### **Starting Help**

XMI Add-In allows UML to exchange modeling information between StarUML and XMI suppoeted-different modeling tools by using XMI(XML Metadate Interchange). Use XMI Add-In if you want to import the designed information by using UML in XMI supported-other modeling tool from StarUML or to import modeling information in StarUML from XMI supported-other modeling tool.

Index of XMI Add-In Help

- 1. XMI Add-In Overview
- 2. Using XMI Add-In
- 3. <u>FAQ</u>

## XMI Add-In Overview

Top Previous Next

This chapter contains a general overview of XMI Add-In. Included are a brief introduction of XMI and descriptions of XMI Add-In functions and configurations.

- XMI Concepts
- XMI Add-In Functions
- XMI Add-In Configurations

### XMI Concepts

#### **XMI Concepts**

XMI (XML Metadata Interchange) is an OMG standard specification for mutual exchange of metadata between UML-based modeling tools. If a UML modeling tool saves modeling information in the XMI format, other UML modeling tools can read this information as well. For this, all UML modeling tools must support XMI, and many UML tools in the market currently do support it.

For more information on XMI, please visit the OMG web site.

• OMG (Object Management Group) - <u>http://www.omg.org</u>

#### **XMI Versions**

There are several XMI versions depending on the UML version. Each version has a few differences. StarUML(tm) XMI Add-In supports XMI version 1.1, which is currently the most widely used XMI version.

So far the official OMG XMI specifications have specified only the standards for mutual exchange of information for model elements, and exchange standards for diagrams and view elements have been excluded. However, as the need for mutual exchange of information for diagrams increases, the industry widely employs a specification called Unisys XMI, which adds specifications for diagram and view elements to XMI 1.1. StarUML(tm) XMI Add-In supports this Unisys XMI format.

#### XMI Support by Other UML Modeling Tools

Many UML modeling tools currently in the market support XMI and provide data compatibility with other modeling tools. Nevertheless, some modeling tools require additional installation processes to enable XMI functionality, and as yet some tools do not have XMI functionality at all. For information on using XMI in a specific modeling tool, please direct your inquiries to the developer or vendor.

#### **Note**

Some modeling information may be lost or modified when exchanging modeling information between UML modeling tools using XMI. This is

• because of the unique features of each modeling tool, especially those non-

standard features that do not comply with the UML standard.

### **XMI Add-In Functions**

There are two main functions of XMI Add-In: importing XMI format files to StarUML(tm) and exporting StarUML(tm) modeling information as XMI format files.

#### **Importing XMI**

Use this function to import XMI format files from other XMI-supporting modeling tools to StarUML(tm). The user can review or edit any parts of the imported XMI files and save them as StarUML(tm) project files (.uml) and other formats. XMI Add-In also intelligently extracts and displays information such as the XMI version and UML version of the XMI file to be imported.

See the following help section for help on using the XMI import function.

• Importing XMI Files

#### Exporting XMI

Use this function to export StarUML(tm) modeling information to other XMIsupporting UML modeling tools. The user can export modeling information either in the standard XMI format or in the extended XMI format with diagram information. XMI files exported from StarUML(tm) are saved as XML (eXtensible Markup Language) format files.

See the following help section for help on using the XMI export function.

• Exporting XMI Files

#### **Note**

• StarUML(tm) XMI Add-In supports imports and exports for XMI 1.1 and Unisys XMI 1.1, which includes diagram information.

### **XMI Add-In Configurations**

Once XMI Add-In is installed, it is enabled for use in StarUML(tm) by default. Installed Add-Ins can be enabled or disabled through Add-In Manager in StarUML(tm). If an Add-In is disabled, no main menu and popup menu items related to it are displayed, and no StarUML(tm) events are relayed to it.

Procedure for Enabling XMI Add-In :

1. Select the **[Tools]->[Add-In Manager...]** menu in StarUML(tm).

At the Add-In Manager dialog box, check the "XMI Add-In" checkbox in the 2.

