

BSOA Orchestra

Zenflow BPEL Editor Overview

BULL SERVICE-ORIENTED
ARCHITECTURE (BSOA)



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Zenflow BPEL Editor Overview

BSOA Orchestra v2.5

Software

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Table of Contents

Chapter 1.	Introduction to the Zenflow BPEL Editor.....	1
Chapter 2.	Starting the BPEL Editor	3
Chapter 3.	Creating a New BPEL Process.....	5
Chapter 4.	Loading an Existing BPEL Process.....	9
Chapter 5.	Menus	11
5.1	File Menu	11
5.2	Edit Menu	12
5.3	View Menu.....	12
5.4	Insert Menu	13
5.5	Process Menu	14
5.6	Window Menu	15
5.7	Help Menu	15
Chapter 6.	Buttons	17
Chapter 7.	File View	19
Chapter 8.	Process View	21
Chapter 9.	Inserting, Deleting, and Modifying Activities	23
Chapter 10.	Error View	25

List of Figures

Figure 3-1.	Process Attributes Window for Creating a New BPEL Process	5
Figure 3-2.	Screen for Specifying the WSDL Files To Link To a Process.....	6
Figure 3-3.	Zenflow Main Screen	7
Figure 4-1.	Screen for Loading an Existing Process.....	9
Figure 4-2.	Linked WSDL Files Dialog Box	10
Figure 5-1.	File Menu.....	11
Figure 5-2.	Edit Menu	12
Figure 5-3.	View Menu	12
Figure 5-4.	Insert Menu	13
Figure 5-5.	Process Menu.....	14
Figure 5-6.	Help Menu.....	15
Figure 5-7.	Help Menu Display of Zenflow Product Version	15
Figure 6-1.	BPEL Editor Window Toolbars.....	17
Figure 7-1.	File View Display of Currently Loaded Processes	19
Figure 8-1.	Process View	21
Figure 8-2.	Scheme View	22
Figure 10-1.	Error View.....	25

List of Tables

Table 5-1.	File Menu Options.....	11
Table 5-2.	Process Menu Options.....	14

Preface

This document provides an overview of and essential information about using the Zenflow BPEL Editor.

Chapter 1. Introduction to the Zenflow BPEL Editor

The Zenflow BPEL Editor is a tool designed to help create, update, and visualize BPEL processes.

BPEL is an XML language proposed by the [Oasis Consortium](#). This tool helps with designing processes and generates the corresponding BPEL code.

This version of the tool allows only the generation of BPEL files. This means that WSDL files must be created manually. This feature will be added in a future version of the package.

Zenflow is a BPEL designer compliant with the [Oasis BPEL4WS 1.1 standard](#).

Chapter 2. Starting the BPEL Editor

Once the BSOA BPEL Package is installed, a Zenflow directory will be available. This directory contains the BPEL Editor.

To start Zenflow, run:

```
./zenflow.sh for Linux
```

```
zenflow.bat for Windows.
```

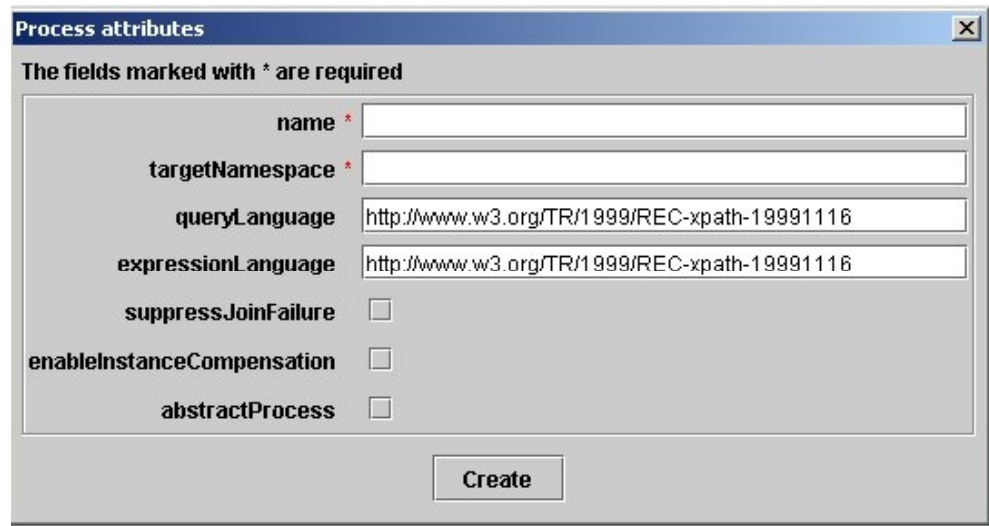
It can also be started from the Windows® Start menu (Start\Programs\BSOA\BPEL Designer\Zenflow).

