Eclipse plugin
Designer
for Joram 5
Contents

Contents................................................................................................................. 2

Figures and tables................................................................................................. 3

1. Introduction...................................................................................................... 4

2. Installation...................................................................................................... 4
   2.1. Requirements............................................................................................. 4
   2.2. Installation.................................................................................................. 4
       2.2.1. Eclipse with modeling tools............................................................... 4
       2.2.2. Installation of the Joram designer plugin.......................................... 5

3. Getting started............................................................................................... 6
   3.1. Creation of a new configuration................................................................. 6
   3.2. Configuration elements............................................................................. 8
   3.3. Properties setting..................................................................................... 9
   3.4. Configuration generation.......................................................................... 9
Figures and tables

Figures index

Figure 1 - Installing GMF................................................................. 5
Figure 2: JORAM Designer wizard.................................................. 6
Figure 3: Sample Joram configuration.......................................... 7
Figure 4: Configuration tee view................................................... 7
Figure 5: Topics properties........................................................... 9
Figure 6: Generation menu............................................................ 10

Tables index

Tableau 1: Elements from right palette........................................ 9
Tableau 2: Script generation wizard............................................ 11
1. Introduction

This document describes installation and usage of the Joram architecture designer.

2. Installation

2.1. Requirements

The designer plugin needs an Eclipse 3.5 platform with additional plugins:

- EMF 2.5.0 (http://www.eclipse.org/modeling/emf/)
- OCL 1.3.0 (http://www.eclipse.org/modeling/mdt/?project=ocl#ocl)
- EMF Validation Framework 1.3.1 (http://www.eclipse.org/modeling/emf/?project=validation)
- GMF 2.2.1 (http://www.eclipse.org/downloads/)

2.2. Installation

2.2.1. Eclipse with modeling tools

Prior to install the plugin you have to obtain an Eclipse with modeling tools, the simplest way if you don’t have Eclipse installed consists to download eclipse modeling tools from «http://www.eclipse.org/downloads/».

If you already have eclipse installed, which will produce a lighter eclipse, run eclipse and install GMF using "Help > Install New Software..." menu (see figure below).

2.2.2. **Installation of the Joram designer plugin**

Download the 5 jar files from http://joram.ow2.org/download/index.html:

- Follow the « Click here to start the download process link ».
- Search the « JORAM_DESIGNER » package at the end of the page.

Copy the 5 jar files in Eclipse dropins folder, then restart Eclipse.
3. Getting started

3.1. Creation of a new configuration

Select « File > New > Other... » menu, then select « JORAM Designer > Joram Diagram » and click the « Next » button.

Fix the name of the configuration file then click the « Finish » button to create an empty configuration. Using tools in the right palette you can now define « Joram servers », connect them through « Domain », and locate them on « Host ».

A tutorial is available from http://joram.ow2.org/doc/tutorials.html to guide you to a full configuration as the one below:

- 3 Joram servers interconnected through a PoolNetwork domain named D0.
- 2 servers are located on host « tiga », the last on « aroe ».
- Each servers defined a TCP entry point (TCPProxyService), the server 0 defined a JNDI service.
- Each server defined a user named « anonymous » and 2 destinations are defined on server 0.
This configuration can be viewed as a tree opening the corresponding «.joram» file. The figure below shows the previous configuration as a tree.
## 3.2. Configuration elements

This chapter describes the tools in Palette at the right side of the window.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Joram Server](image) | Allow to create a new Joram server with default configuration:  
  - server id. 0,  
  - a ConnectionManager and a TCPProxyService defined,  
  - a JNDIServer,  
  - an user named « anonymous » and 2 destinations, a queue named « sampleQueue » and a topic named « sampleTopic ».  
  Additional elements can be added using configuration elements below. |
| ![Host](image) | « Host » allow to create a new physical host. « Server host » allow to link a Joram server to a physical host. |
| ![Domain](image) | « Domain » allow the creation of a new communication domain, default name is « D0 » and protocol is « PoolNetwork ». « Server domain » allow to link a Joram server to a communication domain. |
| ![Topic](image) | Allow the creation of JMS Topic:  
  - default implementation class is used,  
  - internal name is « topic », by default the destination is not registered in JNDI,  
  - nobody is authorized to send or receive messages.  
  These values can be modified using properties (see next chapter). |
| ![Queue](image) | Allow the creation of JMS Queue:  
  - default implementation class is used,  
  - internal name is « queue », by default the destination is not registered in JNDI,  
  - nobody is authorized to send or receive messages.  
  These values can be modified using properties (see next chapter). |
| ![User](image) | Allow the creation of an user with default name and password set to « anonymous » |
Allow the definition of sample or distributed JNDI service.

Allow to define a global set of properties which can be applied to all servers and communication domains.

Allow to define a custom property with a <name, value> pair.

Allow to add predefined property sets for specific components:
- Transaction, NTransaction,
- Network, PoolNetwork, HttpNetwork.
These sets of properties can be added either at server, domain or global level.

Tableau 1: Elements from right palette

### 3.3. Properties setting

Many elements need to be configured. The properties of a selected elements can be changed using eclipse properties view. For example for a « Topic » element:

![Properties view](image)

**Figure 5: Topics properties**

### 3.4. Configuration generation

Each time the file is saved your configuration is verified and fault are reported using icon, an associated tooltip describes the error: « server id must be unique » for example.
To export your configuration in standard Joram configuration file, right click on your « .joram » file then select the « Joram » sub-menu:

- The « Generate a3servers.xml... » menu allows to produce the corresponding a3servers.xml configuration file.
- The « Generate admin script » menu executes a wizard allowing the generation of XML administration scripts.
- The « Deploy... » menu generates and executes a DeployWare script.

The generation of XML administration script comprises 4 steps:

1. The first step allows to define the administration entry point, either through TCP or local connection.

2. The second step allows to choose the JNDI server used to register created destinations.
The third step allows to choose elements to create through this script. For example, all elements can be created from a single script, or elements can be created through different scripts associated to each server.

The last step allows to choose the file containing the created XML administration script.

Tableau 2: Script generation wizard