

# 1

## **Getting Started with SDE fo Java**

# Chapter 1 - Getting Started with SDE for Eclipse

Aside from a collection of menus, tool-bars and windows that make up the development workspace, one special feature is our Resource-centric interface, which lets the user access modeling tools easily without referring back and forth from the workspace to various toolbars. Incorporating shortcuts such as mouse gestures into our modeling tools allow our users to draw as with a pen and paper, executing complicated modifications with just a click and drag, creating a completely visual environment.

This chapter will describe how to get started with Smart Development Environment for Eclipse. You will learn following techniques in this chapter:

- How to Launch Smart Development Environment for Eclipse?
- What is Workspace?
- Importing License Key
- Working with Floating License Server
- Basic Environment
- Dockable User Interface
- Browse your work by trees and tables
- Basic diagram editing functionalities

## Launching SDE for Eclipse

SDE for Eclipse can run in different operating systems.

### Windows

To launch SDE for Eclipse in Windows:

Select **start > All Programs > Visual Paradigm > SDE for Eclipse**.

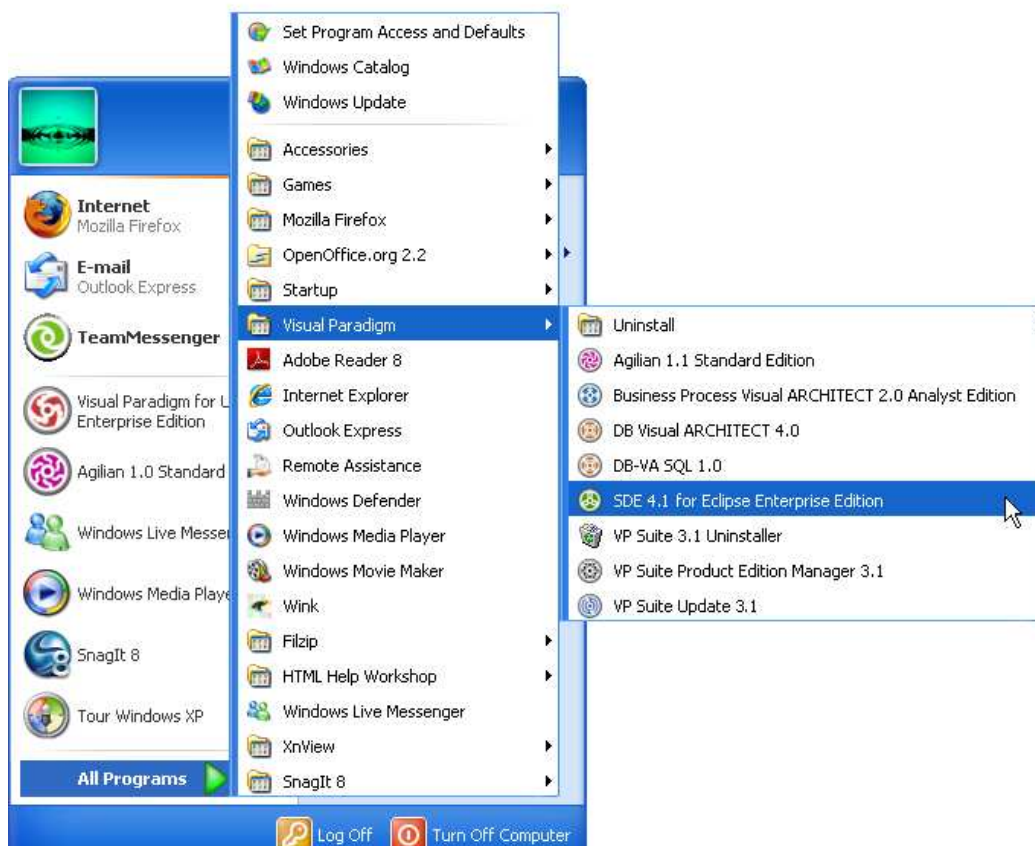


Figure 1.1 - Launch SDE for Eclipse in Windows

## Linux

To launch SDE for Eclipse in Linux:  
Select **SDE\_for\_Eclipse** icon on the desktop.



*Figure 1.3 - Launch SDE for Eclipse in Linux*

## Managing License Key and Edition

All VP products need a license key to activate. A License key of a higher edition can be used on a lower edition. For example, you can run Standard Edition of SDE for Eclipse with Professional Edition of SDE for Eclipse key.

SDE for Eclipse also provides a 30-days evaluation key for trial. After the evaluation key expires, you can choose to purchase the full license from our website or resellers, or un-install the program.

The license key for Community Edition will not expire. However, Community Edition cannot be used for commercial purposes.

### Importing a Single Seat License Key

A Visual Paradigm's Single Seat (developer based) license allows a licensee to install the software on more than one machine, such as desktop and notebook, which belong to the licensee only. As the license is developer based, the software must be used by the licensee only, without running more for than one instance concurrently.

To import a single seat License Key:

1. You should first open the License Key Manager. There are two ways of opening License Key Manager:

- If there are no valid license keys imported, the License Key Manager will show up for importing license key.
- Select from the main menu **Modeling > Key Manager...**

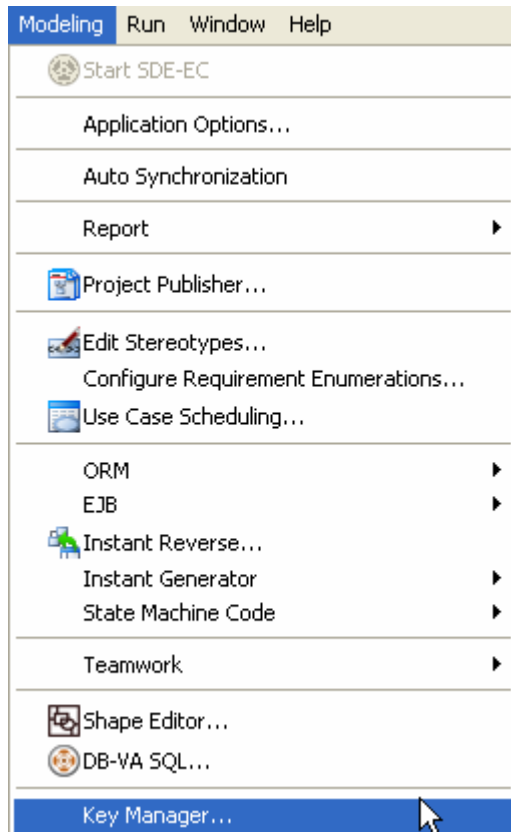


Figure 1.7 - Select Key Manager

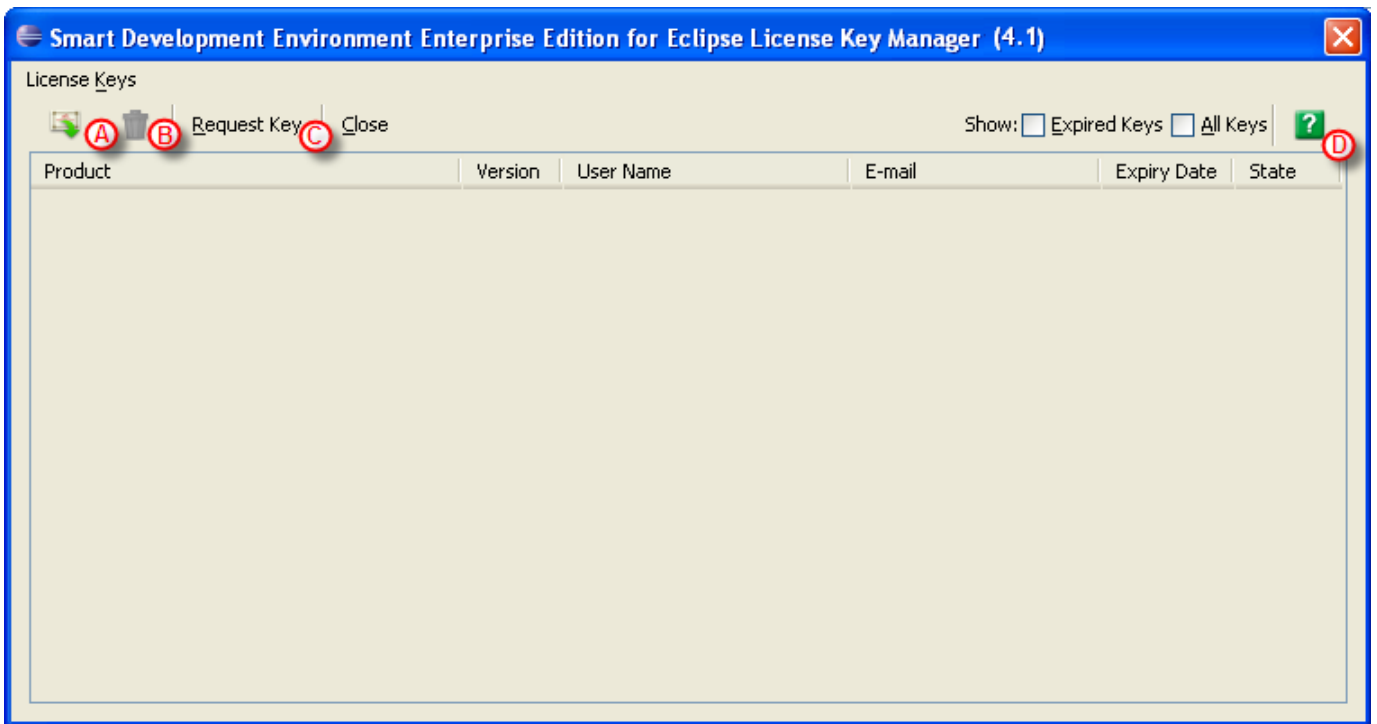



Figure 1.8 - License Key Manager

	Name	Function
(A)	Import license key	To import a license key.
(B)	Delete the license key	To delete the license key imported.
(C)	Request Key	To request a 30 days evaluation key if you are not using the Community Edition. If you are using the Community Edition, it will request an activation key. Both keys will be sent to you by email.
(D)	Help	To show the Help. If no Help has been installed before, the Download Help dialog box will appear to enable downloading and installation of Help.

Table 1.1

2. Then, you can either select **License Keys > Import...** or press on the **Import License Key**  button on the toolbar. This displays the **Import License Key** dialog box. From the **File** field, enter the file path of license key. You can enter the path in the text field directly, or you can click on the ... button to browse for license key file. Click **OK**.