The following two options will display: Chapter 3, [Creating a New BPEL Process](#), or Chapter 4, [Loading an Existing BPEL Process](#).

Chapter 3. Creating a New BPEL Process

When a new BPEL process is created, the following screen will be displayed.

Figure 3-1. Process Attributes Window for Creating a New BPEL Process



The image shows a software window titled "Process attributes" with a close button in the top right corner. Below the title bar, a message states "The fields marked with * are required". The window contains several input fields and checkboxes:

- name ***: An empty text input field.
- targetNamespace ***: An empty text input field.
- queryLanguage**: A text input field containing the URL `http://www.w3.org/TR/1999/REC-xpath-19991116`.
- expressionLanguage**: A text input field containing the URL `http://www.w3.org/TR/1999/REC-xpath-19991116`.
- suppressJoinFailure**: An unchecked checkbox.
- enableInstanceCompensation**: An unchecked checkbox.
- abstractProcess**: An unchecked checkbox.

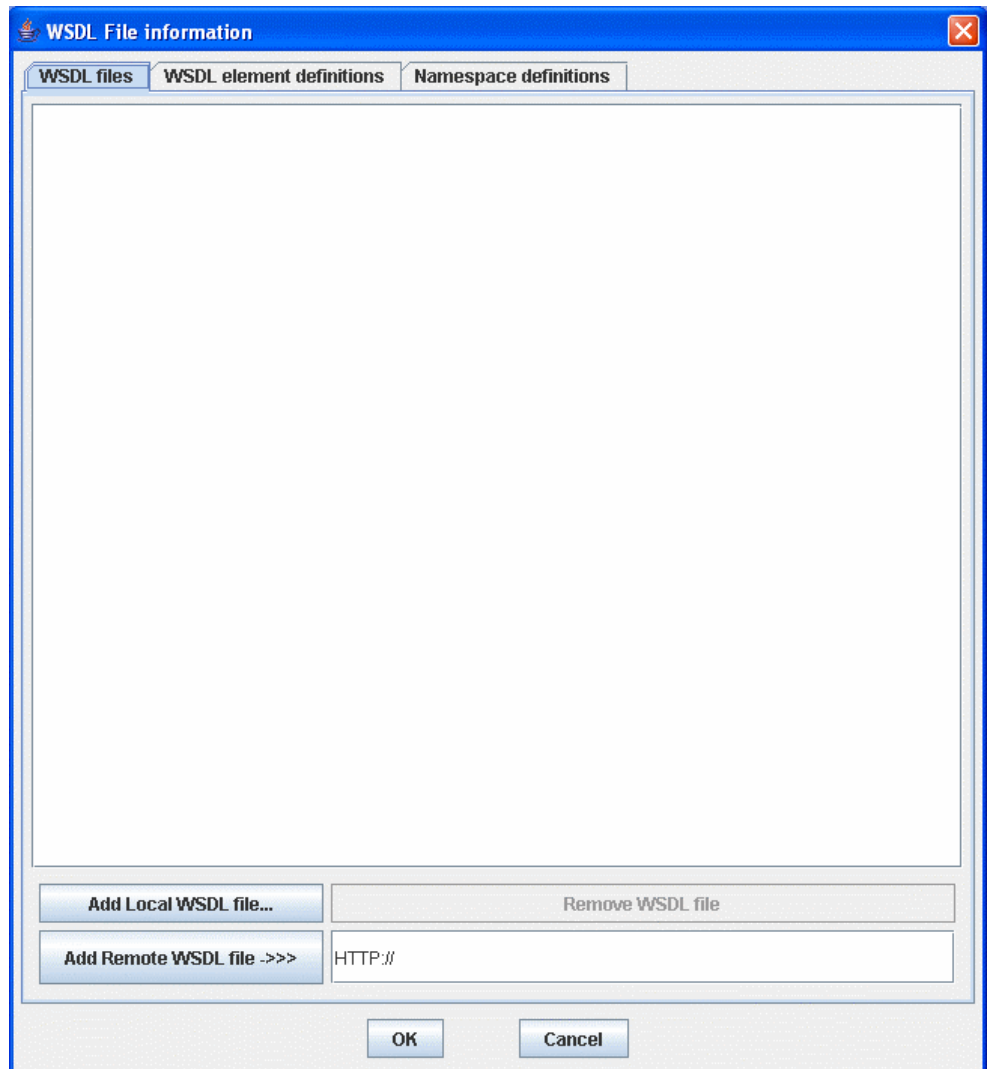
At the bottom center of the window is a button labeled "Create".

