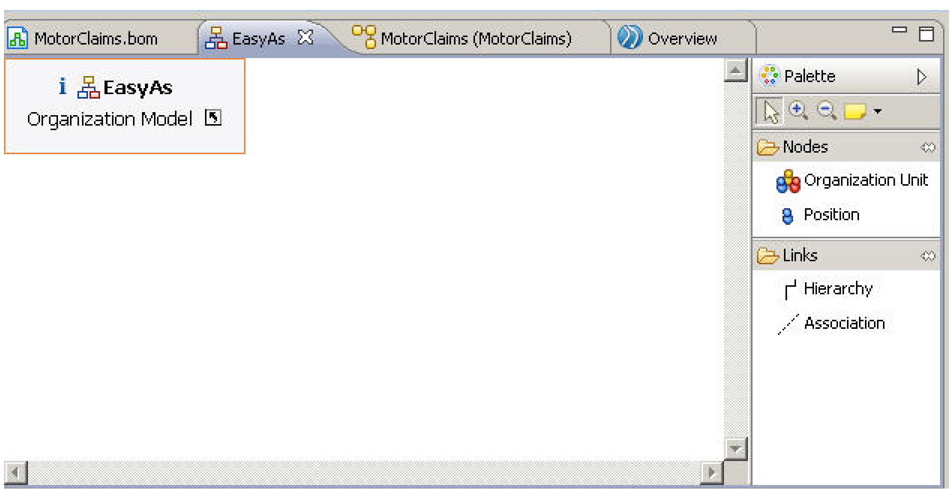
Only entities defined in the organization model can be assigned (as participants) to perform user tasks in processes. See Adding a Position as a Participant to the Process on page 31.

An organization model does not define the actual users (resources) who belong to it. Assigning users to organization model entities is a separate task, performed at runtime using the Organization Browser in TIBCO Openspace or in TIBCO Workspace.

Procedure

To define a simple organization model:

1. Click the **EasyAs** organization tab. The Organization Editor opens.

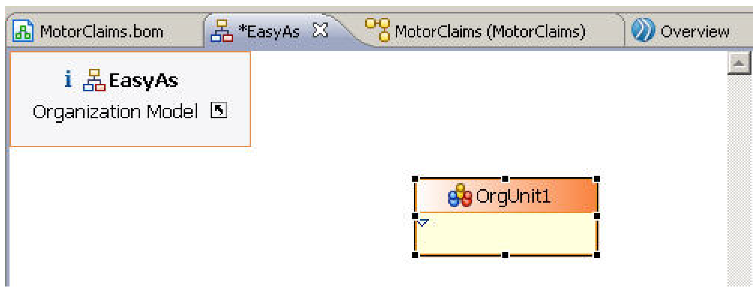


You use the Organization Editor to produce an organization diagram, showing the structure of an organization, the organization units and positions it contains, and the relationships between them. The Organization Editor:

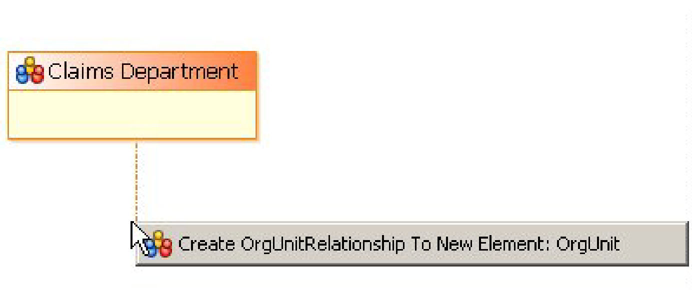
— contains a canvas area and a palette. The palette contains a different set of tools than those provided in the Process Editor or Business Object Model Editor.

— initially shows an empty organization, which you have already renamed **EasyAs**.

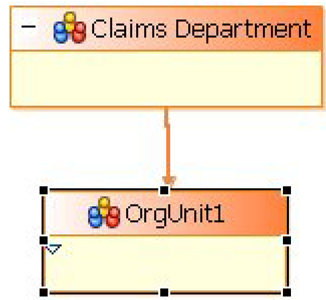
2. Click the **Organization Unit** tool  in the palette.
3. Position the mouse pointer anywhere in the Organization Editor canvas, then click to add an organization unit to the organization. Or select the Organization Unit from the palette and drag and drop it.