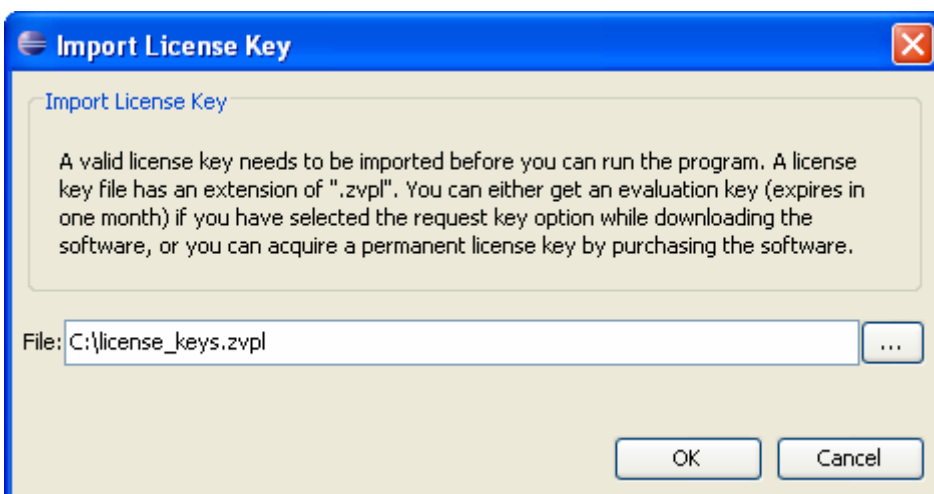


Figure 1.9 - Import License Key dialog

3. The imported key is then displayed in the Key Manager.

Product	Vers...	User Name	E-mail	Expiry...	S
Smart Development Environment Enterprise Edi...	4.1	Demo	demo@visual-paradigm.com	Aug 2, 2007	Va

Figure 1.10 - The imported key displayed in Key Manager

Then, click **Close** from the **License Key Manager** to start using SDE for Eclipse.

## Switching from Evaluation Key to Permanent Key

You can try SDE for Eclipse by using an evaluation key for 30 days. Then, you will need to buy a permanent key if you want to continue to use it. After purchasing, you should follow the steps below to switch your evaluation key to a permanent one. To switch from evaluation key to permanent key:

1. Open the License Key Manager from the main menu **Modeling > Key Manager...**

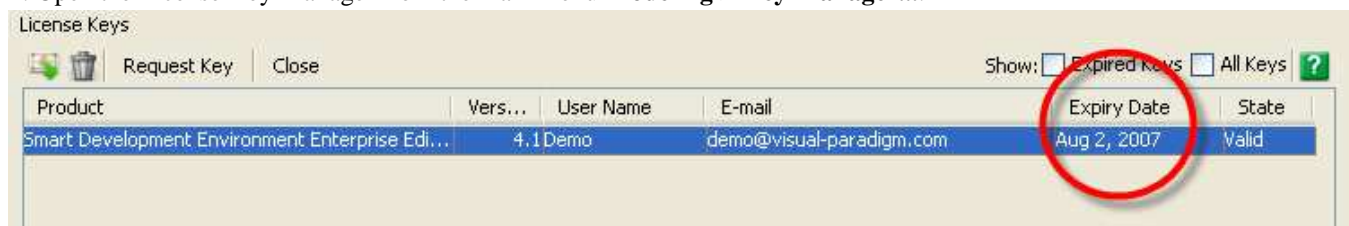


Figure 1.11 - License Key Manager with evaluation key with expiry date

2. Remove the evaluation key by clicking the **Delete the license key** button in License Key Manager dialog. You can also remove the key by clicking **License Keys > Remove**. If your key has expired, you have to check the **Expired Keys** to show your expired evaluation key in order to delete.

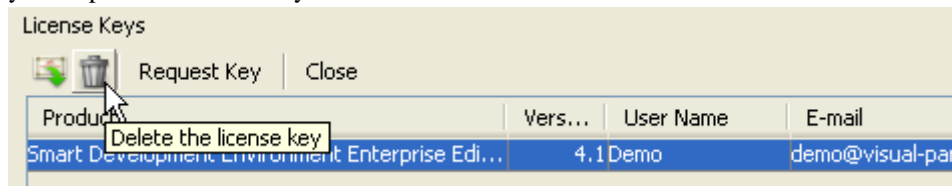


Figure 1.12 - Delete by clicking Delete the license key button

If your key has not expired, **Delete License Key** dialog will appear and ask if you really want to remove the key. Click **Yes** to confirm.

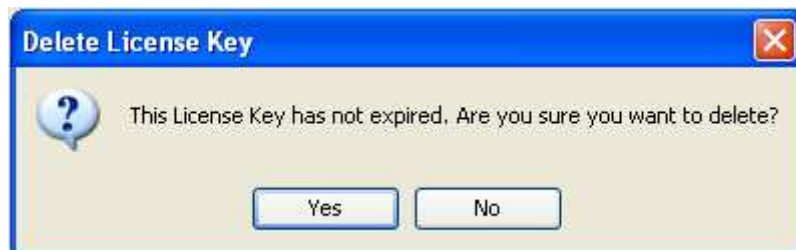


Figure 1.13 - Confirm deleting license key

3. Click **Import license Key** to import the permanent key. You can also select **License Keys > Import...** to import the key.

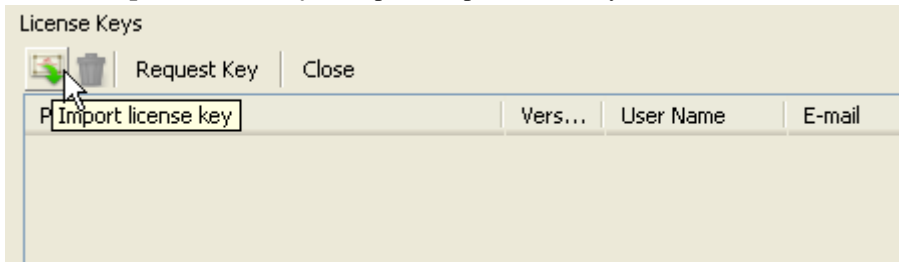


Figure 1.14 - Import by clicking Import license key button

4. Select or type a path for the permanent key in **Import License Key** dialog. Click **OK** to confirm.

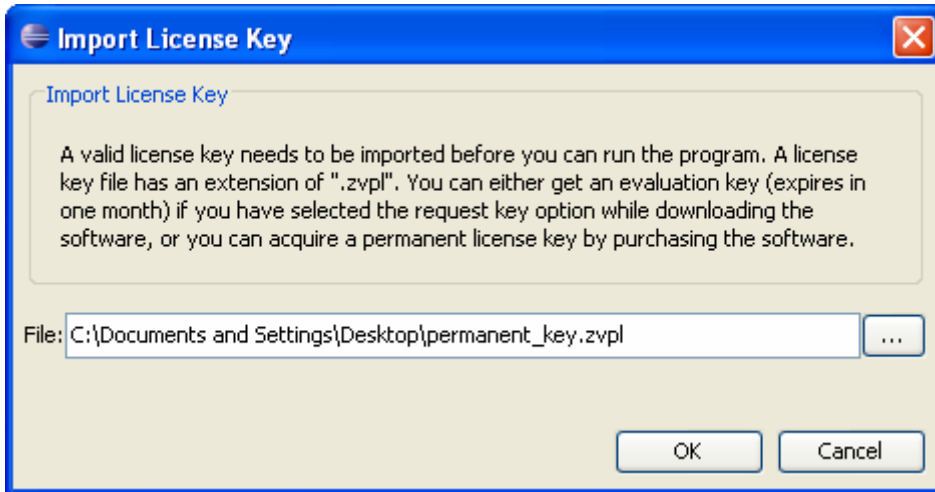


Figure 1.15 - Select or type a path for permanent key

5. Permanent key imported. Unlike an evaluation key, the permanent key does not have expiry date.

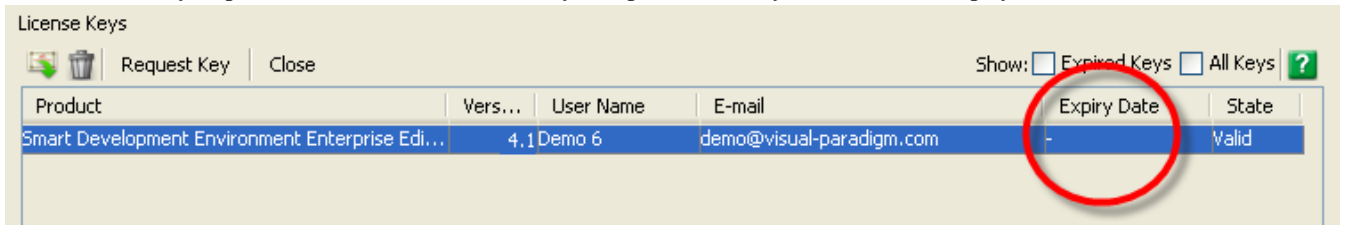


Figure 1.16 - Permanent Key with no expiry date

## Importing Upgrade Keys

From time to time, VP releases new versions. If your license keys are covered by the maintenance period, the latest version will be available to you without any payment. You can login to the Customer Service Center (<https://cs.visual-paradigm.com>) to download the latest version and get an upgrade key. The upgrade key should be used with the original license key, i.e. the original key should neither have been delete or expired.

After you have installed the latest version and downloaded the upgrade key, follow the steps below to import upgrade keys to use that version. Here, a license key of version 4.0 is used as an example to replace the key of version 3.1.

To import upgrade keys:

1. Open the License Key Manager from the main menu **Modeling > Key Manager...**

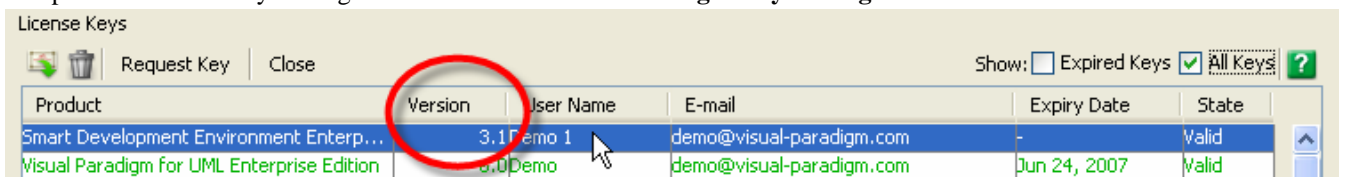


Figure 1.17 - License Key Manager with license key of version 3.1

2. Click **Import license Key** to import the upgrade key. You can also select **License Keys > Import...** to import the key. Remember the old key must still exist before you import the upgrade key.

