

Release Note for pi4soa version 1.7.0

March 2008

PURPOSE: The main features of this release are improvements to the user interface for the choreography description editor, the addition of a simple choreography monitoring tool, and the addition of JBossESB as a deployment target for the generated Java.

STATUS: This is a beta release.

System Requirements

Eclipse: tested with version 3.3.2 (Europa)

This can be downloaded from the Eclipse website: <http://www.eclipse.org>

Also required EMF (Eclipse Modeling Framework) and GEF (Graphical Editing Framework), which are available from the Europa update site by selecting the complete "Graphical Editing Framework" and "Models and Model Development" categories. This will also include the UML2 plugins required for the UML export facility. If BPMN export is also required, then download the BPMN plugin from the "SOA Development" category.

JDK1.5

NOTE: Documentation and examples now available online at the pi4soa wiki, located at <http://pi4soa.wiki.sourceforge.net>.

Changes in this Release

The org.pi4soa.jmslibs and org.pi4soa.jdbclibs plugins have been removed, due to some conflicts with the JBossESB Jars. These plugins were originally used to enable client projects to make use of a variety of JMS or JDBC technologies. However now the choice of transport implementation is coupled to the deployment option selected for a Choreography, so this avoids the user having to explicitly setup their own client side configuration.

The 'New Service Description Wizard' has been removed, as the service description representation is for internal use, and at present not expected to be used to manually create endpoint descriptions. Service descriptions can still be exported, and displayed within an endpoint description editor, for information purposes.

New Features in this Release

A new deployment option for JBossESB. This can be selected from the Java Generation properties for a project or CDM file.

Changes have been made to the properties for the Choreography Description Editor. Previously the Eclipse property sheet mechanism was used, which presented the properties in a table with name and value columns. This has been migrated to use the new tabbed properties mechanism, to present the properties as a form. As a result of this change, the

Choreography perspective now places the properties in the same region of the Eclipse user interface as the Problems window. However, if you already have the pi4soa environment installed, it will remember where the previous perspective placed the properties, and therefore the form will initially appear in the left hand bottom corner. To update the perspective, select the "Reset Perspective" option from the Windows menu, when using the Choreography perspective.

An inference mechanism has been implemented, which can be disabled within the Windows->Preferences->Choreography->Designer preferences. This mechanism creates related objects, and pre-configures their values, to save the user time when creating choreographies. This mechanism is still experimental, so any feedback on ways it can be improved would be appreciated.

A simple Choreography Monitor tool has been added, which can be launched from the context menu associated with a choreography file.

Bugs Fixed

[1820636] Identity equality based on value instead of token name+value Implemented, so now identities are checked for equality based on value and optionally on token type if available, but not token name.

[1822786] Variable and expression incorrectly projected to participant All of these features were not being filtered based on the role types in the participant instance as opposed to participant type.

[1824015] Unusual exception propagation problem Side effect caused by the way that exception handlers were processed - when the exception handler in the sub-choreo was checked but found not to match, it was triggering the propagation of the exception to the parent choreo before returning to process the exception in the local exception handler. This has now been resolved.

[1830956] Conditional not skipping when expr defined evaluates false Issue was that the 'evaluateState' property was not being taken into account, so because in monitoring mode it was using lookahead, even though an expression had been defined.

[1893214] Generate WS-BPEL Failed: null

[1683069] Cannot paste into property boxes with expansion Fixed as a result of changing to the 'tabbed properties' mechanism.

Downloading and Installing

The release can be downloaded from the SourceForge project, at <http://www.sourceforge.net/projects/pi4soa>.

Once the ZIP file has been downloaded, the contents should be extracted into your Eclipse installation's home directory. When the contents have been unpacked, then you should restart your Eclipse application and verify that the plugins have been correctly installed.

Verifying the Installation

This can be done by selecting the "About Eclipse Platform" item on the "Help" menu. This will display a window with some buttons at the bottom. Press the button labelled "Plug-in Details". This will display a list of plugins that are currently visible within your Eclipse environment, and should now include a set of plugins from www.pi4soa.org with the appropriate version number.

Known Issues

Message ordering problem in Axis: This issue has been logged [https://sourceforge.net/tracker/index.php?func=detail&aid=1491441&group_id=122989&atid=695122] and occurs when a one-way request follows a request for a req/resp operation. This is because the one-way request is directly sent within the invoking thread, while the request for the req/resp operation needs to be performed in a separate thread, due to the wait for synchronous response. This limitation is due to the Axis1 API. Although Axis1 provides an asynchronous API, it is only implemented as mentioned before (i.e. a separate thread that uses the synchronous API).

Printing on Mac: There is an issue related to printing diagrams from the pi4soa designer on a Mac. This may or may not be related to the Eclipse bug [https://bugs.eclipse.org/bugs/show_bug.cgi?id=8146]. The problem causes Eclipse to hang.

Reporting Issues

If a problem occurs while using the pi4soa tools, then please consult the "bugs" and "support requests" sections on the pi4soa sourceforge project: <http://sourceforge.net/projects/pi4soa>.

The WS-CDL spec is now at Candidate Recommendation Status, and can be found at: <http://www.w3.org/TR/2005/CR-ws-cdl-10-20051109/>.