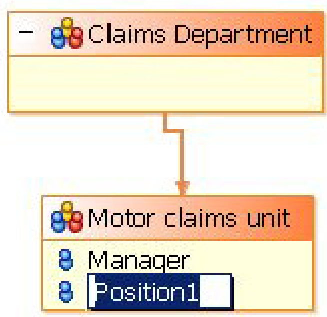
4. Change the organization unit label from **OrgUnit1** to **Claims Department**. (Click away from the field in the Organization Editor or press **Enter** to save your label change.)
5. Click the **Hierarchy** tool in the palette. Click on **Claims Department**, hold the mouse button down, and drag the pointer downwards a short distance. When you release the button, the label **Create OrgUnitRelationship to New Element: OrgUnit** displays.



6. Click on that label and a new organization unit is added. It is linked by a Hierarchy link to **Claims Department**, indicating that the new unit is subordinate to **Claims Department**.



7. Change the label of the new unit to **Motor claims unit**.
8. Drag and drop **Position** from the palette into the **Motor claims unit**. A position called **Position1** is created within the unit.
9. Click **Position1** to allow you to change the label for it to **Manager**. Click away from the field in the Organization Editor to save your label change.
10. Drag and drop **Position** into the **Motor claims unit** a second time.



11. Change the new position's label to **Customer service rep**.
12. Change the **Number** field on the **General** tab for **Customer service rep** to **6**. This indicates the ideal number of these positions in the unit.
13. Click or press **Ctrl+S** to save your changes to the organization model.

Next Step Adding a Position as a Participant to the Process

Adding a Position as a Participant to the Process

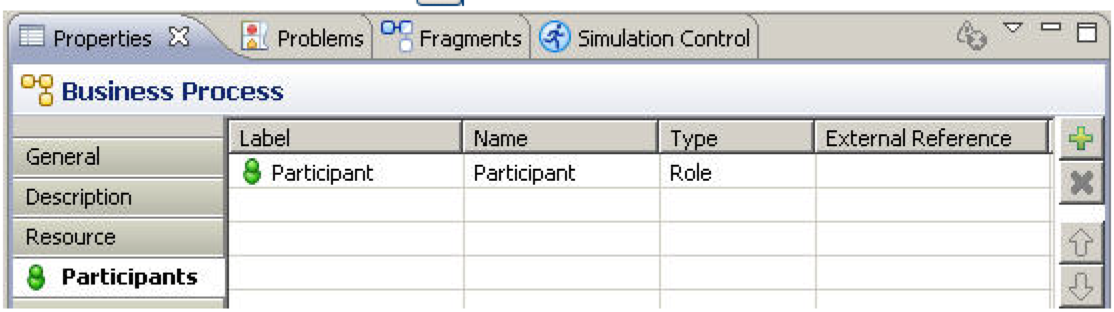
Key Points Participants represent the users who perform the work defined in user tasks. Note that:

- Participants must be defined as *external references* to the organization model used by the process.
- Every user task in a process must have a valid participant.

Procedure You must first define the participant. Then you assign the participant to each user task that you want that participant to receive work items from.