Add-In list.

Name	Version	
🗹 🏝 Java Add-In	1.0.1.94	
🗹 🚫 Pattern Add-In	1.0.1.63	
🗹 🔇 Rose Add-In	1.0.1.64	
🗹 🍪 Default Extension Pack	1.0.1.314	
🗹 💹 VSS Add-In	1.0.1.72	
MI Add-In	1.0.1.61	
4		- I + [

3. Click the **[OK]** button to close the dialog box.

Procedure for Disabling XMI Add-In :

1. Select the **[Tools]->[Add-In Manager..]** menu in StarUML(tm).

At the Add-In Manager dialog box, uncheck the "XMI Add-In" checkbox in 2. the Add-In list.

3. Click the **[OK]** button to close the dialog box.

## Using XMI Add-In

Top Previous Next

This chapter describes how to use the XMI Add-In functions: importing XMI files and exporting XMI files.

- Importing XMI Files
- Exporting XMI Files

## **Importing XMI Files**

Top Previous Next

This function imports XMI files saved by other modeling tools to StarUML(tm).

**Procedure for Importing XMI Files :** 

1. Select the **[File]->[Import]->[XMI ...]** menu.

At the Import XMI dialog box, click the **[Browse...]** button to activate the 2. Select XMI File dialog box.

ile name:	Browse
File information	
XMI version : (Unknown)	
UML version : (Unknown)	
Exporting tool : (Unknown)	
<ul> <li>✓ Generate diagram and view</li> <li>✓ Generate as new project</li> <li>✓ Use Rational Approach</li> </ul>	
rogress:	

3. Select an XMI file to import and click the **[Open]** button.

Open					<u>? ×</u>
Look jn:	🛃 Desktop		-	+ 🛍 💣 🎟	
History History Desktop My Computer My Computer My Network P	見 My Computer 健 My Network Pl	aces			
	File <u>n</u> ame:			•	<u>O</u> pen
	Files of <u>type</u> :	XMI files(*.xml;*.xmi)		•	Cancel

Examine the option items in the Import XMI dialog box and check the 4.

necessary options.

#### 5. Click the **[Execute]** button to import the XMI file.

#### **Options**

There are a few options available for importing XMI files.

Item	Description
Generate diagram and views	Specifies whether to generate a diagram and its view elements. If unchecked, diagram and view elements are not generated. This option has no effect on standard XMI format files that do not contain diagram information.
	Specifies whether to create a new project with the modeling information from the imported XMI file. If a project is already open when importing an XMI file with this option, the earlier project will be closed automatically.
Use Rational	Specifies whether to apply Rational Approach when creating a new project with the modeling information from the imported XMI file. This option is automatically selected when importing XMI files

Approach saved in Rational Rose. Although the user can deselect this option, it is highly recommended to use it when importing XMI files saved in Rational Rose.

#### **Note**

• The extension name for XMI format files must be either .xml or .xmi.

## **Exporting XMI Files**

This function exports StarUML(tm) modeling information as XMI format files. The saved XMI files can be read by other UML modeling tools.

**Procedure for Exporting XMI Files :** 

1. Select the **[File]->[Export]->[XMI ...]** menu.

At the Export XMI dialog box, click the **[...]** button to activate the Save as 2. XMI File dialog box.

MI version	
XMI 1.1 for UML 1.3	C XMI 1.1 for UML 1.3 Rose Extended
ptions	
Include diagram and vi	ew information
Generate <u>U</u> UID	
Generate Timestamp	
gress	
P1-5.51	

Specify the path and file name for the XMI file to save, and click the **[Save]** 3.

button.

Save					<u>? ×</u>
Save jn:	🚮 Desktop		•	+ 🗈 💣 💷	]-
History History Desktop My Computer My Computer My Network P	見 My Computer 健My Network Plac	.es 			
	File <u>n</u> ame:			•	<u>S</u> ave
	Save as <u>t</u> ype:	XMI files(*.xml;*.xmi)		•	Cancel

Examine the option items in the Export XMI File dialog box and check the 4.

necessary options.