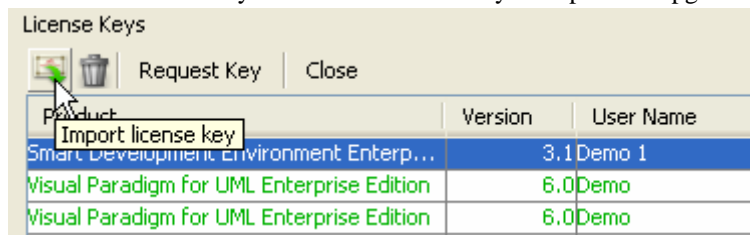


Figure 1.18 - Import by clicking Import license key button

3. Select or type a path for the upgrade key in **Import License Key** dialog. Click **OK** to confirm.

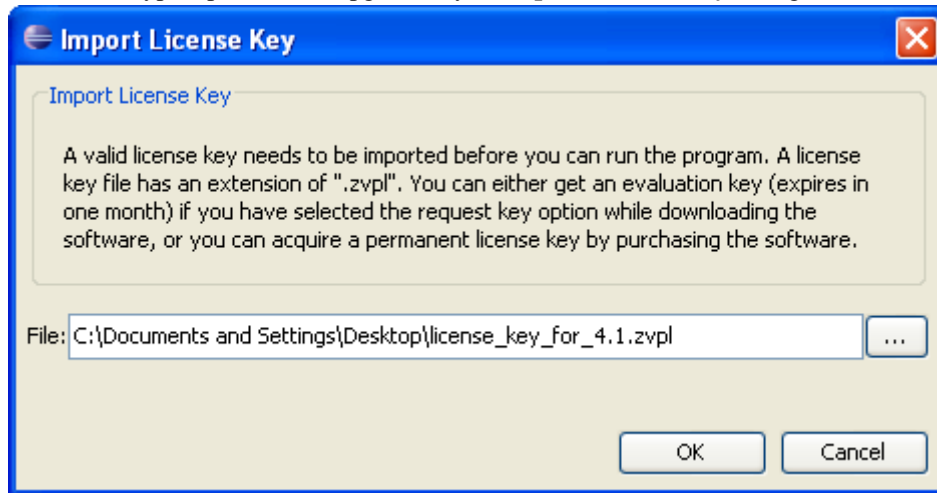


Figure 1.19 - Select or type a path for upgrade key

4. The upgrade key has replaced your old one.

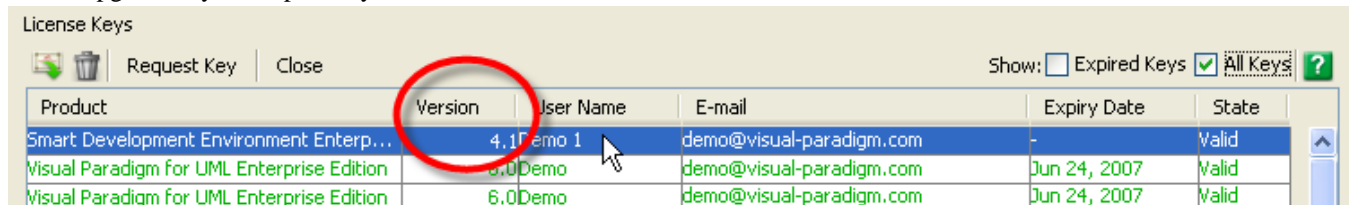


Figure 1.20 - License Key Manager with license key of version 4.0

## Floating License Key

VP Floating License allows you to deliver development software to every user in your organization without paying for unique licenses for every developer. When you use a floating license, the entire organization can access to SDE for Eclipse but the number of people that use VP at the same time is limited to the number of license keys you buy.

By using a floating license, you can reduce the cost of buying licenses, as you just need to purchase enough number of licenses that will run VP at the same time, instead of buying licenses for all developers in your organization.

The installation of floating license server and the configuration of client pointing to the server is a simple process. Our license server can be run on multiple platforms and can be installed in less than 10 minutes.

The license sharing process is automatic, which is convenient to use. VP Floating License automatically manages and shares the licenses through the network. When the client connects to the license server, the server will assign him a license until the license limit has been reached. Once it disconnects from the server, the license will be released automatically and the other user can start using VP with that license.

This kind of key is particularly useful for organizations which have limited access to VP at a certain time each time, e.g. a company has ten staff but only two staff will use SDE for Eclipse at the same time. The the company can then purchase just two floating license keys but the whole company will be able to use SDE for Eclipse at different times.

Before you use SDE for Eclipse with a floating license key, your machine need to access to the license server via LAN to acquire a license key first. For more details, you can refer to the Floating License Server Installation Guide about floating license server installation for more details.

## Configuring Floating License Server

To configure floating license server:

1. Open the License Key Manager.
2. Select **License Keys > Floating License > Configure...** .

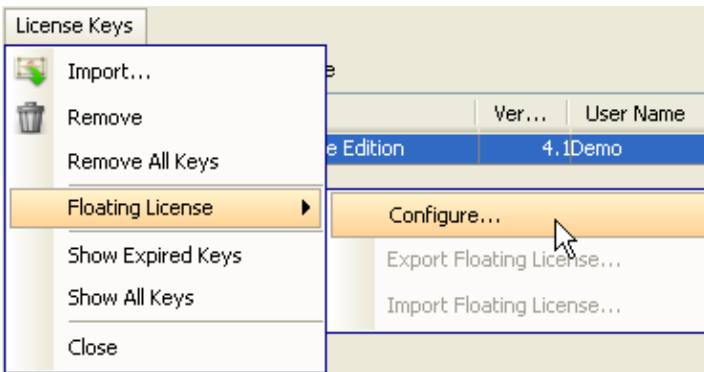


Figure 1.21 - Select configuration of floating license

3. Input the host and port. You can refer to Floating License Server User's Guide for more details.

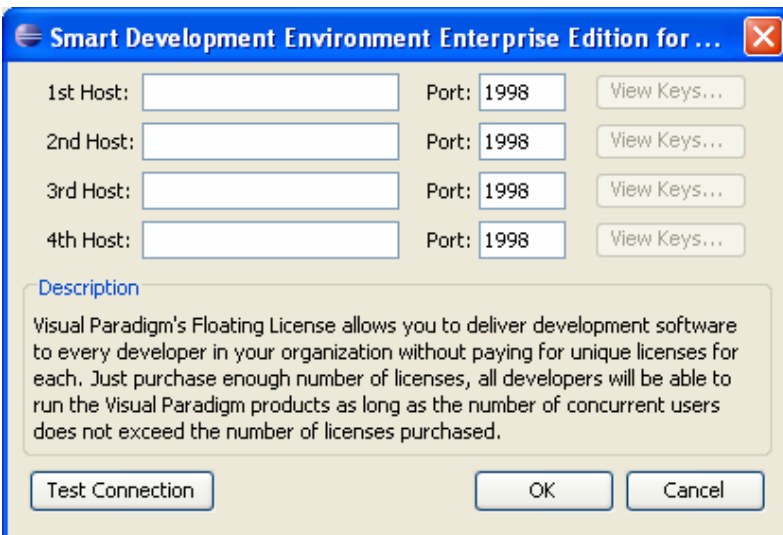


Figure 1.22 - Configuration dialog box

## Exporting Floating License Key

To use a Floating License key, you need to have Local Area Network (LAN) access to the \*Floating License Server\*. You may choose to export one of the floating license keys to your laptop if you need to use it out of the office (e.g. a meeting with a client). If you export a floating license key the number of floating licenses in the server will decrease. This will be reverted when you import the licence key back to the server from your laptop.

To export floating license key:

1. Select **License Keys > Floating License > Export Floating License...** .

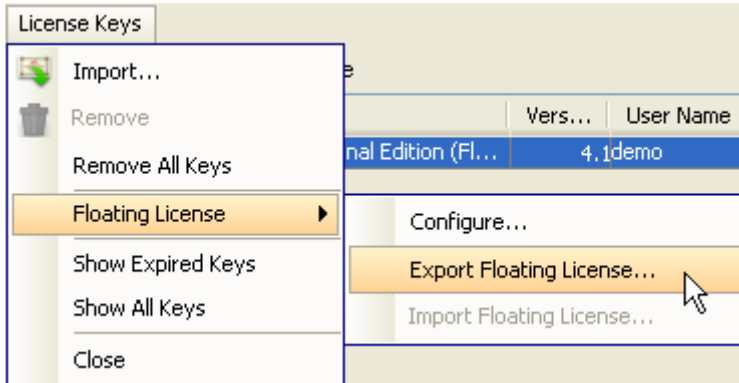


Figure 1.23 - Export the Floating License

2. Floating license key is exported from server.



Figure 1.24 - Floating license exported

## Importing Floating License Key

When you finish using the exported license key, you can import the key back to the server.

To import floating license key:

1. Select **License Keys > Floating License > Import Floating License...** . The **Import Floating License Key** dialog is displayed.