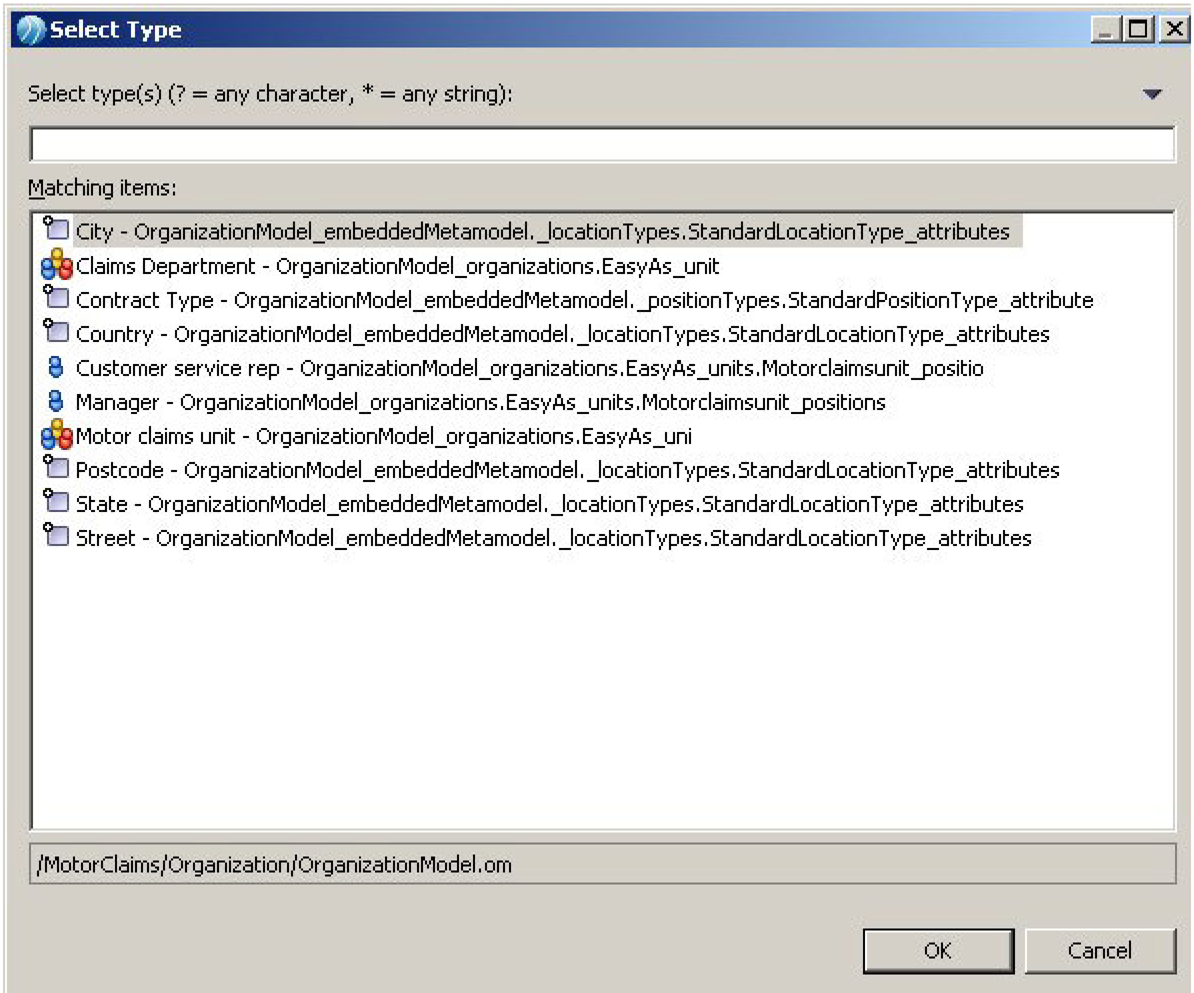
Task A Define a Participant

1. In the Process Editor for the **MotorClaims** process, display the **Properties** view for the business process. Click on the **Participants** tab.
2. Click the plus sign at the right of the **Participants** tab. A participant displays.



3. Change the **Label** to **Claims checker**.
4. Change the **Type** to **External Reference**. This allows you to select a participant from an organization model defined outside the process.
5. Select the **External Reference** field. Because you specified **External Reference** in the **Type** field, a browse button ... becomes available. Click it.

6. The **Select Type** dialog is displayed.



7. Select **Customer service rep** , then click **OK**.

Type the first letters of 'Customer ...' in the box entitled **Select type(s) (? = any character, * = any string):** to show all external references starting with those letters.