Enter the name of the process and the associated targetNamespace. Specify the following characteristics of the process (optional): suppressJoinFailure, enableInstanceCompensation and AbstractProcess.

For more information about these characteristics, refer to the [Oasis BPEL4WS 1.1 standard](#).

The following screen is then displayed.

Figure 3-2. Screen for Specifying the WSDL Files To Link To a Process



Specify the WSDL of the Web Services orchestrated by this process.

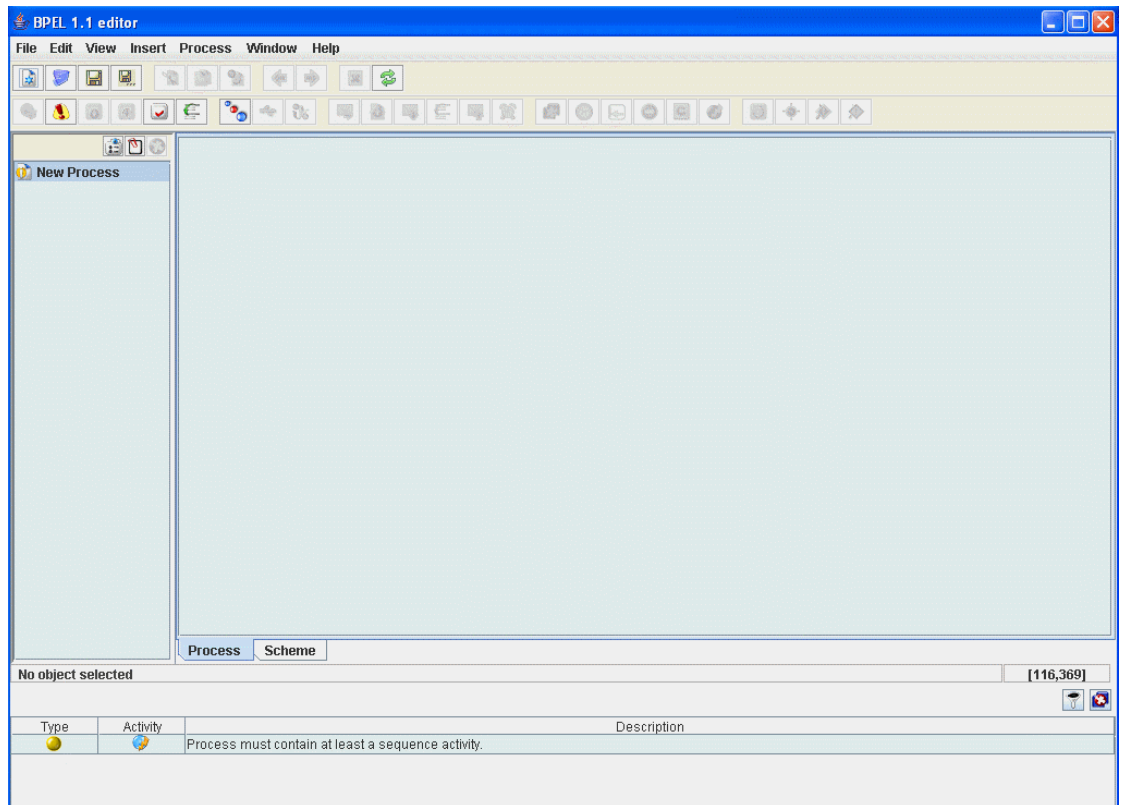
Click on **"Add file"** and select the WSDL file.

The corresponding namespace is automatically added to the process definition.

When all the WSDL files of the process have been added, click on the "OK" button.

The Zenflow main screen is then displayed.

Figure 3-3. Zenflow Main Screen



This screen has the following elements:

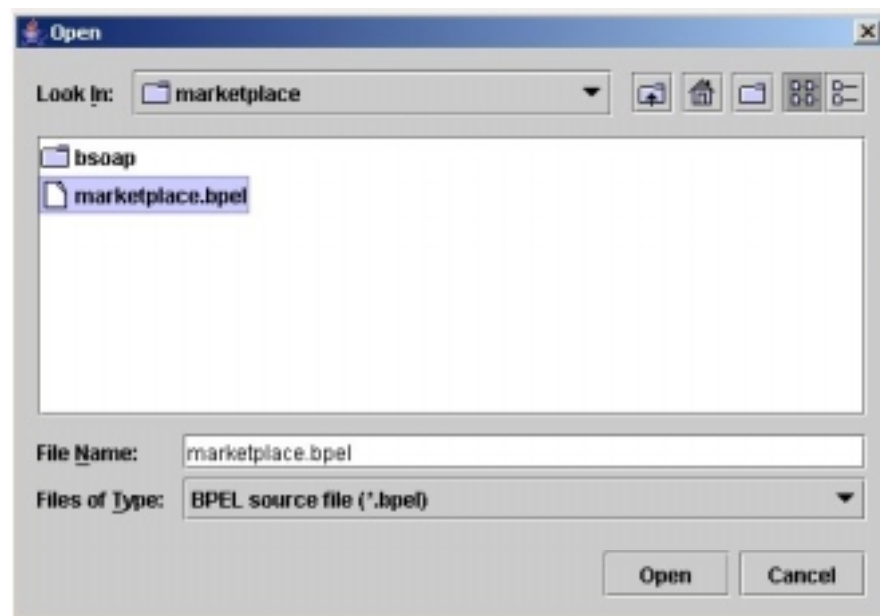
- [Menus](#) (Chapter 5)
- [Buttons](#) (Chapter 6)
- [File View](#) (Chapter 7)
- [Process view](#) (Chapter 8)
- [Error View](#) (Chapter 10)

You can then start specifying processes.

Chapter 4. Loading an Existing BPEL Process

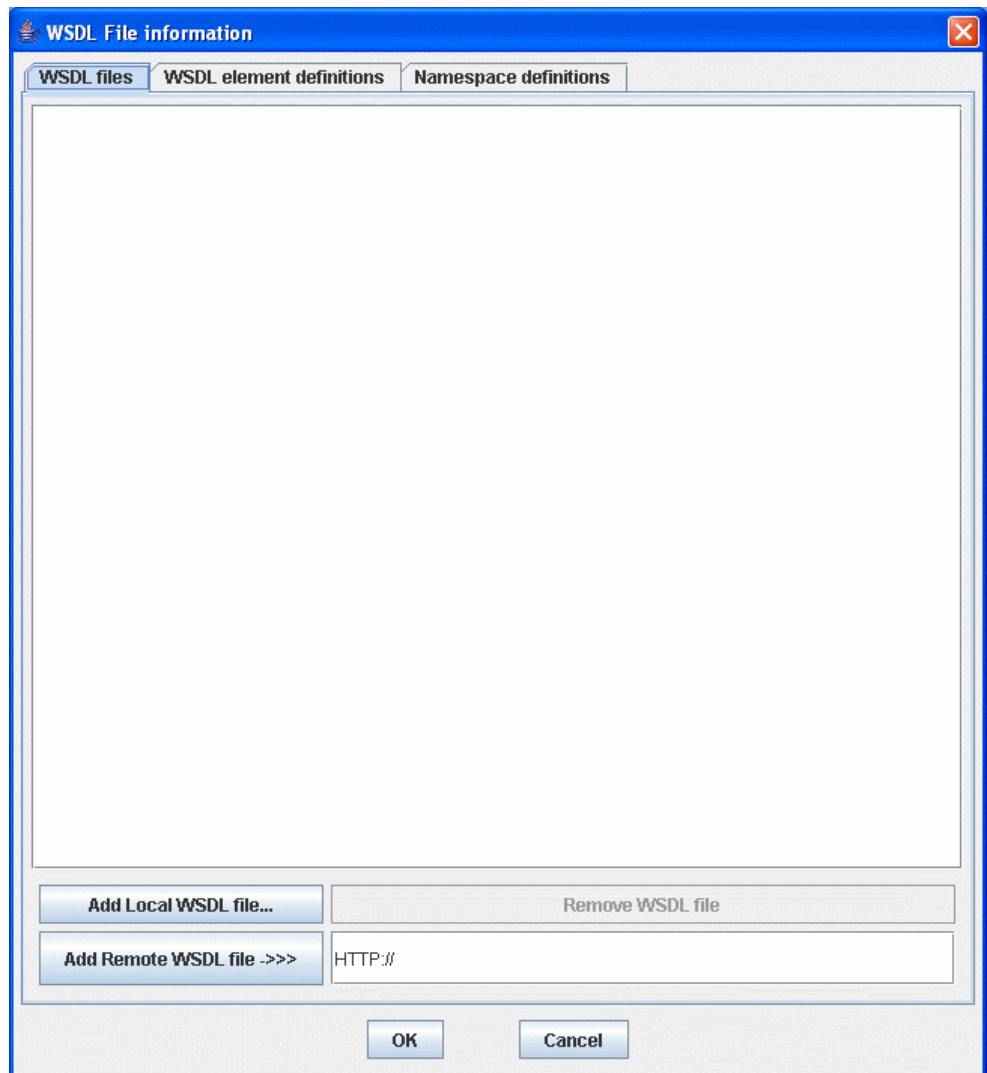
When loading an existing process, the following dialog box will be displayed.