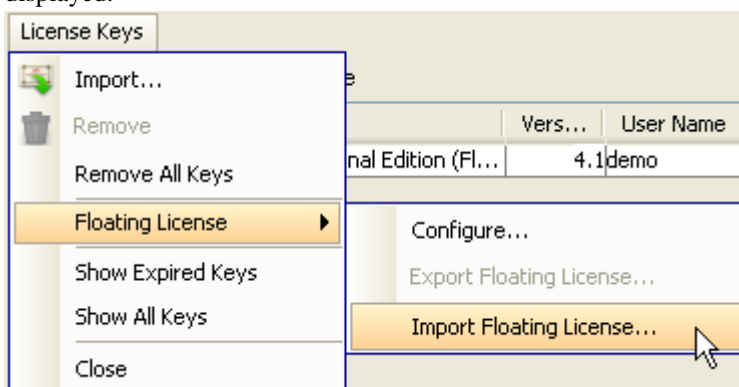


Figure 1.25 - Import Floating License

2. Select the key you want to import and click **OK** to confirm.

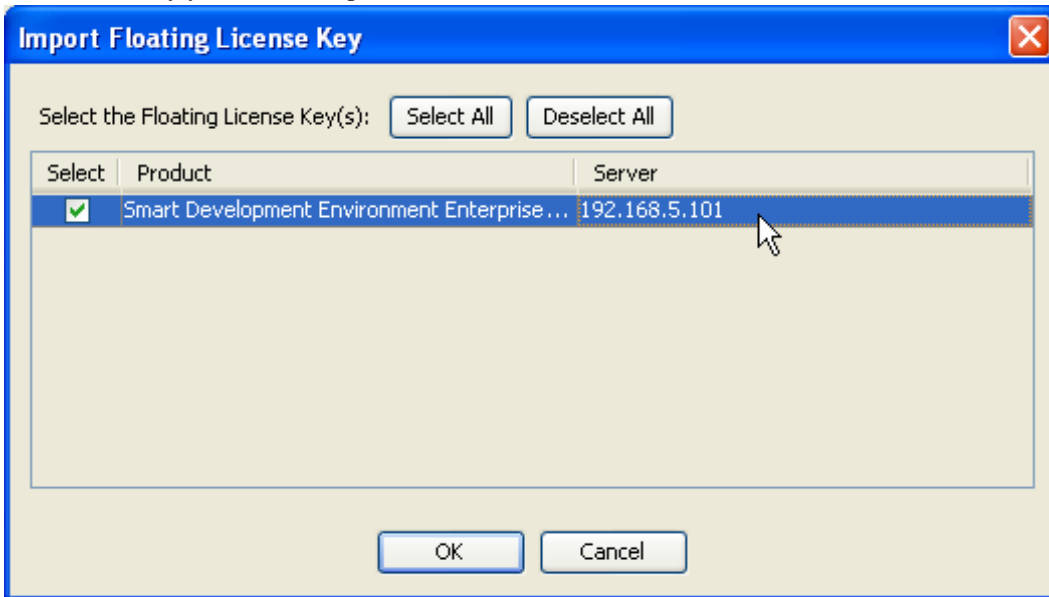


Figure 1.26 - Select license key to import

3. The key is imported successfully.

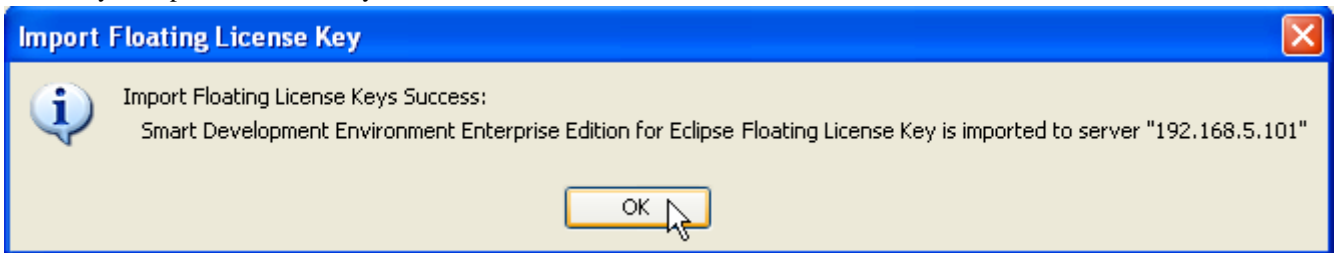


Figure 1.27 - License key imported successfully

If you did not import the exported key to the server when you switch off SDE for Eclipse, the next time you switch on SDE for Eclipse, it will ask if you want to import it to the server.

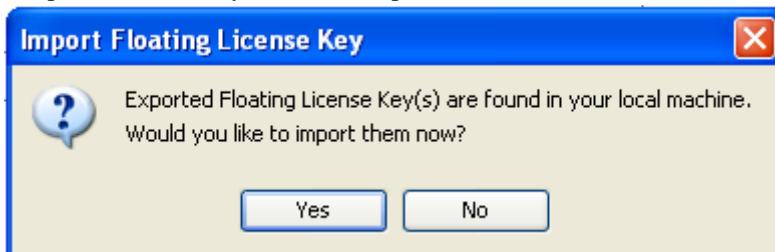


Figure 1.28 - Asking whether to import the license key

## Switching Edition

There is a single installer for all editions. You can install any edition with the same installer. If you want to change your installed edition, you can either re-install the software or use the VP Suite Product Edition Manager as long as you have a valid key for that edition to run.

When evaluating SDE for Eclipse, you can ensure the features you want and are most likely to use are available in different editions.

### 1. Select **start > All Programs > Visual Paradigm > VP Suite Product Edition Manager** .

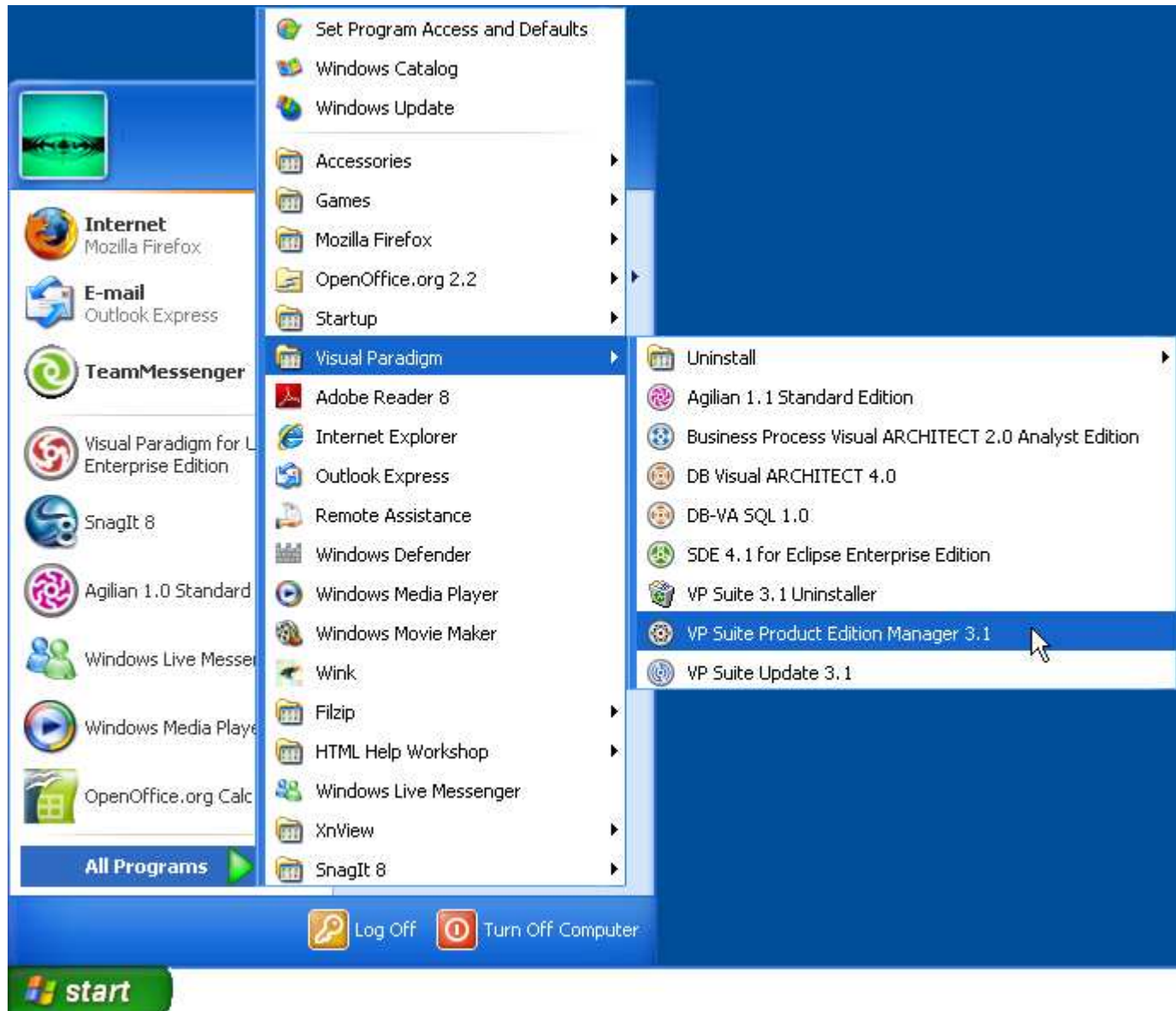


Figure 1.29- Select Product Edition Manager

2. Select the desired edition in the edition manager.

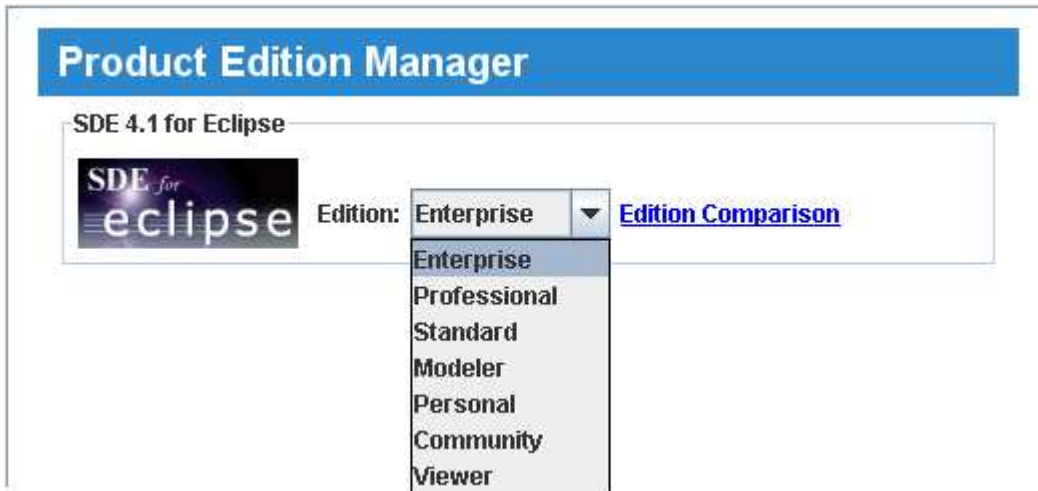


Figure 1.30 - Select desired edition

## Auto Switch Edition

When you start SDE for Eclipse of an edition other than the edition you have a license key for, the Switch Edition dialog will appear and ask whether you want to switch to the other edition.

For example, if you have imported a Standard Edition license key, when you run the Enterprise Edition, SDE for Eclipse will ask you if you want to switch to Standard Edition.