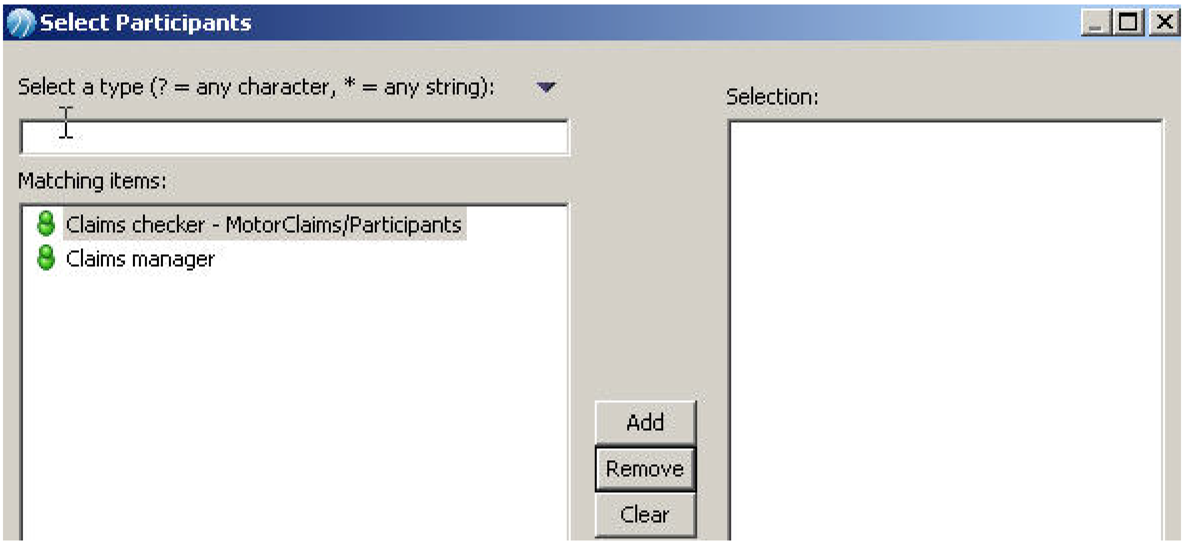
8. Define another participant called **Claims manager** and link them to the External Reference **Manager**.

9. Click or press **Ctrl+S** to save the changes you have made.

Task B Assign the Participant to the User Task

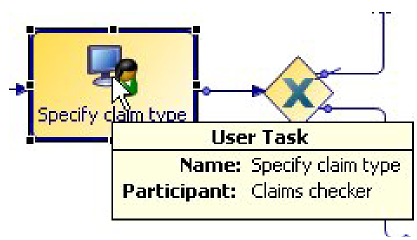
1. Right-click on the **Specify Claim Type** task and select **Participant...** from the pop-up menu.

2. The **Select Participants** dialog displays.



   Claims checker is already highlighted, so click on **Add** and then **OK**.

3. Hover your mouse pointer over the **Specify claim type** task, and note that the information displayed now includes the identity of the participant associated with this task.



4. Add the same participant to the **Record no-fault claim details** user task.

5. Add the **Claims manager** participant to the **Record fault claim details** user task.

6. Click  or press **Ctrl+S** to save the changes you have made.

Viewing and Testing Forms on User Tasks

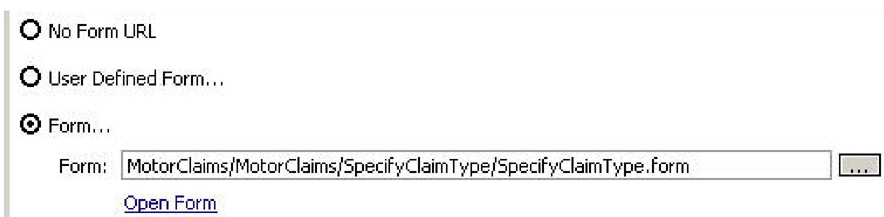
Key Points The form-modeling features of TIBCO Business Studio for Analysts enable you to design, view, and test the forms you need to collect user input from user tasks.

TIBCO Business Studio for Analysts automatically generates a default form for each user task in a business process. Users can also open the form for editing and customizing manually. See the *TIBCO Business Studio Forms User Guide* for more information.