5. Click the **[Execute]** button to export the XMI file.

#### Options

The following options are available for exporting XMI files.

Item	Description
XMI version	Specifies the XMI version. XMI Add-In supports the standard XMI 1.1 and Unisys XMI 1.1, which is extended to include diagram information. Select "XMI 1.1 for UML 1.3" to export in the standard XMI format, or select "XMI 1.1 for UML 1.3 Rose Extended" to include diagram and view information.
Include diagram and view information	Explicitly specifies whether to include diagram and view information, if "XMI 1.1 for UML 1.3 Rose Extended" is selected under the XMI version option.
Generate UUID	Specifies whether to insert UUID (Universal Unique IDentifier) in all XMI elements for UML modeling elements.

Generate Specifies whether to insert file generation time information in the Timestamp XML file.

#### **Note**

• The extension name for XMI format files must be either .xml or .xmi

### FAQ

The following are frequently asked questions and answers for XMI Add-In.

General

- 1. The StarUML(tm) menu does not show XMI-related menu items.
- 2. Which XMI versions are supported by XMI Add-In?
- 3. How do I use the XMI functions in IBM Rational Rose?
- 4. <u>How should I configure the export XMI options in IBM Rational Rose?</u>
- 5. How should I configure the export XMI options in Borland Together?

#### Importing/Exporting XMI

- 1. <u>Non-Latin characters display incorrectly in the XMI files exported by IBM</u> <u>Rational Rose.</u>
- 2. The Dependency/Extend/Include elements of Use Case Diagram are not converted in the XMI files exported by IBM Rational Rose.
- 3. <u>Association (connection) elements of Deployment Diagram are not</u> <u>converted in the XMI files exported by IBM Rational Rose</u>.
- 4. <u>Some stereotypes are not converted in the XMI files exported by IBM</u> <u>Rational Rose.</u>
- 5. <u>Statechart Diagram under the State element is not converted in the XMI files</u> <u>exported by IBM Rational Rose</u>.
- 6. Destruction Mark of Sequence Diagram is not converted in the XMI files exported by IBM Rational Rose.

- 7. <u>Sequence Diagrams are not generated in some of the XMI files exported by</u> <u>IBM Rational Rose.</u>
- 8. The "incorrect encoding" error occurs when reading XMI files exported by Borland Together.
- 9. Extend/Include elements of Use Case Diagram are generated as Association elements in the XMI files exported by Borland Together.
- 10. Object elements are converted as ClassifierRole elements.
- 11. Diagram view elements have different coordinates and shapes.

#### General

#### 1. The StarUML(tm) menu does not show XMI-related menu items.

There are two possible reasons why the menu does not show up. One is that XMI Add-In is not installed in StarUML(tm) or related files are damaged. To correct this, run the installation program to reinstall StarUML(tm) or select to reinstall XMI Add-In only. If you are familiar with the structure of StarUML(tm) Add-Ins, you may examine the registry or menu files to check for damage in the Add-In and correct the problem. Another possible reason for the problem is that XMI Add-In is disabled by Add-In Manager. If so, go to Add-In Manager and enable XMI Add-In. For the procedure to enable XMI Add-In, see the section on <u>XMI Add-In Configurations</u>.

#### 2. Which XMI versions are supported by XMI Add-In?

XMI Add-In supports XMI 1.1, which is the most widely used version in the market today, and Unisys XMI 1.1, which is extended to include diagram information in XMI. In other words, XMI Add-In can be used to read and write XMI 1.1 (Unisys XMI 1.1) format files.

#### 3. How do I use the XMI functions in IBM Rational Rose?

In order to use the XMI functions in IBM Rational Rose, you need to have an Add-In called "Unisys XML Tools" installed. For details on installing and using the Add-In, please refer to the technical documentation or support provided by the tool vendor.