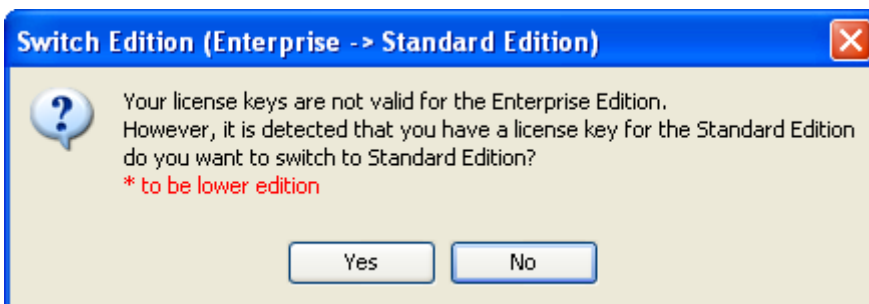


Figure 1.31 - Switch Edition dialog

You may click **Yes** to switch to a lower edition, or **No** to display the License Key Manager dialog to import another key.

## VP Suite Product Selector

Product selector is for a flexible license scheme, and is only for users using a floating license key.

The selector is flexible so that you can view the license keys available in the floating license server and start a product with the selected key.

To start the Product Selector:

Select Product Selector from 'bin' folder in the directory where VP Suite is installed.

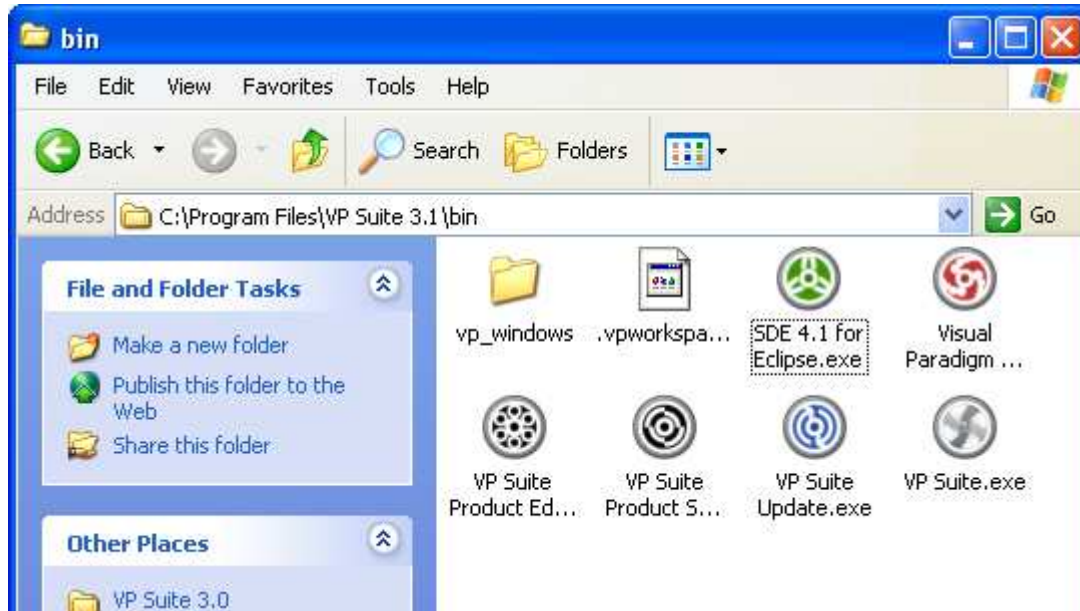


Figure 1.32 - Bin folder

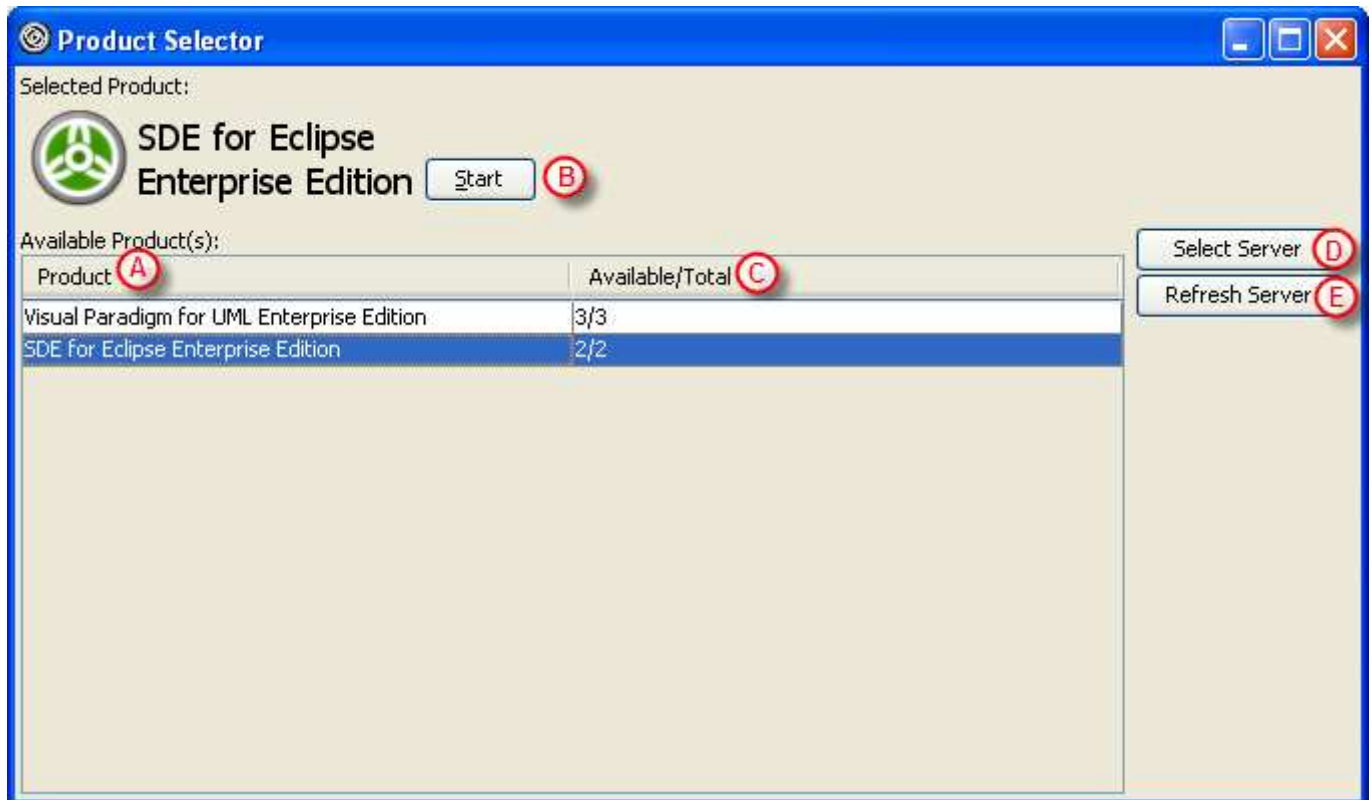


Figure 1.33 - Product Selector

	Name	Function
(A)	Product	Name of products available.
(B)	Start	To start the selected product.
(C)	Available/Total	The number of products in the server available. This is a fraction that the number of product available over the total product purchase.
(D)	Select Server	To select floating license server(s).
(E)	Refresh Server	To refresh a floating license server(s).

Table 1.2

## Basic Environment

In this section, you will learn the basic environment of the SDE for Eclipse user interface, and get to know how to use it to perform modeling more efficiently.

After you have imported the license key, you will see the SDE for Eclipse main screen.

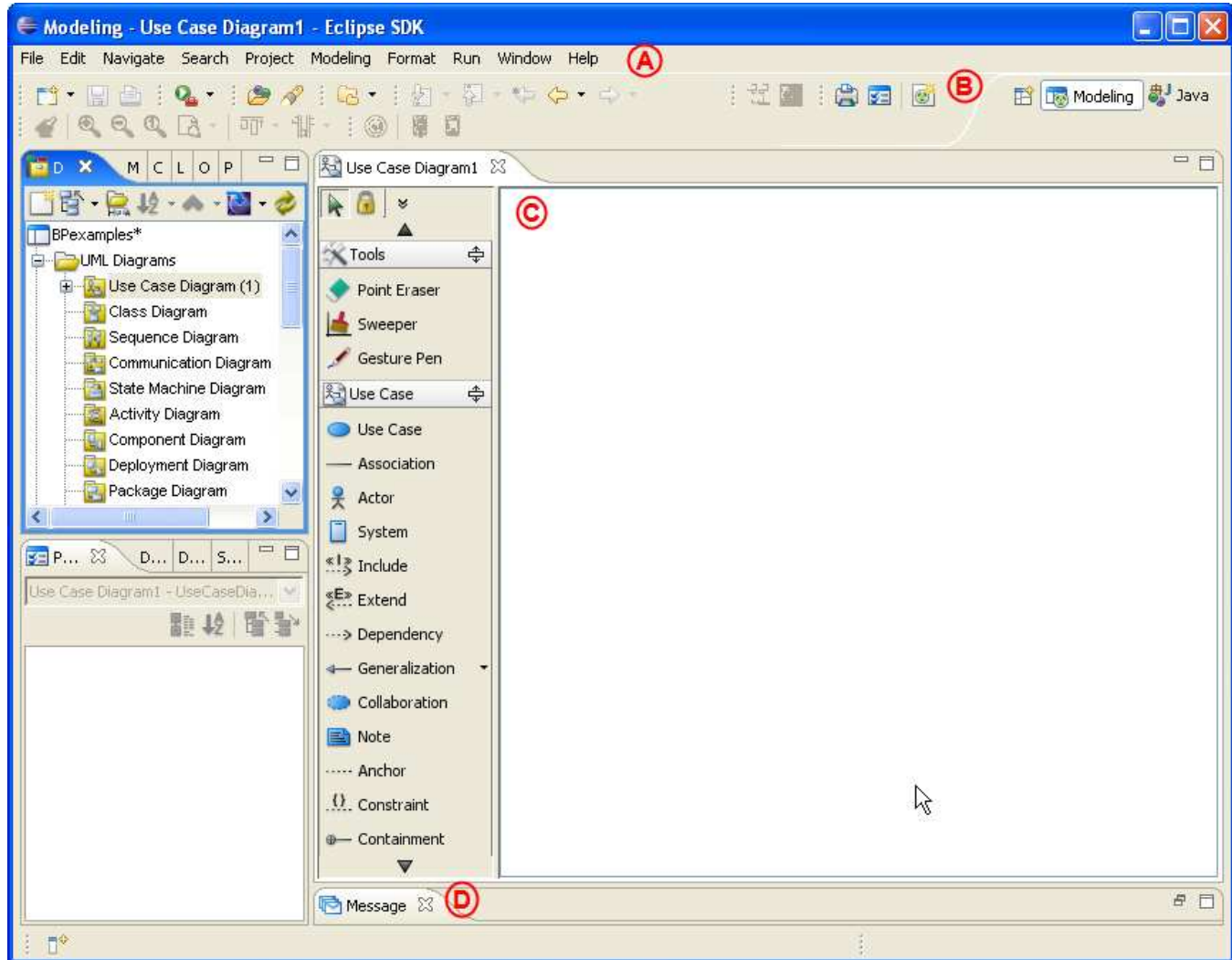


Figure 1.34 - Basic environment

	Name	Description
(A)	Menu	All the commands for execution.
(B)	Toolbar	Frequently used commands.
(C)	Diagram pane	Area where you create your diagram.
(D)	Message pane	Display messages that are generated by performed operations.

