

# Dali JPA Tools 2.1 (of WTP)

Full Release Review Materials

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## Introduction

This document is meant to fulfill the requirements of the Eclipse Release Review process for Dali 2.1, planned for release on Dec 19<sup>th</sup>, 2008.

## History

The Dali sub-project was proposed under the Technology project in July of 2005. The project successfully graduated to the WTP top-level project in February, 2007. The following list describes the major release history:

- Dali 0.5 June, 2006 (Technology)
- Dali 1.0 June, 2007 (WTP/Europa)
- Dali 2.0 June, 2008 (WTP/Ganymede)

## Goals and Features

The three main goals for this release included improving existing:

- EclipseLink support
- Usability
- Core JPA support

Notable Features include:

- EclipseLink
  - Caching
  - Converters
  - Attribute Mapping Options
  - Type Mapping Options
  - Support for the EclipseLink XML Mapping File
- Usability
  - Common menu enhancements for all JPA related artifact creation
  - UI to add database driver to project classpath on project creation
- Core JPA Support
  - Case sensitive database support based on Platform
  - Basic support for differently named/multiple XML mapping file(s)

See the standard project plan for more detail - <http://www.eclipse.org/projects/project-plan.php?projectid=webtools.dali>

Also see the New and Noteworthy documentation for the 2.1 release:

- <http://www.eclipse.org/webtools/development/news/3.1M2/jpa.php>
- <http://www.eclipse.org/webtools/development/news/3.1M3/jpa.php>

## Non-Code Aspects

The Dali project has extensive non-code artifacts including comprehensive user documentation, context sensitive help, a full tutorial, viewlets, developer/extension docs, numerous conference presentations, and javadoc. These materials have been kept up to date and will also be updated for the 2.1 release.

In addition to the above, the Dali project is included in many of the parent WTP project's non-code aspects, including articles, wiki's, and other user/developer information.

## API

Dali currently provides a Provisional API in accordance with the WTP API Policy - [http://wiki.eclipse.org/WTP\\_API\\_Policy](http://wiki.eclipse.org/WTP_API_Policy). These API meet the Eclipse Quality API standards with the exception of some deficiencies in their evolving specifications. These deficiencies will be improved for the Galileo aligned release.

## Architectural Issues

Dali has been designed from the ground up to be extensible for those wishing to change and/or add to the present functionality. A Platform concept exists to facilitate JPA providers in developing tooling specific to a given runtime. This architecture has been proven by an included exemplary extension, multiple commercial adopters, and multiple commercial extenders.

We have a small number of internal dependencies on JDT and DTP. Bugs have been filed for these issues to request public API. All internal access violations are documented – [http://wiki.eclipse.org/Dali\\_Access\\_Warning\\_Documentation](http://wiki.eclipse.org/Dali_Access_Warning_Documentation).

## UI Warnings

- [188673](#) org/eclipse/jpt/ui/internal/prefs/JpaPreferencePage.java - 3
- [188673](#) org/eclipse/jpt/ui/internal/wizards/JpaFacetWizardPage.java - 5
- [156185](#) org/eclipse/jpt/ui/internal/xml/details/XmlJavaClassChooser.java - 8
- [156185](#) org/eclipse/jpt/ui/internal/xml/details/XmlPackageChooser.java - 8

## DB UI Warnings

- [189800](#) No longer getting an access warning in the build.

## Tool Usability

The Dali Tools provide a vast improvement over hand editing and runtime validation of JPA Entities. The tools are light-weight and useful, able to cater to the new user with a comprehensive, rich UI. They also cater to the power user who may choose to ignore the UI altogether, and rely only on our validation and Dali contributions to Java code completion.

## End-of-Life

The following 2.0 Provisional API's are being changed in the 2.1 release - [http://wiki.eclipse.org/Dali\\_Provisional\\_API\\_Changes](http://wiki.eclipse.org/Dali_Provisional_API_Changes).

