

# Refactoring eclipse/Lyo

## Motivation

eclipse/Lyo is currently a collection of quite different things:

1. OSLC4J SDK (client, core)
2. RIOs of OSLC domain specifications (three different ones)
3. LDP - an implementation that is not part of OSLC4J or used in any of the current RIOs (including `oslc.v3.sample`)
4. Samples
  1. `org.eclipse.lyo.client` - contains the OSLC4J client and its samples
  2. `org.eclipse.lyo.docs` - contains old Lab examples of OSLC before OSLC4J, and the `org.eclipse.lyo.oslc4j.bugzilla` example which is used for the tutorial and as a template for creating adapters using OSLC4J
  3. `org.eclipse.lyo.server` - these are old, sample OSLC servers.
5. testsuite - this is a testsuite for the RIO server implementations
6. tools - the OSLC4J code generator

There is a high eclipse overhead for contribution to these projects. It is not clear they all benefit from eclipse governance. There is also a large number of eclipse projects associated with Lyo and its git repositories that make maintaining any specific deliverable hard to separate out from all the others. The eclipse process, Lyo git repository organization, and a large number of loosely organized eclipse projects may be a barrier to eclipse/Lyo contribution.

Given existing dependencies on eclipse/Lyo OSLC4J SDK, it makes sense for that part of Lyo to continue under eclipse governance. However, the LDP implementation, sample code, and test suite are not deliverables to any API or SDK that anyone depends upon, and so perhaps do not need to be governed by eclipse.

I propose we:

1. Refactor these repositories, separating the different components into smaller, more cohesive repositories.
2. Move all the repositories to the OSLC GitHub organization except OSLC4J which remains under [eclipse.org](https://eclipse.org) governance

Specifically, reorganize the Lyo git repositories and eclipse projects as described in the following sections:

## OSLC4J SDK

The eclipse/Lyo OSLC4J SDK used to facilitate the creation of OSLC 2.0 client and server applications.

eclipse/Lyo project on [eclipse.org](https://eclipse.org):

• [Client](#) - Client SDK, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.client.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.client.git)

- org.eclipse.lyo.client.java

• [Core](#) - Common and shared core, [http://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.core.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.core.git)

- org.eclipse.lyo.core.query
- org.eclipse.lyo.core.trs
- org.eclipse.lyo.core.utils
- org.eclipse.lyo.oslc4j.adaptormodel
- org.eclipse.lyo.oslc4j.build
- org.eclipse.lyo.oslc4j.core
- org.eclipse.lyo.oslc4j.provider.jena
- org.eclipse.lyo.oslc4j.provider.json4j
- org.eclipse.lyo.oslc4j.wink

OSLC/OSLC4J-Tests

- org.eclipse.lyo.oslc4j.test
- org.eclipse.lyo.oslc4j.test.build
- org.eclipse.lyo.oslc4j.test.common
- org.eclipse.lyo.oslc4j.test.test

## eclipse/Lyo RIO: Reference Implementations for OSLC

There are currently three different RIOs for OSLC, one built on REST, another on OSLC4J, and a third built OSLC Core 3.0:

1. OLD RIO codes built before OSLC4J, may be OSLC 1.0 too. Last commits were close to 3 years ago

- org.eclipse.rio.am
- org.eclipse.rio.cm
- org.eclipse.rio.core
- org.eclipse.rio.rm
- org.eclipse.rio.qm

2. oslc4j.rio - newer RIO based on OSLC4J, built with org.eclipse.lyo.oslc4j.rio.build

- org.eclipse.lyo.oslc4j.automation</module>
- org.eclipse.lyo.oslc4j.automation.common
- org.eclipse.lyo.oslc4j.automation.test
- org.eclipse.lyo.oslc4j.changemanagement
- org.eclipse.lyo.oslc4j.changemanagement.common
- org.eclipse.lyo.oslc4j.changemanagement.test
- org.eclipse.lyo.oslc4j.qualitymanagement
- org.eclipse.lyo.oslc4j.qualitymanagement.common
- org.eclipse.lyo.oslc4j.qualitymanagement.test

3. OSLCv3 RIO - this is a sample CM 3.0 server that is not built on OSLC4J or org.eclipse.lyo.ldp.build. It is incomplete and out of date with OSLC Core and CM 3.0

- oslc-v3-rio

These are currently all in the org.eclipse.lyo.rio repository. This repository should be refactored into the different implementations, they are not particularly related. The new repositories should be hosted in the GitHub OSLC organization in order to eliminate the eclipse process overhead for things that are not delivered as part of the OSLC4J SDK

#### OSLC/REST-RIOs

- org.eclipse.rio.am
- org.eclipse.rio.cm
- org.eclipse.rio.core
- org.eclipse.rio.rm
- org.eclipse.rio.qm
- org.eclipse.lyo.rio.template-webapp
- org.eclipse.lyo.rio.trs
- org.eclipse.lyo.rio.trs.tests

#### OSLC/OSLC4J-RIOs

- org.eclipse.lyo.oslc4j.automation
- org.eclipse.lyo.oslc4j.automation.common
- org.eclipse.lyo.oslc4j.automation.test
- org.eclipse.lyo.oslc4j.changemanagement
- org.eclipse.lyo.oslc4j.changemanagement.common
- org.eclipse.lyo.oslc4j.changemanagement.test
- org.eclipse.lyo.oslc4j.qualitymanagement
- org.eclipse.lyo.oslc4j.qualitymanagement.common
- org.eclipse.lyo.oslc4j.qualitymanagement.test

OSLC/OSLCv3-RIOs

- oslc-v3-rio

## OSLC RIO Testsuite

These are eclipse projects used to test some of the RIOs.