Table 1.3

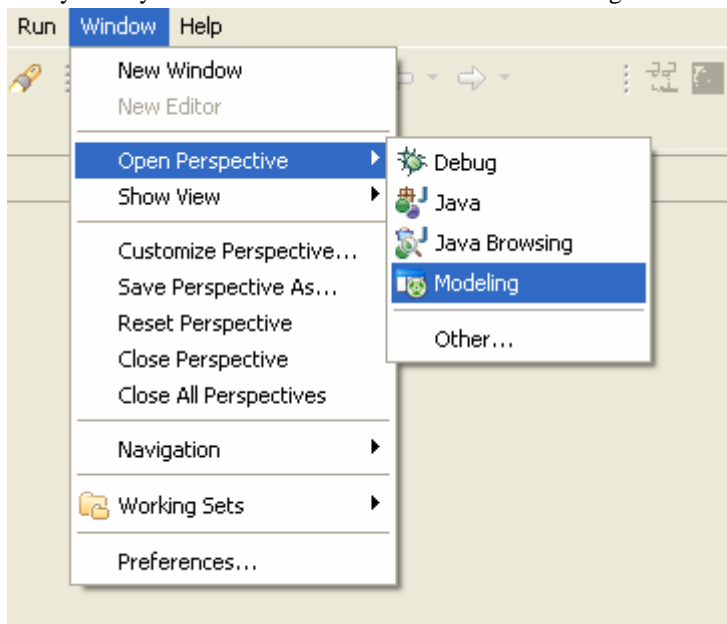
## Panes

SDE for Eclipse provides various panes for performing different tasks and for displaying the modeling project in different views.

## Modeling Perspective

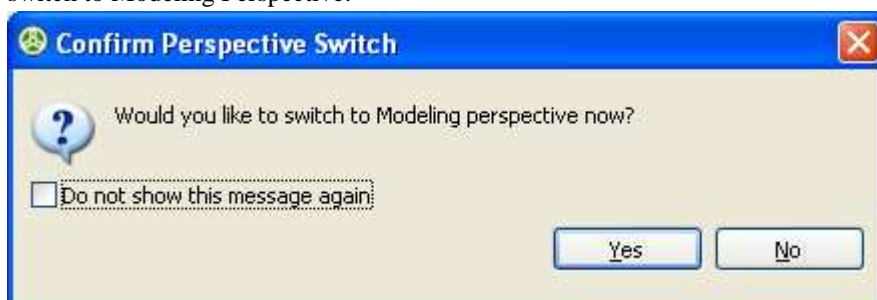
SDE for Eclipse provides different views, however, not all the views will be shown on the Eclipse's "Java" or "Resources" perspective automatically. Therefore, SDE for Eclipse provides Modeling Perspective to show all the views.

To switch to Modeling Perspective. Select **Windows > Open Perspective > Modeling**. **Modeling** may not shown on the menu, then you may need to select **Other...** and select Modeling on the dialog.



If you want to show SDE for Eclipse's view on other perspective. Select **Windows > Show View > Other...**. Then select **SDE for Eclipse**. You can select the view you wanna to be shown.

Note that if SDE for Eclipse is starting and current perspective is not Modeling Perspective. SDE for Eclipse will ask you switch to Modeling Perspective.



## Diagram Navigator Pane

The Diagram Navigator Pane displays diagrams and their diagram elements in the project, which are categorized by diagram type.

To open this pane:

- Select **Windows > Show View > Diagram Navigator**



Figure 1.41 - Diagram Navigator Pane

## Model Pane

The Model Pane displays models in the project.  
To open this pane:

- Select **Windows > Show View > Model**

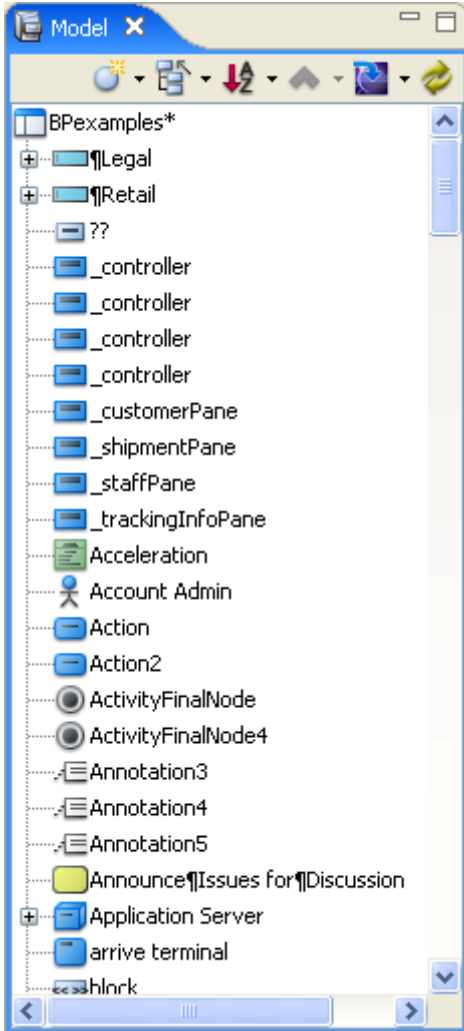


Figure 1.42 - Model Pane

## Class Repository Pane

The Class Repository Pane displays packages and class models in the project. To open this pane:

- Select **Windows > Show View > Class Repository**

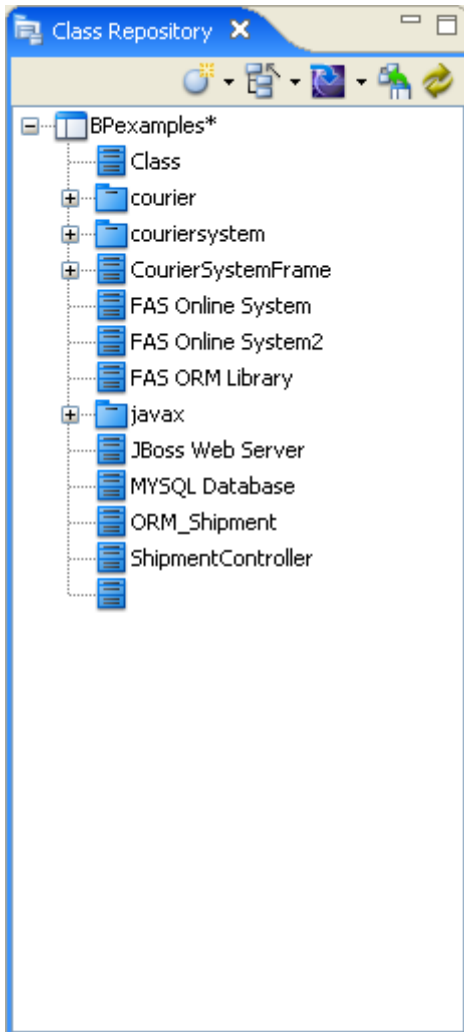


Figure 1.43 - Class Repository Pane

## Logical View Pane

Logical View Pane displays logical view of the project that can be customized to the desired structure. To open this pane:

- Select **Windows > Show View > Logical View**

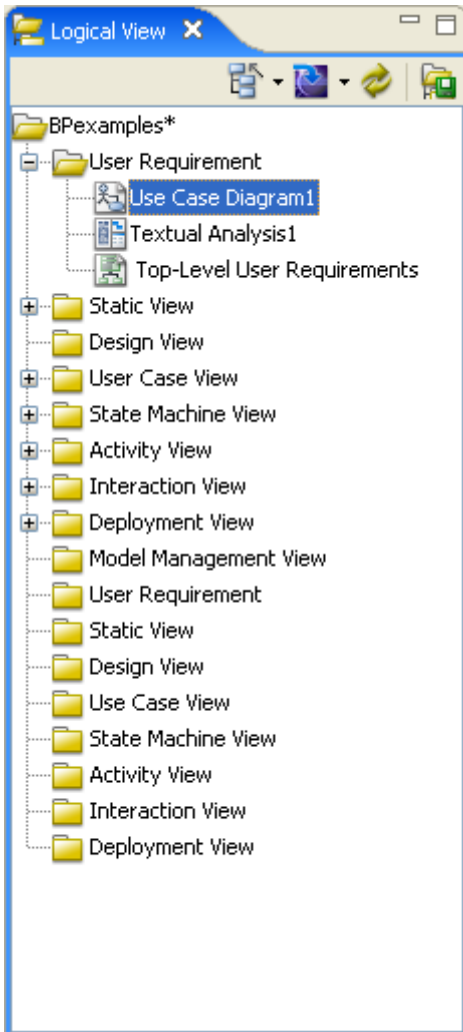


Figure 1.44 - Logical View Pane

## ORM Pane

ORM Pane displays ORM-related views including classes and database configurations. To open this pane:

- Select **Windows > Show View > ORM**

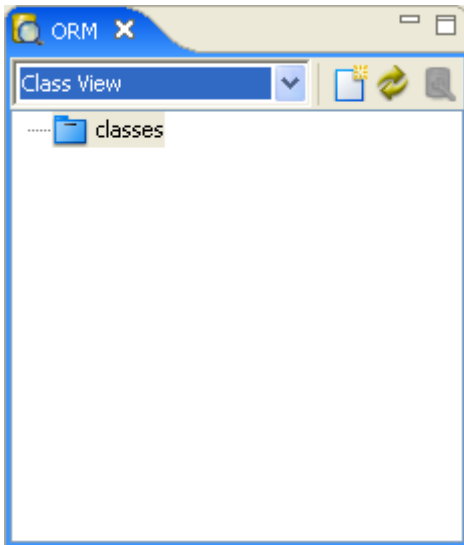


Figure 1.45 - ORM Pane

## Stencil Pane

Stencil Pane displays stencils that can be used to create custom shapes. You can also organize and select stencils here. To open this pane:

- Select **Windows > Show View > Stencil**

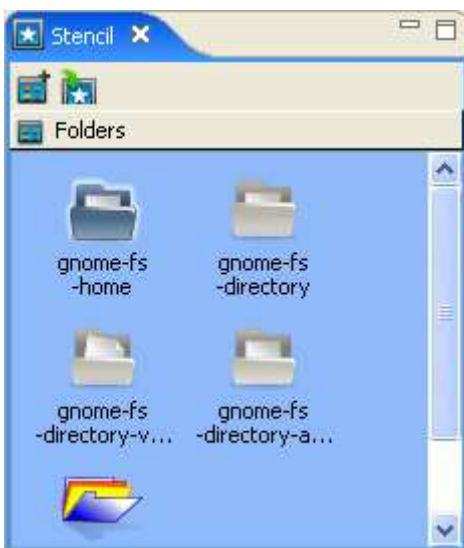


Figure 1.46 - Stencil Pane

## Property Pane

Property Pane displays the properties of the selected element(s). You can also edit the properties here. To open this pane:

- Select **Windows > Show View > Property**

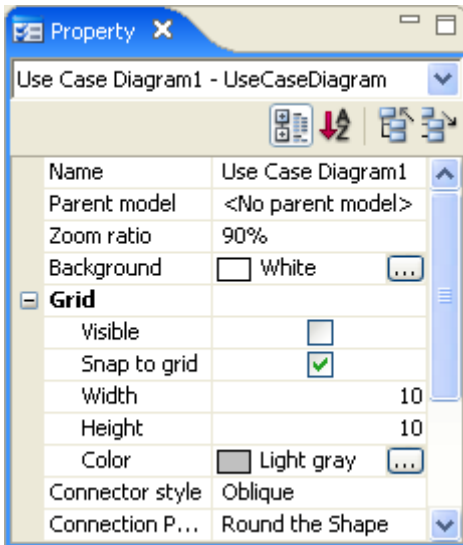


Figure 1.47 - Property Pane

## Diagram Overview Pane

This pane displays the overview of the active diagram which is scaled to fit the display area. The rectangle represents the visible area of diagram. You can navigate to different parts of the diagram by dragging the display area. To open this pane:

- Select **Windows > Show View > Diagram Overview**

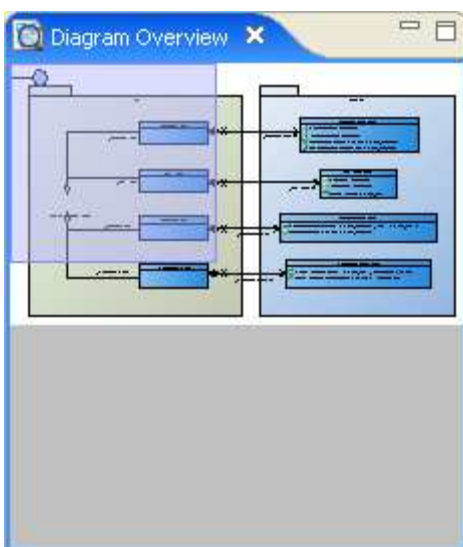


Figure 1.48 - Diagram Overview Pane

## Documentation Pane

Documentation Pane can display documentation of the selected element. SDE for Eclipse also provides rich text documentation. You can edit your documentation directly here.

To open this pane:

- Select **Windows > Show View > Documentation**

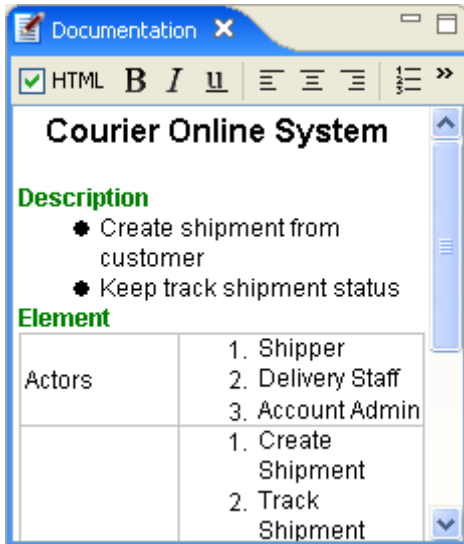


Figure 1.49 - Documentation Pane

## Message Pane

Message Pane displays information, warning and error messages shown by SDE for Eclipse.

To open this pane:

- Select **Windows > Show View > Message**

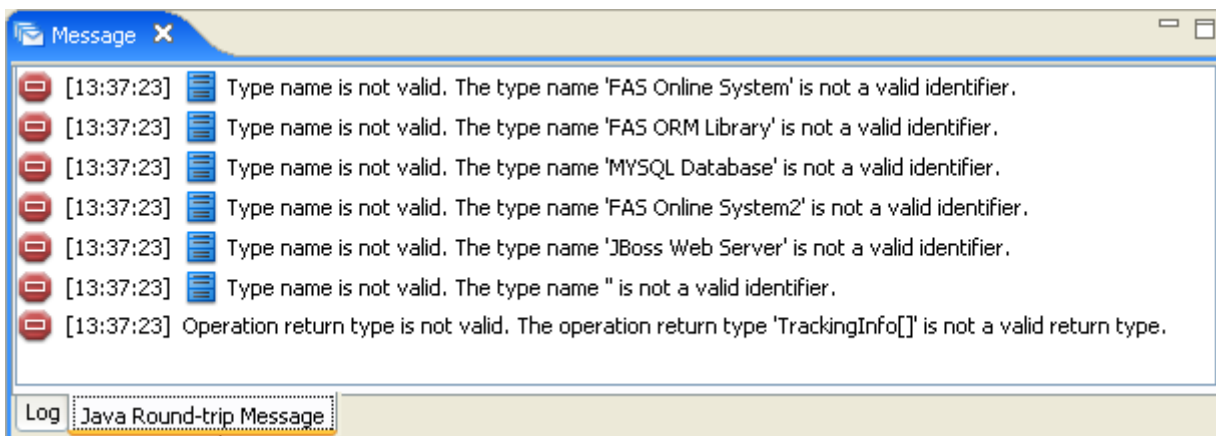


Figure 1.50 - Message Pane showing XMI Results

## Open Specification Dialog Box

The open specification dialog box is a top-level window which enables you to browse for and edit the detail of model elements or diagrams. It can be invoked by right-clicking on either a model or a diagram and selecting **Open Specification...** from the popup menu.