Figure 4-1. Screen for Loading an Existing Process



Browse for a BPEL file: a dialog box will appear asking for the corresponding WSDL files.

Figure 4-2. Linked WSDL Files Dialog Box



Click on **"Add file"** and select the WSDL file.

The corresponding namespace is automatically added to the process definition.

When all the WSDL files of the process have been added, click on the "OK" button.

Note that Zenflow remembers the WSDL files that the user has already loaded in the system and will automatically propose them if the namespace is the same.

The main screen of the tool is now displayed. See the following sections for instructions on how to use it.

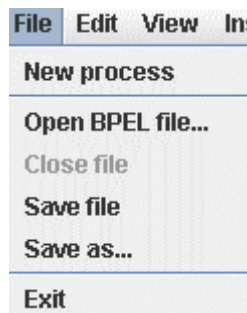
Chapter 5. Menus

This section provides a description of the menu options available in the BPEL editor.

5.1 File Menu

The File menu offers the standard choices.

Figure 5-1. File Menu



The following table describes these options.

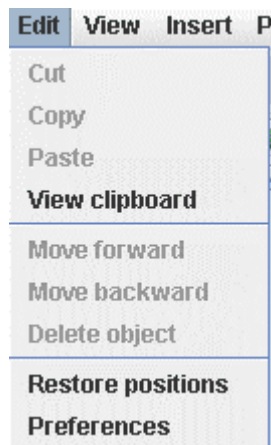
Table 5-1. File Menu Options

Menu Option	Description
New process	Creates a new process. See Create a new BPEL process .
Open BPEL file	Loads a new process. See Load an existing BPEL Process .
Close file	Closes the current process (only if it is not the only one open).
Save file	Saves the process to the same file that was previously used. If this is a new file, the File Chooser dialog is opened to allow specification of the desired file name and directory.
Save as	Saves the current process design as a BPEL File.
Exit	Quits Zenflow.

5.2 Edit Menu

This menu contains the usual edit functions: copy, cut, paste, move, delete, and the capability of editing the tool's preferences.

Figure 5-2. Edit Menu

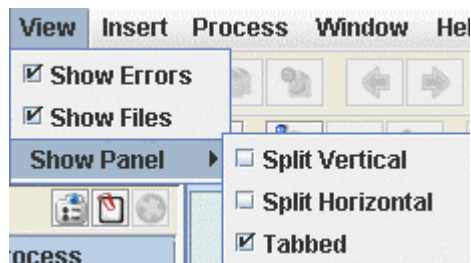


5.3 View Menu

This menu offers the user the possibility to change the view:

- Display or not display the file view.
- Display or not display the error view.
- Display the source and process view either tabbed, or split vertically or horizontally.

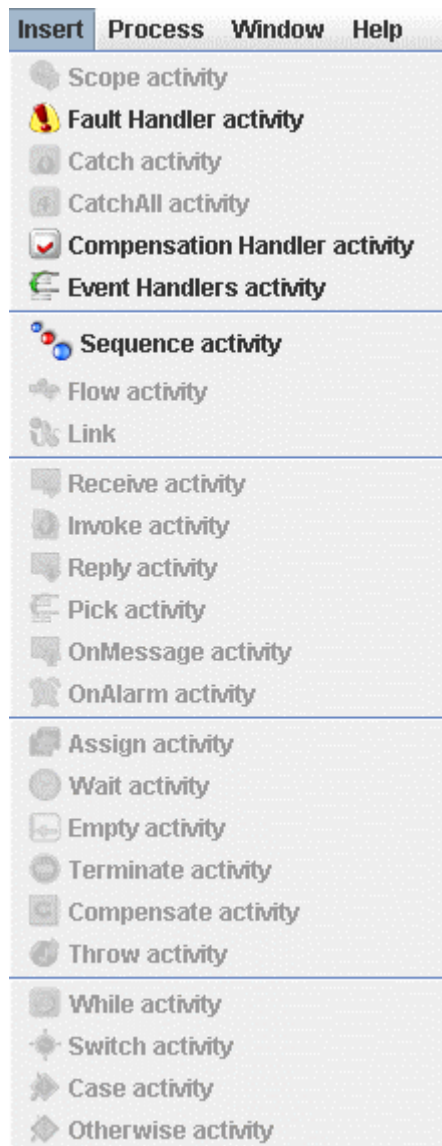
Figure 5-3. View Menu



5.4 Insert Menu

This menu allows the user to insert various types of activities into the process. Only the items that are valid to add, based on the current graph selection, are enabled.

