# eclipse

#### EclipseLink 2.5.0 Release Review Proposed Release Date: April 22<sup>nd</sup> 2013

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May 25, 2012

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# Project Overview



- Complete persistence framework that is both comprehensive and universal
- Supported in the following containers:
  - OSGi, Java EE, Java SE, Spring Framework
  - Equinox specific fragments included for extended usage
- Read and write objects to virtually any type of data source
  - Including Relational Databases, NoSQL, XML and EIS systems
- Standards Based
  - Java Persistence API (JPA): relational databases
  - Java Architecture fore XML Binding (JAXB): XML
  - Java EE Connector Architecture (JCA): EIS
  - Service Data Objects (SDO)

## Project Overview (cont'd)

- Milestones
  - Creation Review May 30<sup>th</sup>, 2007
  - Initial Source Drop Aug 23<sup>rd</sup>, 2007
  - Major releases
    - 1.0 release July 9<sup>th</sup> 2008
    - 1.1 Release: March 11<sup>th</sup> 2009
    - 1.2.0 Release: Oct 23<sup>rd</sup> 2009
    - 2.0.0 Release: Dec 10th 2009
    - 2.1.0 Release: June 23<sup>rd</sup> 2010 Helios release train
    - 2.2.0 Release Feb 22 2011
    - 2.3.0 Release: June 22 2011 Indigo
    - 2.4.0 Release: June 22 2012
  - Monthly milestone builds on multiple streams



## EclipseLink 2.5.0 New Features



 $\Delta$ 

- Performance
  - Several performance improvements on all components
- JPA
  - JPA 2.1 support
    - RI for JPA 2.1
  - Database Platforms
    - HANAPlatform
    - PervasivePlatform

# EclipseLink 2.4.0 New Features (cont'd)



- MOXy
  - MOXy NamedObjectGraphs Allow a subset of attributes to be marshaled and unmarshaled
  - MOXy bundle restructuring Separate MOXy bundles from other EclipseLink components to reduce install size and simplify bundling with other 3rd party products.

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#### Project Health

- Active Code Base
  - Average 3000 file commits / month
- Testing
  - JUnit test cases for regression testing
  - Continuous build
    - Run every half hour (if code changes)
    - Compile and Smoke tests
  - Over 60,000 tests run nightly on Eclipse Foundation
- Additional Testing
  - Additional configurations run regularly on Oracle servers
    - Several different DBs, Several Different App Servers, Different VMs
    - CTS testing



# Project Health (cont'd)



- Documentation
  - Full Technical Docs on Wiki
    - http://wiki.eclipse.org/EclipseLink/UserGuide
  - Javadocs hosted online
    - http://www.eclipse.org/eclipselink/api/latest/index.html
  - Other documentation on wiki
    - Features index
    - FAQ
    - Examples http://wiki.eclipse.org/EclipseLink/Examples
      - Over 25 How to examples
- Bugs
  - Over 200 bug/enhancements Closed in 2.4.0

# **Open Source**



- Permeable
  - Issue discussions
    - mailing lists (eclipselink-dev and eclipselink-users)
    - Eclipse Bugzilla
  - Weekly Open Project Status Meeting
  - All code available through anonymous SVN
  - Architecture described on project Wiki along with feature design docs
- Receptive
  - Bug fixes and features implemented in a timely manner
  - Newsgroup and mailing list questions fielded promptly

# Community



- Developers
  - 30 committers
  - Several Code contributions from individual contributors
    - HANAPlatform, PervasivePlatform
- Users
  - Growing community of enterprise development orgs
    - Oracle/Sun
    - SAP
    - TmaxSoft
    - SpringSource
- Distributions
  - GlassFish, Spring Framework, JOnAS, and Oracle (TopLink & WebLogic)

# Community (cont'd)



- EclipseLink Continues to upgrade on line documentation and website to make adoption easy
  - Updated Wiki Pages
  - Javadocs available online and updated with every milestone
  - Wiki used to facilitate open communication
- Many EclipseLink presentations have been given at conferences and workshops.
  - EclipseWorld, EclipseCon, JavaOne, SpringOne, Oracle OpenWorld, JAX, ....
  - http://wiki.eclipse.org/EclipseLink/Presentations
- Many press releases have been written, and dozens of articles and blog entries have mentioned EclipseLink

#### API's



- Supported Spec APIs
  - Implements:
    - JPA 2.1, JPA 2.0, JPA 1.0, JAXB 2.0, JAXB 2.1, SDO 2.1, SDO 2.1.1
      - JPA 2.1 Reference Implementation (JSR 338)
      - JPA 2.0 Reference Implementation (JSR 317)
      - SDO 2.1.1 Reference Implementation (JSR 235)
  - Integrates with: JDBC, JCA, JAXP, JTA
- Native API
  - Extensive API for Persisting Java Objects
  - Migration tools and strategy from earlier Oracle TopLink releases

#### Architectural Features



- Basic Architecture built on Product over 14 years of commercial usage
  - Stable and Performant
- Adaptable architecture easily add/modify features in EclipseLink
  - Database Platform add/modify support for specific database
  - Server Platform add/modify support for specific Application Server
  - Events triggered on data store access
  - Policies most features implemented with pluggable policies
    - Optimistic Locking
    - Caching
    - Object Instantiation
    - and many more



- IP Log
  - http://www.eclipse.org/projects/ip\_log.php?projectid=rt.eclipselink
  - All IP (except 3<sup>rd</sup> Party jars) dual licensed under EPL and EDL
  - All 3<sup>rd</sup> party dependencies are approved
- Community Contributions
  - Approx 75 Contributions listed in IPLog
- Project Plan
  - http://www.eclipse.org/projects/projectplan.php?projectid=rt.eclipselink

# End Of Life Strategy



- 2.5.0 Release
  - No new features are being deprecated

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#### Schedule



- EclipseLink 2.5.0
  - Start date: Feb 2012
  - Currently planned for: April 22<sup>nd</sup> 2013
  - http://wiki.eclipse.org/EclipseLink/Development/2.5

#### Feedback



• Newsgroup:

http://www.eclipse.org/newsportal/thread.php?gro
up=eclipse.rt.eclipselink

- Mailing lists:
  - eclipselink-dev@eclipse.org
    - Release Review communication channel
  - eclipselink-users@eclipse.org
- Eclipse Bugzilla
  - RT
  - Product: EclipseLink