## Bugzilla

Bug statistics:

- Total Bugs: 1111
- Unresolved: 247
  - Defects – 157
    - Major – 6
    - Normal – 133
    - Minor - 18
  - Enhancements - 90
- Resolved: 865

The bug statistics appear to be consistent with a healthy Eclipse project. Bugs are filed on a regular basis by committers, contributors, adopters, and users.

## Standards

Dali specifically supports the JCP's JSR220 - JPA 1.0 specification.

## UI Usability

We are familiar with and follow the Eclipse User Interface Guidelines. Dali has also gone through a UI Walkthrough.

We also have some contributors that often open bugs for Accessibility and National Language issues so we can fix those bugs before end-users encounter them.

## Schedule

The initial schedule laid out 3 milestones (in sync with the first 3 Galileo milestones) and a release date of December 19<sup>th</sup>. All milestone dates were met and the planned release is still scheduled for December 19<sup>th</sup>, 2008. Some enhancements that were originally considered have been deferred in an effort to meet the general milestone goals.

## Planned Maintenance

There will only be (if necessary) 1 planned maintenance release for the 2.1 branch, targeted for the Feb-March, '09 timeframe. The expected upgrade path for adopters and consumers will be to adopt the 2.2 release, which is planned for the end of June, '09.

As always, other maintenance would be considered, especially if resources are contributed to the effort.

## Communities

- Contributors (from committers to prolific bug filers)
  - Oracle
  - SAP
  - IBM
  - JBoss
  - Fujitsu
  - Individuals and others
- Commercial adopters
  - Oracle
  - IBM
  - SAP
  - JBoss
  - Genuitec
- Users
  - Seen on the newsgroup, mailing lists, and bugzilla
  - We have a lively bug database with enhancement requests and bugs filed by end users
  - Over 80K downloads of our initial 0.5 release (before we were bundled with WTP), which gives a (historical) flavor of the interest level.
- Other interaction
  - Dali committers are active in various cross project and cross member groups, including the Eclipse Planning Council, UI Working Group, and WTP PMC.
  - We also participate in numerous conferences, including EclipseCon, EclipseWorld, JavaOne, and JavaPolis, usually with very good attendance.

- Dali has been presented in Eclipse DemoCamps in 2007 and scheduled for 2008.

## Eclipse Dependencies

The Dali 2.1 release is built and tested against the WTP 3.0.x maintenance stream, and will specifically ship with a requirement of WTP 3.0.3. WTP 3.0.3 is built and tested against its prerequisites in the Ganymede maintenance stream, specifically SR1.

## IP Issues

I verify that:

- the about files and use licenses are in place as per the [Guidelines to Legal Documentation](#)
- all contributions (code, documentation, images, etc) have been committed by individuals who are either Members of the Foundation, or have signed the appropriate Committer Agreement. In either case, these are individuals who have signed, and are abiding by, the Eclipse IP Policy.
- all significant contributions have been reviewed by the Foundation's legal staff.
  - See Appendix 1
- all non-Committer code contributions, including third-party libraries, have been documented in the release and reviewed by the Foundation's legal staff.
  - See Appendix 1
- all Contribution Questionnaires have been completed
- the "provider" field of each feature is set to "Eclipse.org"
- the "copyright" field of each feature is set to the copyright owner.
- that any third-party logos or trademarks included in the distribution (icons, help file logos, etc) have been licensed under the EPL.
- that any fonts or similar third-party images included in the distribution (e.g. in PDF or EPS files) have been licensed under the EPL.

The Dali IP Log has been reviewed and approved by Eclipse Legal.