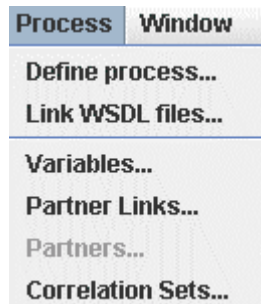
Figure 5-4. Insert Menu



5.5 Process Menu

The Process menu is used to define the characteristics of the process.

Figure 5-5. Process Menu



The following table describes these options.

Table 5-2. Process Menu Options

Menu Option	Description
Define process	opens the screen to define the process name, target namespace, etc.
Link WSDL file	opens the screen to add WSDL files related to this process.
Variables	opens a screen to define the variables of the process.
PartnerLinks	opens a screen to define the Partner Links of the process.
Partners	opens a screen to define the Partners of the process.
CorrelationSets	opens a screen to define the Correlation Sets of the process.

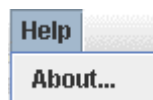
5.6 Window Menu

The Window menu offers the capability of switching from one open process to another.

5.7 Help Menu

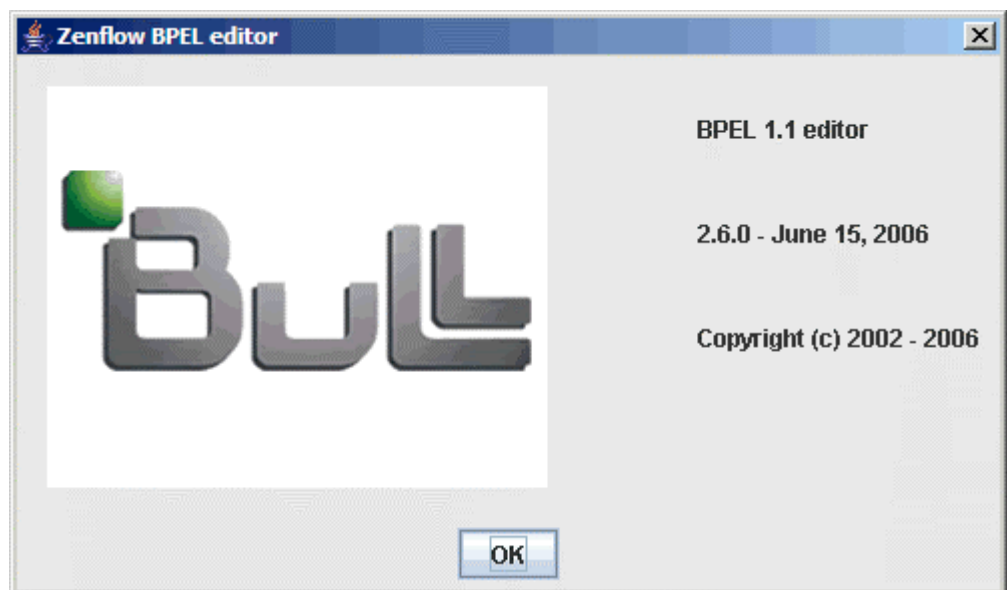
The Help → About... menu item will display the Zenflow product version.

Figure 5-6. Help Menu



Information from this dialog should be used when reporting Zenflow related bugs.

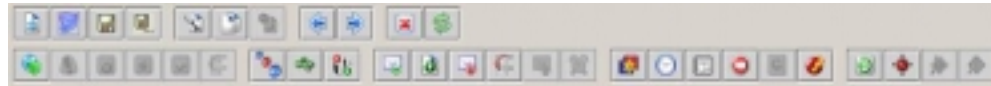
Figure 5-7. Help Menu Display of Zenflow Product Version



Chapter 6. Buttons

The BPEL Editor window provides the following two rows of toolbar buttons.

