



Lyo OSLC4J, OAuth Library, and OSLC Test Suite 2.1.0 Release Review

Samuel Padgett (spadgett@us.ibm.com)
Eclipse Lyo Project Lead

Steve Speicher (sspeiche@us.ibm.com)
Eclipse Lyo Project Lead

About



The Eclipse Lyo project is focused on providing an SDK to enable adoption of OSLC specifications. OSLC (Open Services for Lifecycle Collaboration: <http://open-services.net>) is an open community dedicated to reducing barriers for lifecycle tool integration. The community authors specifications for exposing lifecycle artifacts through uniform (REST) interfaces and relying on Internet and Linked Data standards.

Eclipse Lyo project is a companion to the continuing specification efforts of the OSLC community. Its main purpose is to expand adoption of OSLC specifications and to enable the Eclipse community to easily build OSLC compliant tools.

The project was approved by the PMC in July 2011 and initial contributions were committed in September 2011.

The project had a 1.0 release and graduated from incubator status on 10 October 2012. The project had a 1.1 release on 7 February 2013 and a 2.0 release 2 October 2013.

Introduction



Lyo is a Technology sub-project: <http://eclipse.org/lyo>

This is the fourth release of Lyo components as an Eclipse project. The goals are to continue to build an Eclipse community around Lyo by providing enhancements to the Java SDK for OSLC (OSLC4J), an update to the OSLC assessment test suite and code samples of OSLC provider and consumer implementations.

2.1.0 is an incremental release with several enhancements:

1. A sample OSLC Automation provider for Hudson written as a plugin
2. OSLC test suites driven by resource shapes, greatly reducing the amount of configuration
3. New user interfaces for change management, quality management, and automation OSLC reference implementations



Early Adoption of 2.1.0

2.1.0 is an update to 2.0 with some additional enhancements and bug fixes. It has not undergone a formal milestone progression, but has been adopted by several Lyo consumers prior to proposing a release.

- Early adoption of 2.1.0
 - Snapshot/interim releases are being used to develop real OSLC integrations.
 - New test suite changes have been adopted by Lyo consumers



Committer Diversity

The following individual committers are actively involved:

- Samuel Padgett (IBM)
- Michael Fiedler (IBM)
- Steve Speicher (IBM)
- Paul McMahan (IBM)

Additional active significant contributors

- Jad El-khoury (KTH)

<http://www.eclipse.org/projects/project.php?id=technology.lyo>

Main Features to be released as 2.1.0



- OSLC4J – Java SDK for OSLC implementations (1.0, 1.1, 2.0.0)
 - Annotations to add OSLC attributes and meta-data to Java objects representing OSLC resources
 - Serialize/deserialize Java objects as OSLC resources
- Tracked Resource Set (TRS) SDK and reference implementation (2.0.0)
 - SDK and reference implementation for building OSLC Tracked Resource Set implementations
- OSLC assessment Test Suite (1.0, 1.1, 2.0.0)
 - Tests cover OSLC Core spec + Change Management, Quality Management, Asset Management, Requirements Management, and Automation specifications
 - (New) Coverage for TRS 2.0 specification in 2.0.0
- OAuth provider library (1.1, 2.0.0)
 - Core, persistence and webapp libraries to ease OAuth provider implementation

API Maturity



- OSLC4J API
 - No breakage of previous APIs – continued stability
 - Early 2.1.0 adopters have developed real integrations – intent is to not break backward compatibility
 - Future additions to API will be designed to be non-breaking
 - Currently, no deprecated API elements

Additional Lyo project content



- Additional Lyo components NOT being formally released in 2.1.0 – under consideration for the future releases
 - OSLC4J Code Generator from EMF Models
 - SDKs for other languages (Perl)
- Lyo also contains code samples which are for developers to use as aids and examples for their own implementations. Not formally released.
 - Reference implementations for specifications, including W3C LDP
 - Sample OSLC integrations for Bugzilla, Excel, Sharepoint, and Hudson
 - Client library sample implementations
- Previously proposed .NET content has moved to Microsoft Codeplex due to IP challenges with 3rd party dependencies.



Non-code aspects

OSLC4J and TestSuite documentation:

<http://wiki.eclipse.org/Lyo/LyoOSLC4J>

<http://wiki.eclipse.org/Lyo/BuildTestSuite>

TRS SDK and workshop:

<http://wiki.eclipse.org/Lyo/TRSSDK>

<http://wiki.eclipse.org/Lyo/TRSWorkshop>

LDP reference implementation:

<http://wiki.eclipse.org/Lyo/BuildLDPSample>

Contributor Guide:

<http://wiki.eclipse.org/Lyo/ContributorsGettingStarted>

Mailing List:

<https://dev.eclipse.org/mailman/listinfo/lyo-dev>

Forum:

<http://www.eclipse.org/forums/eclipse.lyo>

Continuous Integration:

Hudson-based builds

Bugzilla



Bugzilla Statistics (on 2014-02-24):

Open: 12 bugs, 74 enhancement requests

- No major, critical, or blocker bugs open

Fixed since 1.1 : 60 bugs, 25 enhancement requests

Community



- Eclipse DemoCamp : Durham, NC, November 2011
- EclipseCon Europe: Ludwigsburg, Germany, November 2011
- EmbeddedWorld: Nuremberg, Germany, February 2012
- EclipseCon: Reston, VA March 2012 – Boston, MA, March 2013
- IBM Rational Innovate: Orlando, FL, June 2012 – Orlando, FL, June 2013 – Orlando, FL, June 2014
- EclipseCon France: Toulouse, France, June 2013
- JavaOne: San Francisco, CA, October 2013
- OSLC Community Site: <http://open-services.net>
- CESAR Project: <http://www.cesarproject.eu/> (Lyo adopter)

IP Log for Lyo



http://www.eclipse.org/projects/ip_log.php?projectid=technology.lyo



Proposed Schedule

- 1.0 – October 2012
- 1.1 – February 2013
- 2.0 – October 2013
- 2.1.0 – March 2014
 - Hudson OSLC Automation Sample
 - Test suite improvements
 - New UIs for reference implementations
- 3.0 – June 2014
 - W3C Linked Data Platform reference implementation, SDK, and test suite
 - OSLC 3.0 reference implementations, SDK, and test suite

Project Plan



<http://www.eclipse.org/projects/project-plan.php?projectid=technology.lyo>

<http://wiki.eclipse.org/Lyo/ProjectPlans>

Themes for future releases:

- W3C Linked Data Platform reference implementation, SDK, and test suite
- OSLC 3.0 support
- Test suite improvements (additional domain coverage, improved depth of test cases, improved reporting)
- Process improvements (continuous integration)
- Improved documentation
- Usability
- Building a community