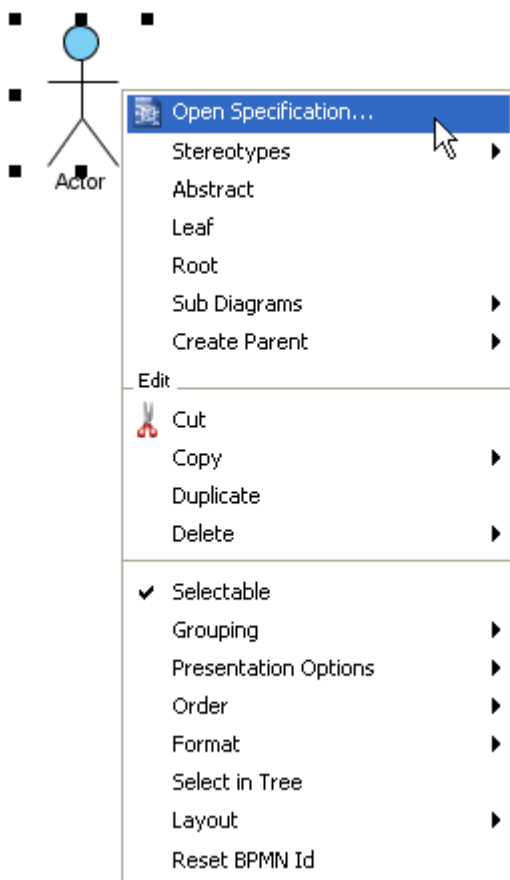


Figure 1.56 - Open Actor Specification

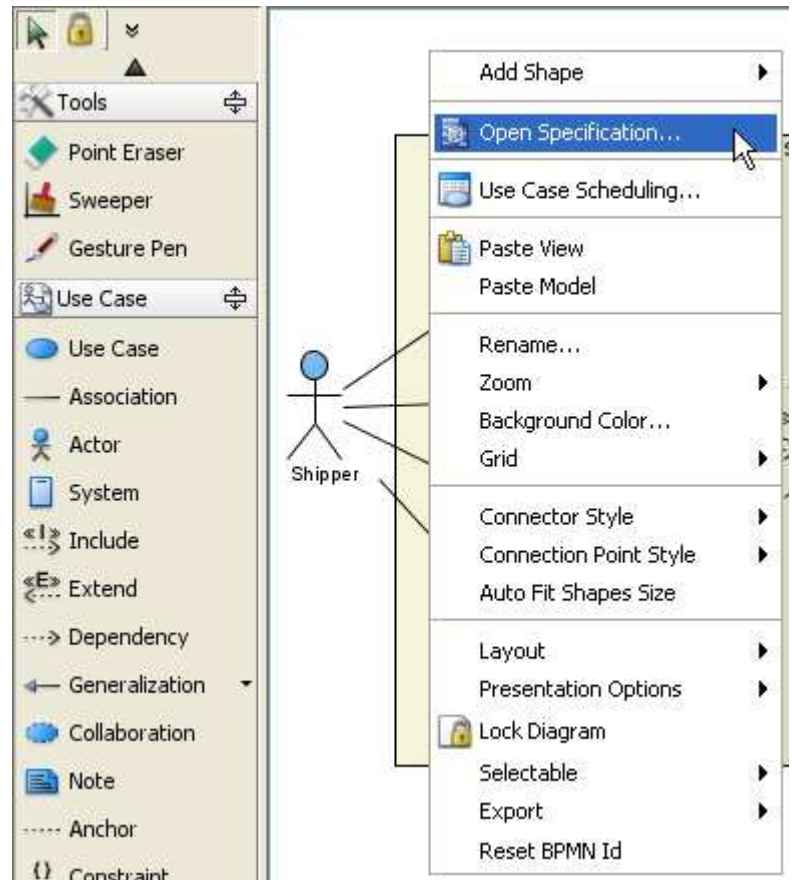
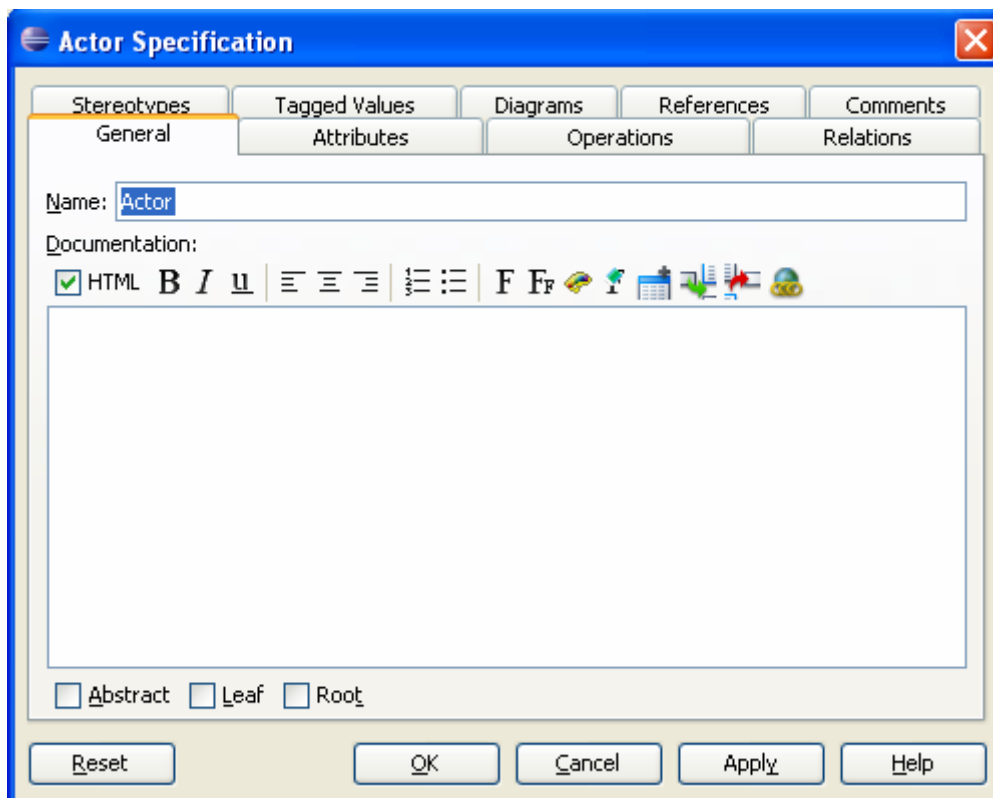


Figure 1.57 - Open Diagram Specification



*Figure 1.58 - Actor Specification*

The open specification dialog box contains several pages which show different aspects of the selected item. General information such as name, stereotype, documentation, files are included in most of the model elements. For some of the model elements, relationship between other model elements (children, relations) and information that is specific to the model elements. (attributes/operations in Class, sub-diagrams of Package) will be displayed as well.

There are five buttons at the bottom of the dialog box: **Reset**, **OK**, **Cancel**, **Apply** and **Help**.

Button	Description
Reset	Reset the changes made in the dialog box.
OK	Accept the changes and close the dialog box.
Cancel	Cancel and close the dialog box.
Apply	Apply the changes immediately without closing the dialog box.
Help	Display the help information of the Open Specification dialog box.

*Table 1.4*

## Navigating between Model Elements

You can navigate to other model elements via the open specification dialog box. This can be done in two ways. For model elements with a one-to-many relationship such as relations, children, you can invoke the open specification dialog box of a selected model elements by clicking on the **Open Specification...** button.

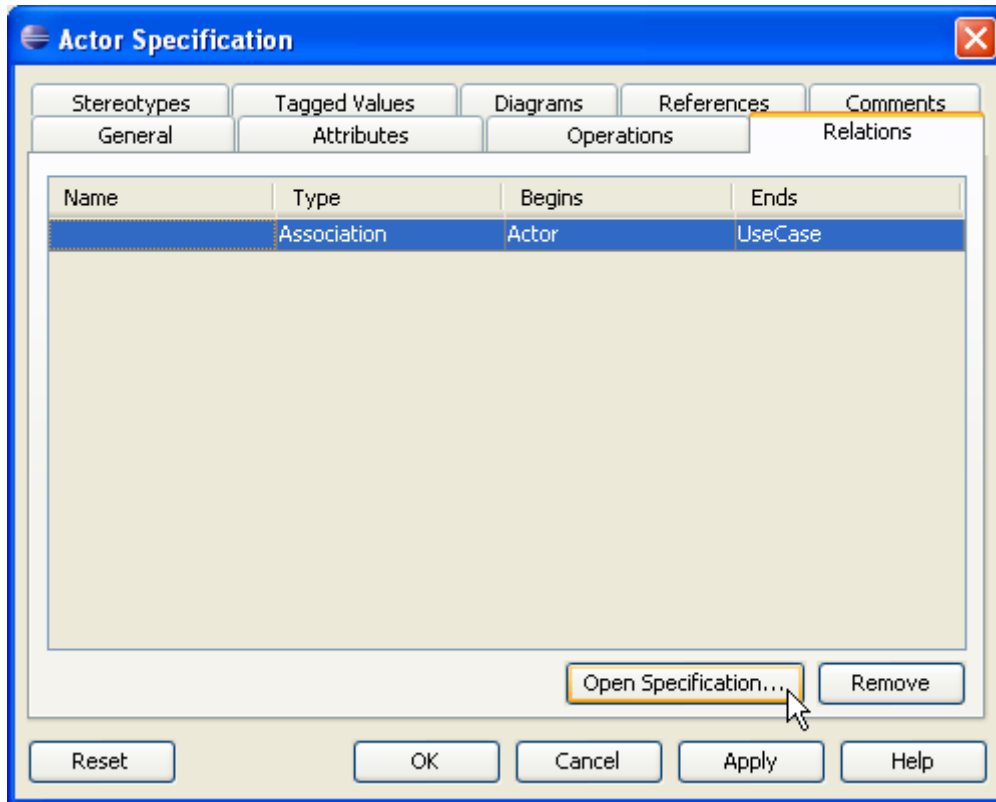


Figure 1.59 - Open Association Specification

Some of the properties of the model element are references to another model element (or a reference to itself) such as Supplier/Client of a Dependency, or Role A/Role B of an Association. In this case you can click on the ... button besides this property to navigate to that model element.

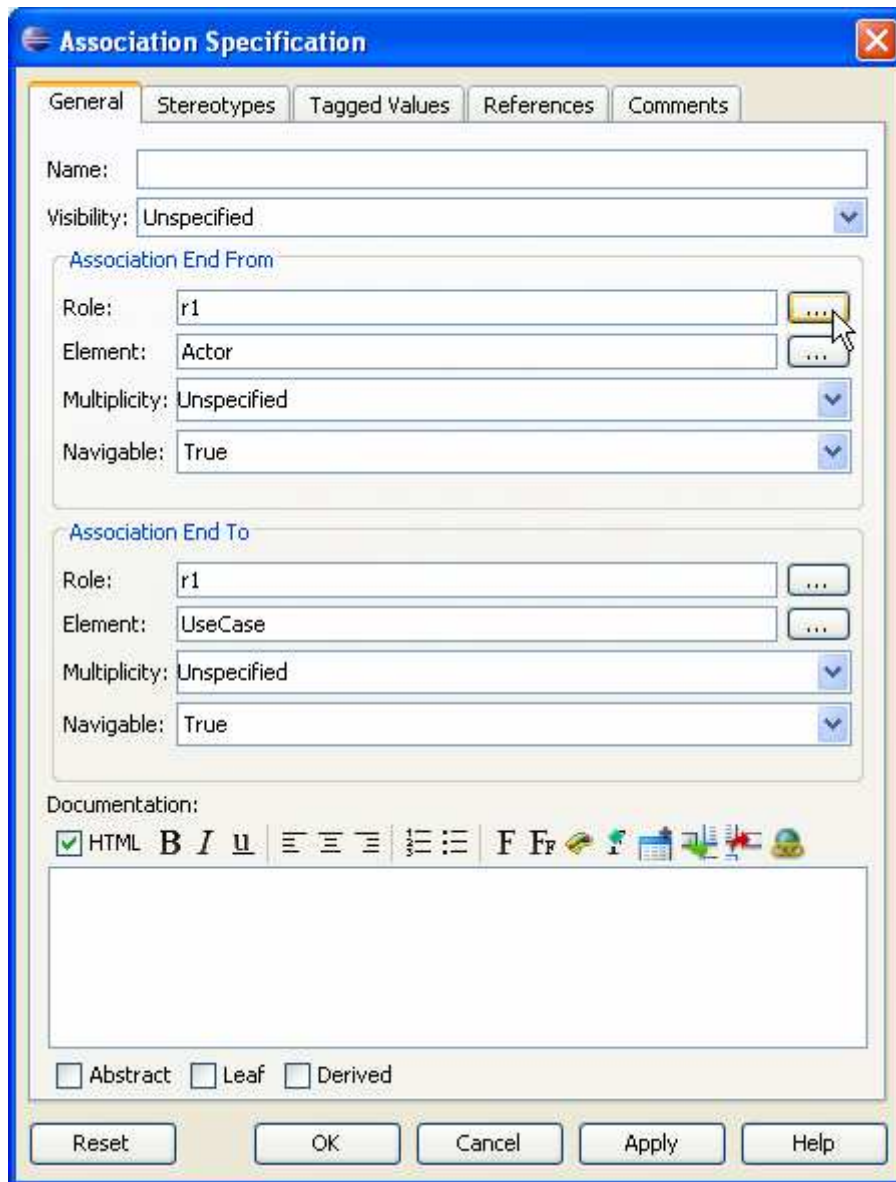


Figure 1.60 - Association Specification

Note that if the open specification dialog box of the referenced model element is already opened, this button will be disabled.