Figure 6-1. BPEL Editor Window Toolbars

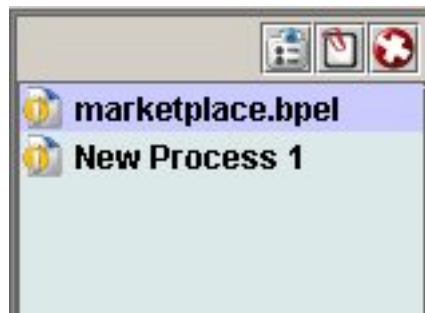


- The first row offers the same options as the “file” and “edit” menus: create, open, save, saveas, copy, cut, paste, move, delete and restore positions.
- The second row offers a button for each BPEL statement. The buttons are activated depending on the location in the design of the process.

Chapter 7. File View

File view displays the processes that are currently loaded in Zenflow.

Figure 7-1. File View Display of Currently Loaded Processes



To switch from one process to another, click on the chosen process. A process can also be closed by clicking on a button.

Chapter 8. Process View

Process view is the main part of the BPEL designer.

Two viewing modes are available to view the process: the “Process View” and the “Source view”.

Figure 8-1. Process View

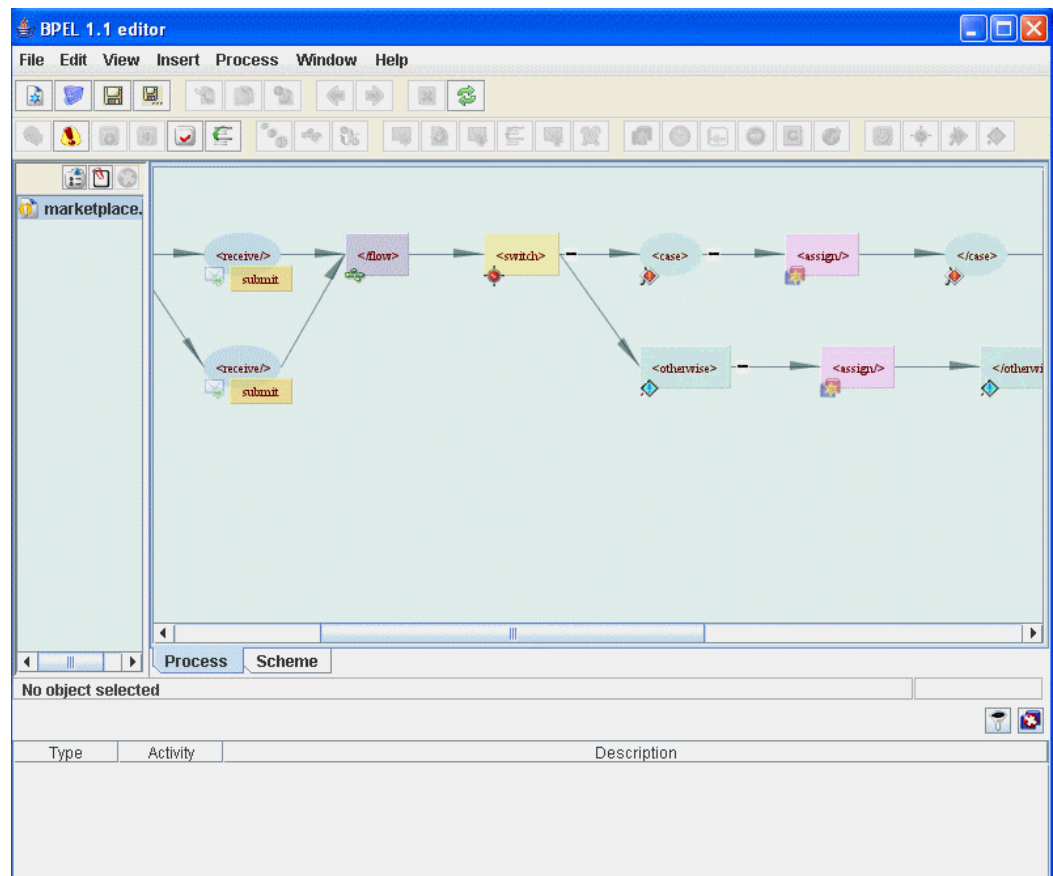
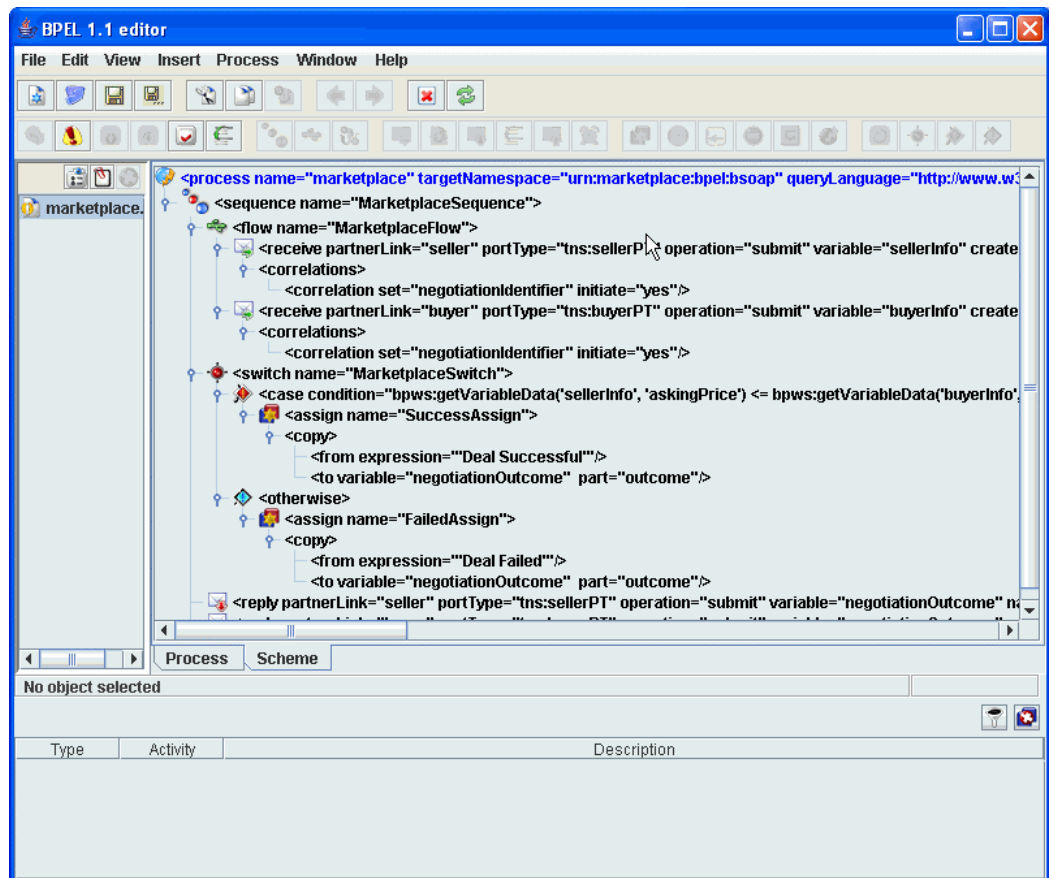