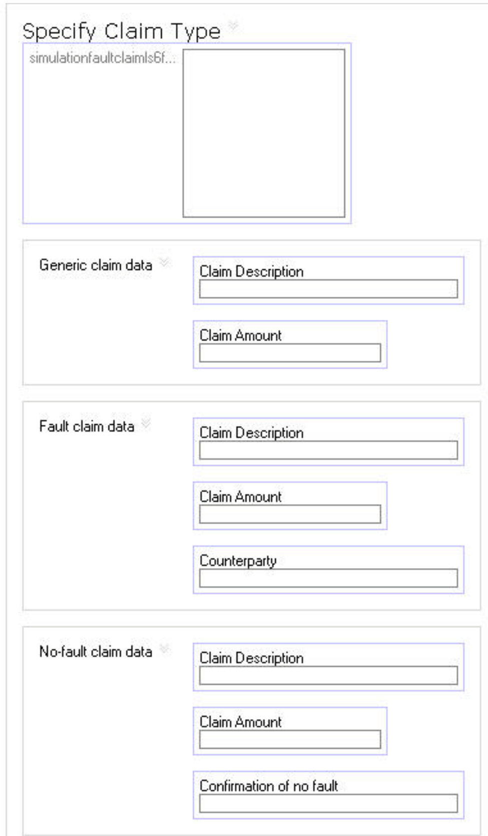
Procedure To view and preview a form on a user task:

1. Select the **Specify Claim Type** task.
2. From the **General** tab, select the **Form...** radio button. The following warning appears.

3. Press **OK**, and the following information is shown.



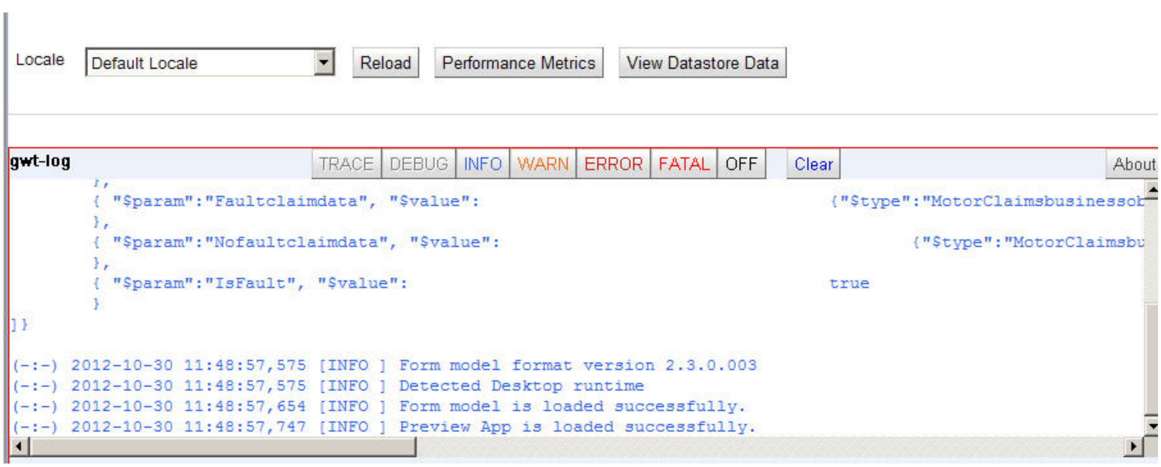
4. Select **Open Form**. A form is shown in the design tab. The screenshot shows the start of this long form. You can only view and not edit in the **Design** tab:



5. To preview the form and test its functionality, select the the **GWT Preview** tab. You will see a preview of the form and can enter information in the available fields.

6. Try entering some changes to the number in one of the the **Claim Amount** fields on the form and then press **Submit**.

7. The lower panel (**gwt-log**) shows a log of the processing of the form, similar to the following.



Refer to the *TIBCO Business Studio Forms User's Guide* for more information.