[http://www.eclipse.org/projects/ip\\_log.php?projectid=webtools.dali](http://www.eclipse.org/projects/ip_log.php?projectid=webtools.dali)

## Appendix 1

### IP Log for webtools.dali

#### Third-Party Code

CQ	Third-Party Code	License	Use
<a href="#">1889</a>	JPA (Javax Persistence Jar) Version: 1.0 (PB CQ1616)	Common Development and Distribution License	unmodified binary
<a href="#">2216</a>	New Entity Wizard	Eclipse Public License	
<a href="#">2763</a>	velocity-1.5.jar Version: 1.5 (PB CQ1977)	Apache License, 2.0	unmodified binary
<a href="#">2778</a>	Dali initial code contribution	Eclipse Public License	

#### Pre-Req Dependencies

CQ	Third-Party Code	License	Dependencies
<a href="#">2775</a>	Java Persistence Frameworks (Works With)	See CQ for detailed list of packages / licenses	works with

#### Committers

Past and Present Active	
Name	Organization
Max Rydahl Andersen	Jboss
Christian Ernst	Versant
Paul Fullbright	Oracle
Neil Hauge	Oracle
Markus Kuppe	Versant
Tran Le	Oracle
Dirk Le Roux	Versant
Karen Moore	Oracle

Rick Sapir	Oracle	
Shaun Smith	Oracle	
Brian Vosburgh	Oracle	

## Contributors and Their Contributions

Bug	Size	Description
John Bassett (oracle.com)		
<a href="#">232870</a>	686.4K	Documentation updates for Dali 2.0 JAR file cotaining JPA help.
Dimitar Dimitrov (sap.com)		
<a href="#">215807</a>	1.1K	JPA Project action should appear in the New menu the create JPA Project action is introduced to New... group
<a href="#">216450</a>	140.0K	Create new JPA Entity Wizard changed hashCode() method
<a href="#">216755</a>	999	Warning that default package is discouraged doesn't dissappear handle method is overridden in order to process package change
<a href="#">228222</a>	3.5K	warnings for .JETEmitters source files change model API and templates to return Generic collection
<a href="#">230414</a>	1.0K	JPA Entity wizard exception canceling Add Entity Fields dialog return if the pressed button is Cancel
<a href="#">239409</a>	1.1K	JPA Entity wizard second page should show the fully qualified name of the attribute type the type of added field is with fully qualified name in the table
Pascal Filion (oracle.com)		
<a href="#">127337</a>	57.9K	Support for sequence and table generators at the Class level Added generators support to entity mappings and fixed issues at the same time for queries
<a href="#">128979</a>	135.5K	Context needed on the Persistence Properties View Fixed two bugs + changes contained in previous patch
<a href="#">130580</a>	135.2K	Add persistence.xml editing support First pass to add support for editing a persistence unit
<a href="#">130580</a>	28.8K	Add persistence.xml editing support Bug fixes
<a href="#">130580</a>	44.9K	Add persistence.xml editing support Fixed minor bugs
<a href="#">137799</a>	9.6K	Add support for IdClass



		Added UI support
<a href="#">186439</a>	71.9K	Add UI support for NamedQuery Merge the panes and made the property pane switches based on the query type
<a href="#">186439</a>	4.2K	Add UI support for NamedQuery Added query support to entity mappings
<a href="#">191720</a>	28.4K	Unable to create JPA Project without a database connection when at least one available Added to the connection combo
<a href="#">198982</a>	114.8K	UI support for additional table and column settings Added the missing settings and fixed several bugs in the dialogs
<a href="#">202518</a>	2.9K	JPA Details view shouldn't be gray when selecting unmapped class Fixed for pane not being white
<a href="#">213467</a>	187.6K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	138.2K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	73.7K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	76.1K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	87.7K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	54.2K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	632.6K	Refactor 1.0 UI to work with 2.0 context model First pass at removing EMF
<a href="#">213467</a>	338.6K	Refactor 1.0 UI to work with 2.0 context model Latest changes made to the UI widgets
<a href="#">213467</a>	132.0K	Refactor 1.0 UI to work with 2.0 context model Regenerated patch, the previous one is corrupted
<a href="#">213467</a>	301.9K	Refactor 1.0 UI to work with 2.0 context model Re-created the previous patch
<a href="#">213467</a>	351.1K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	328.0K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	260.5K	Refactor 1.0 UI to work with 2.0 context model