#### 4. How should I configure the export XMI options in IBM Rational Rose?

If you want to use "Unisys XML Tools" in IBM Rational Rose to save an XMI format file for use by StarUML(tm) XMI Add-In, save the file as an "XMI 1.1" file.

#### 5. How should I configure the export XMI options in Borland Together?

If you want to save an XMI file in Borland Together for use by StarUML(tm) XMI Add-In, it is recommended to save the file as "XMI 1.1 for UML 1.3 (Unisys Extension)" or "XMI 1.1 for UML 1.3 (Unisys Extension, Recommended for Rose)".

#### Importing/Exporting XMI

## **1.** Non-Latin characters display incorrectly in the XMI files exported by IBM Rational Rose.

This problem occurs because IBM Rational Rose's "Unisys XML Tools" only supports "ISO-8859-1" encoding (English only). To resolve this, please direct inquiries to IBM Rational customer support or the Unisys XML Tools vendor.

## 2. The Dependency/Extend/Include elements of Use Case Diagram are not converted in the XMI files exported by IBM Rational Rose.

This problem occurs because Rational Rose omits information for the Dependency/Extend/Include elements of Use Case Diagram when saving XMI files.

## **3.** Association (connection) elements of Deployment Diagram are not converted in the XMI files exported by IBM Rational Rose.

This problem occurs because Rational Rose omits information for Association (connection) elements of Deployment Diagram when saving XMI files.

# 4. Some stereotypes are not converted in the XMI files exported by IBM Rational Rose.

This problem occurs because Rational Rose omits information for some stereotypes such as "business use case", "use-case realization" and "ClassUtility" when saving XMI files.

## 5. Statechart Diagram under the State element is not converted in the XMI files exported by IBM Rational Rose.

While Rational Rose is capable of generating Statechart/Activity Diagram under State or Activity elements, this information is omitted when saving XMI files because it is conceptually incorrect for UML. This information cannot be restored.

## 6. Destruction Mark of Sequence Diagram is not converted in the XMI files exported by IBM Rational Rose.

While Rational Rose is capable of expressing Destruction Mark in Sequence Diagram, this information is omitted when saving XMI files because there is no appropriate modeling element that corresponds to it under the UML standard. This information cannot be restored.

# 7. Sequence Diagrams are not generated in some of the XMI files exported by IBM Rational Rose.

This problem occurs because when saving XMI files Rational Rose omits information for Sequence Diagram that does not contain any message elements.

# 8. The "incorrect encoding" error occurs when reading XMI files exported by Borland Together.

Borland Together incorrectly writes XML file encoding values when saving XMI files. For instance, hyphens ("-") in values such as "ISO8859\_1" and "EUC\_KR" are incorrectly replaced by underscores "\_". Appropriate corrections must be made to the XMI files saved by Together before importing them into StarUML(tm).

## 9. Extend/Include elements of Use Case Diagram are generated as Association elements in the XMI files exported by Borland Together.

If either the 'XMI 1.1 for UML 1.3 (Unisys Extension)' or 'XMI 1.1 for UML 1.3 (Unisys Extension, Recommended for Rose)' option is selected, Borland Together expresses Extend/Include elements of Use Case Diagram as Association elements.

#### 10. Object elements are converted as ClassifierRole elements.

Object elements generated from Sequence/Collaboration Diagrams in IBM Rational Rose or Borland Together are converted as ClassifierRole elements. This is because Rose and Together internally treat these object elements as ClassifierRole elements and express them as ClassifierRole elements when saving XMI files. Even if the user may not intend object elements to be converted as ClassifierRole elements, this is conceptually correct.

#### 11. Diagram view elements have different coordinates and shapes.

This problem occurs because information for diagram view elements is

simplified when saving XMI files. Some UML modeling tools also omit some

of the information for view elements when saving XMI files. This varies slightly from one modeling tool to another.