Chapter 3 How to Simulate a Simple Business Process in TIBCO Business Studio for Analysts

Topics

Overview

Using TIBCO Business Studio for Analysts you can simulate a process to give you a quick idea of how efficient it is before you decide to send it to the solution designer to implement. When you simulate a process, you can identify any problems with it, such as bottlenecks and areas of high cost or reduced service levels. You can then make changes to minimize these problems , then simulate the process again and compare the results.

Key Points Although it uses a very simple example, this tutorial demonstrates some of the fundamental points of simulating a business process, making a change in the process, and then simulating it again and comparing the results.

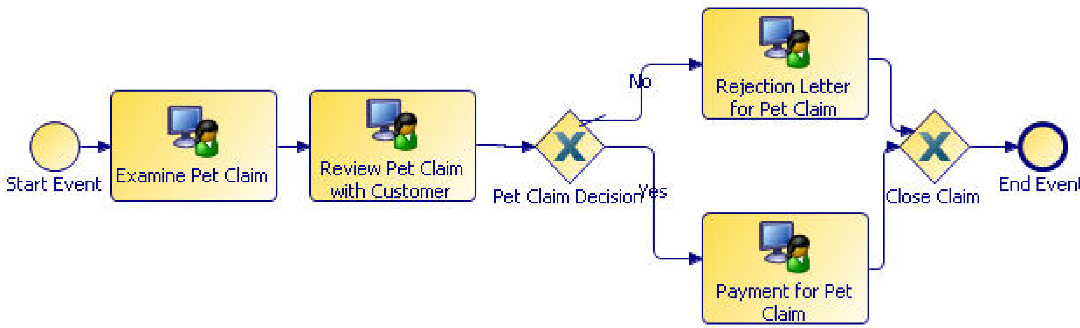
To learn more about simulation refer to the *TIBCO Business Studio Simulation Guide*.

Next Step Creating a New Business Process

Creating a New Business Process

Procedure To create a simple business process and use simulation

1. Using the skills you learnt in the chapter How to Model a Simple Business Process in TIBCO Business Studio for Analysts on page 9 create the following simple process.



2. Add participants called 'Claims Administrator' and 'Claims Manager' at the process level, and make them of type **Role**.
3. Assign the participant 'Claims Administrator' to all tasks except **Payment for Pet Claim**. Make the Participant for that task 'Claims Manager''. To do this, right-click on the task, select Participant... and use the Select Participants wizard.

Next Step Simulating your Project

Simulating your Project

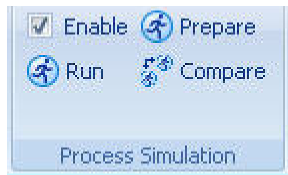
Key Points

You can simulate the project you have just created. This will allow you to see how efficient it is, and what resources it uses.

When you have simulated it, you can make a change to it and simulate it again. You will then be able to compare the results of the two simulations. See Comparing Simulations.

Procedure

1. Select **Enable** from the Process Simulation group.



2. Your business process will now have any problems or warnings identified. You can ignore warnings, but you must fix any problems identified, or your simulation may not run. You can use the quickfix available to add simulation data to different tasks in your process.

3. Select **Prepare** from the Process Simulation group. This sets up parameters necessary for simulation to run. It can also fix some problems which do not have a quick-fix available.