		More UI changes
<a href="#">213467</a>	777.4K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	50.4K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	140.5K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	29.0K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	32.9K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	84.9K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	69.6K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	96.2K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	34.6K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	105.6K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">213467</a>	33.1K	Refactor 1.0 UI to work with 2.0 context model More UI changes
<a href="#">220801</a>	24.1K	Metadata Complete should be a tristate checkbox Change the combo into a tri-state check box
<a href="#">220802</a>	6.2K	tables in the JPA Details view need to have the flat form look Fix for flat-style table
<a href="#">220966</a>	22.0K	Java Column Table selection in UI does not update list of columns for new table Fix bug
<a href="#">222110</a>	10.2K	mappedBy combo box not updated on target entity changes Fixed bug
<a href="#">222241</a>	956	target entity combo default does not update when attribute changes Fixed 2nd part of the bug description
<a href="#">222792</a>	18.9K	unable to do text edits of schema and catalog in the orm.xml Added fix for PersistenceUnitMetadataComposite
<a href="#">222980</a>	1.3K	PersistenceEditor should use IFileEditorInput instead of FileEditorInput Oops that was created by the wizard

<a href="#">223837</a>	24.4K	additional settings for 'discriminator column' Added missing widgets
<a href="#">225428</a>	4.6K	Combo does not render the default value when changing a setting to a default value Fix issue by setting the default value and selecting it
<a href="#">225639</a>	848	tab for persistence.xml files should display file name, not Persistence XML Editor Fixed editor's title
<a href="#">225640</a>	5.9K	enter first class into persistence.xml and the icon is rendered too large Changed to use a warning icon coming from JptUiPlugin
<a href="#">225640</a>	338	enter first class into persistence.xml and the icon is rendered too large The warning icon
<a href="#">225660</a>	2.7K	persistence.xml editor scroll bar issues Managed to find the right layout to use
<a href="#">225681</a>	34.1K	persistence.xml editor needs persistence unit name widget and properties table Added missing widgets
<a href="#">225682</a>	7.3K	multiple classes listed in the persistence.xml causes layout issues Fixed the AddRemoveListPane's layout and adjusted the height of the mapped classes list
<a href="#">227895</a>	5.1K	orm.xml secondary tables UI enabled state is incorrect Fixed enablement
<a href="#">228556</a>	707	NewNameDialog ok button enabled before name entered Fixed: disable OK button when creating dialog
<a href="#">228557</a>	3.5K	Add Secondary Table action opens a dialog titled 'Edit Secondary Table' Fixed title
<a href="#">229511</a>	4.7K	EclipseLink persistence.xml DDL Gen Location Browse button does not work Patch submitted by myself
<a href="#">230427</a>	1.4K	When changing the attribute mapping type in the Details view, the "change mapping link" loses it's highlight Re-submitted the patch without the println
Shota Ito (aa.jp.fujitsu.com)		
<a href="#">245682</a>	1.1K	Line-feed not needed to persistence.xml enters when Class Synchronizer is executed. Bug patch
John Pitman (ca.ibm.com)		
<a href="#">246948</a>	1.2K	[hotbug] Authentication failure due to duplicate connection profiles in DTTPConnectionProfileRepository

		Proposed patch
Kaloyan Raev (sap.com)		
<a href="#">239581</a>	1.4K	Fix Class name validation in Entity wizard patch
<a href="#">243150</a>	1.5K	Add JPA project and Entity wizard actions to JEE perspective toolbar patch
<a href="#">250619</a>	34.0K	[hotbug] Make .JETEmitter project optional patch v2
rick.sapir@oracle.com		
<a href="#">135070</a>	511.2K	The Dali project needs end user documentation and context based help Dali online documentation and help jar for 0.5.0 Release