Figure 8-2. Scheme View



Chapter 9. Inserting, Deleting, and Modifying Activities

Activities can be operated on in one of two ways:

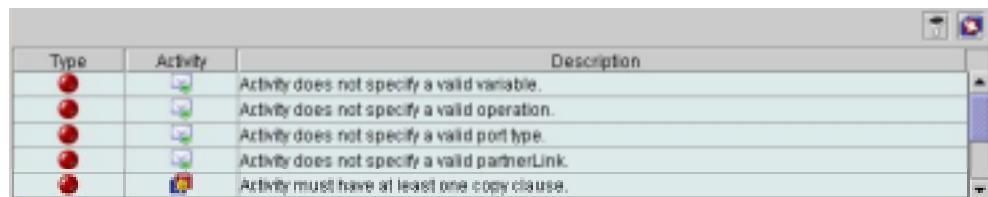
- by selecting an activity node and then using the main toolbar icons or the “insert” menu to add new activities or delete the current activity, or
- by selecting a node and using the right-click, context menu which will display menu items for valid operations. Double clicking on a node, or right clicking and selecting the “Properties” menu, will display the properties dialog box for that node.

To insert and position a new activity, click on the “parent” statement of the desired activity then insert it with the corresponding button or the right-click context menu item. For example, to insert a “receive” statement in a sequence, click on the sequence statement block. The “**receive**” button will then be activated and the statement can be inserted. Move it to the right position in the process using the “arrows” buttons. Double-click on a statement to specify its characteristics: name, value, etc.

Chapter 10. Error View

This view displays the errors of the process that is currently being designed.

Figure 10-1. Error View

The screenshot shows a window titled 'Error View' with a table containing five rows of error information. Each row has a red circle icon in the 'Type' column, a small icon in the 'Activity' column, and a text description in the 'Description' column. The window has standard OS controls (minimize, maximize, close) in the top right corner.

Type	Activity	Description
		Activity does not specify a valid variable.
		Activity does not specify a valid operation.
		Activity does not specify a valid port type.
		Activity does not specify a valid partnerLink.
		Activity must have at least one copy clause.

Double clicking on a particular error will bring up the properties dialog for that task.

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