4. Select **Run** from the Process Simulation group. This will run the simulation.

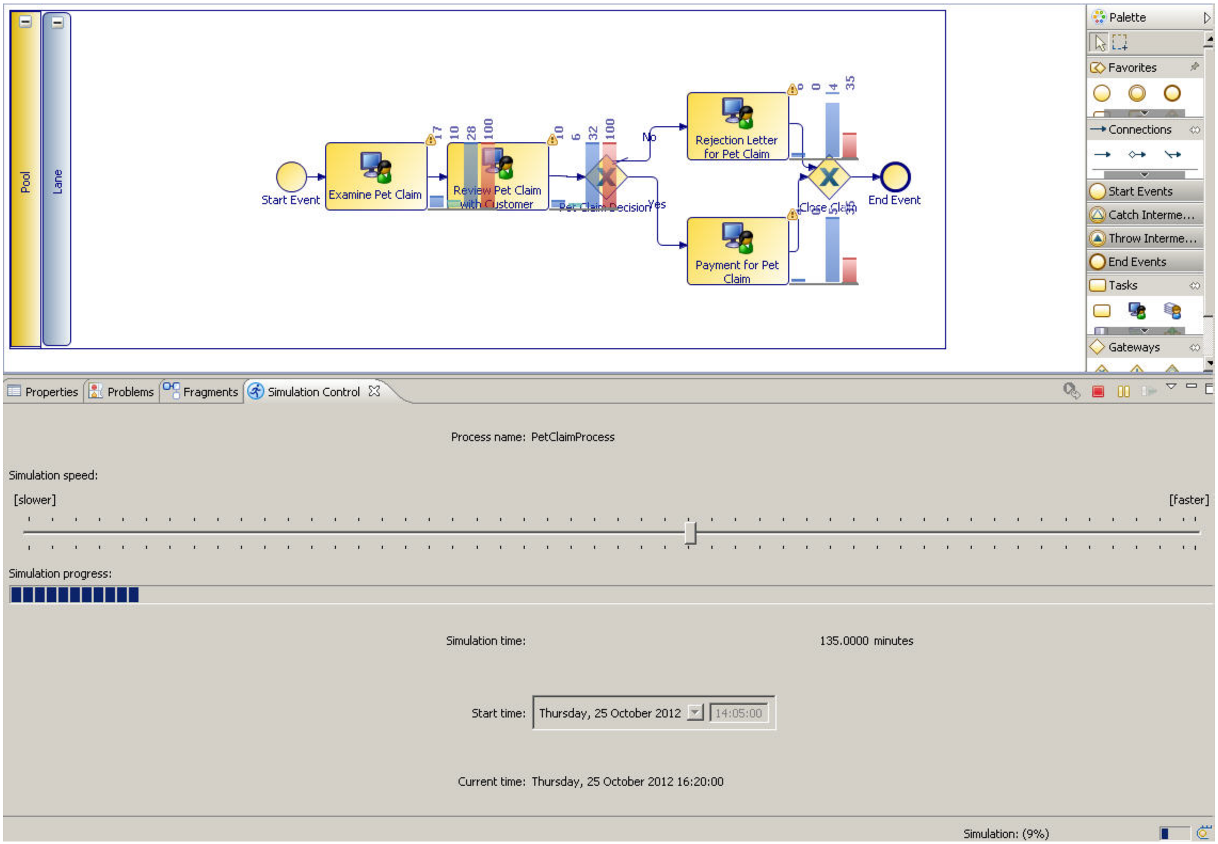
   By default a simulation runs with a Simulation Start Date/Time that is the current system date/time, but you can set the desired Simulation Start Date/Time using the drop-down calendar and by entering a time value.

   The simulation runs:

   — The Simulation Control View shows simulation time and the progress of simulation.

   — The Simulation Results View displays the number of cases and updated simulation data about the Activities and Participants such as the Cost.

   — The number of queued and processed cases is indicated on the Process .



5. Now make a change to the process. Delete the gateways and the user task **Rejection Letter for Pet Claim**, so you have a business process which looks like this:

6. Run the simulation again.

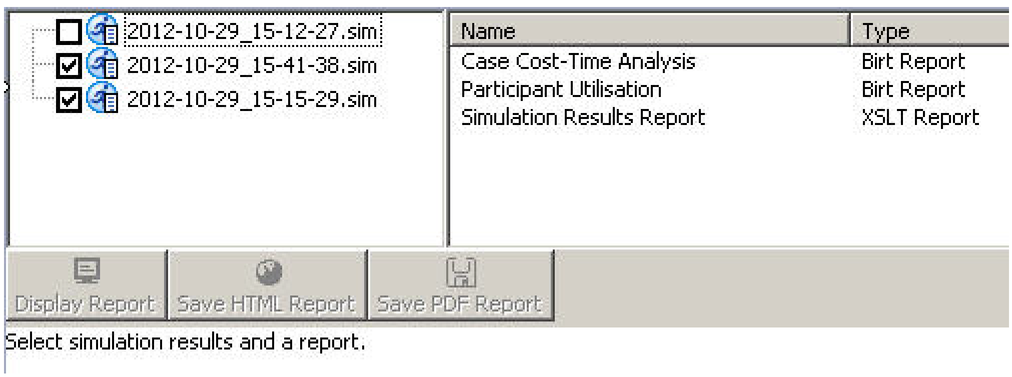
Next Step Comparing Simulations

Comparing Simulations

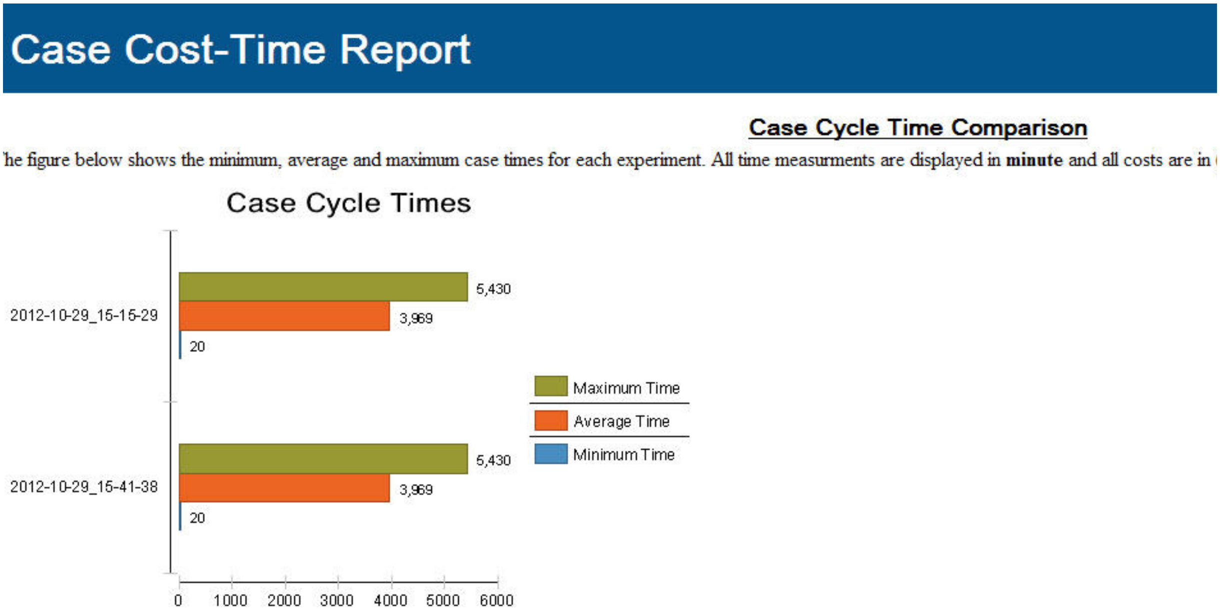
Key Points You can compare the results of the simulations of the project you have just created. This will allow you to analyse the effect of the change you made to the process.

Procedure

1. Select **Compare** from the Process Simulation group.
2. Select the simulations you want to compare from the list available (in this case, the one you did of the full process, and the one you did after removing the gateways, connection and user task).
3. Select the type of report you wish to run from the options on the right-hand side. In this case select **Case Cost-Time Analysis.**
4. You will then be able to select from **Display Report**, **Save HTML Report** and **Save PDF Report**. In this case select **Display Report.**



5. You will see a report which starts with the information in the screenshot below. For further information on interpreting Simulation reports refer to the *TIBCO Business Studio Simulation Guide*.


Case Cost-Time Report
Case Cycle Time Comparison
'he figure below shows the minimum, average and maximum case times for each experiment. All time measurments are displayed in **minute** and all costs are in
Case Cycle Times
2012-10-29_15-15-29
5,430
3,969
20
2012-10-29_15-41-38
5,430
3,969
20
0
1000
2000
3000
4000
5000
6000
Maximum Time
Average Time
Minimum Time