OSLC/OSLC-RIO-Testsuite

- org.eclipse.lyo.testsuite.build
- org.eclipse.lyo.testsuite.server
- org.eclipse.lyo.testsuite.trs

## OSLC Samples

Various OSLC sample client and server applications using different implementation architectures. The OSLC4J client and Bugzilla samples are the the most important. The others may be quite out of date, but could be useful.

OSLC/OSLC4J-Client-Samples

- org.eclipse.lyo.client.java.oauth.sample
- org.eclipse.lyo.client.java.sample
- org.eclipse.lyo.client.perl

OSLC/OSLC4J-Bugzilla

- ninacrm
- org.eclipse.lyo.oslc4j.bugzilla
- org.eclipse.lyo.oslc4j.bugzilla.trs

OSLC/OSLC4J-Misc-Samples

- org.eclipse.lyo.oslc4j.registry
- org.eclipse.lyo.oslc4j.stockquote
- org.eclipse.lyo.oslc4j.stockquote.common
- org.eclipse.lyo.oslc4j.stockquote.test

OSLC/OSLC-REST-Labs

- Lab1
- Lab2
- Lab3
- Lab4
- Lab5
- Lab6

- LabMiscellaneous
- org.eclipse.lyo.examplechecker
- org.eclipse.lyo.model
- org.eclipse.lyo.resourcetable
- org.eclipse.lyo.tools.common

#### OSLC/OSLC-Server-Samples

- org.eclipse.lyo.samples.bugzilla
- org.eclipse.lyo.samples.excel
- org.eclipse.lyo.samples.hudson
- org.eclipse.lyo.samples.sharepoint
- org.eclipse.lyo.server.oauth.consumerstore
- org.eclipse.lyo.server.oauth.core
- org.eclipse.lyo.server.oauth.webapp
- org.eclipse.lyo.server.oauth.webapp.sample
- org.eclipse.lyo.server.releng

## OSLC4J Code Generator, Tools

OSLC/OSLC4J-Toolchain - or leave it in eclipse/Lyo [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.tools.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.tools.git) (up to Jad)

- org.eclipse.lyo.oslc4j.codegenerator
- org.eclipse.lyo.tools.adaptormodel.edit
- org.eclipse.lyo.tools.adaptormodel.editor
- org.eclipse.lyo.tools.adaptormodel.model
- org.eclipse.lyo.tools.adaptormodel.tests
- org.eclipse.lyo.tools.codegenerator.feature
- org.eclipse.lyo.tools.codegenerator.ui
- org.eclipse.lyo.tools.domainmodels
- org.eclipse.lyo.tools.toolchain.design
- org.eclipse.lyo.tools.toolchain.edit
- org.eclipse.lyo.tools.toolchain.editor
- org.eclipse.lyo.tools.toolchain.feature
- org.eclipse.lyo.tools.toolchain.model
- org.eclipse.lyo.tools.toolchain.model.tests
- org.eclipse.lyo.tools.updatesite

## Linked Data Platform (LDP)

This is a reference implementation of LDP in Java, used to support the W3C standardization process. It is not currently used in any other eclipse/Lyo OSLC component. oslc-v3-rio is built on a smaller LDP foundation that implements the

minimal LDP capabilities required by OSLC Core and CM 3.0.

#### OSLC/LDP4J

- org.eclipse.lyo.ldap.build
- org.eclipse.lyo.ldap.sample.loaders
- org.eclipse.lyo.ldap.server
- org.eclipse.lyo.ldap.server.jena
- org.eclipse.lyo.ldap.webapp

## Existing Eclipse Lyo Components in Bugzilla, Git Repositories and Eclipse projects

### ● Client - Client SDK, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.client.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.client.git)

- org.eclipse.lyo.client.java
- org.eclipse.lyo.client.java.oauth.sample
- org.eclipse.lyo.client.java.sample
- org.eclipse.lyo.client.perl

### ● Core - Common and shared core, <http://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.core.git>

- org.eclipse.lyo.core.query
- org.eclipse.lyo.core.trs
- org.eclipse.lyo.core.utils
- org.eclipse.lyo.oslc4j.adaptormodel
- org.eclipse.lyo.oslc4j.build
- org.eclipse.lyo.oslc4j.codegenerator
- org.eclipse.lyo.oslc4j.core
- org.eclipse.lyo.oslc4j.provider.jena
- org.eclipse.lyo.oslc4j.provider.json4j
- org.eclipse.lyo.oslc4j.registry
- org.eclipse.lyo.oslc4j.stockquote
- org.eclipse.lyo.oslc4j.stockquote.common
- org.eclipse.lyo.oslc4j.stockquote.test
- org.eclipse.lyo.oslc4j.test
- org.eclipse.lyo.oslc4j.test.build
- org.eclipse.lyo.oslc4j.test.common
- org.eclipse.lyo.oslc4j.test.test
- org.eclipse.lyo.oslc4j.wink

### ● Dependencies - has the dependencies required to do a Lyo build with Hudson,

— [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.dependencies.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.dependencies.git)

- oslc4j

○ [ReleaseEngineering](#) - Track build and release engineering tasks that span all components

● [docs](#) - Documentation and sample code, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.docs.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.docs.git)

- Lab1
- Lab2
- Lab3
- Lab4
- Lab5
- Lab6
- LabMiscellaneous
- ninacrm
- org.eclipse.lyo.examplechecker
- org.eclipse.lyo.model
- org.eclipse.lyo.oslc4j.bugzilla
- org.eclipse.lyo.oslc4j.bugzilla.trs
- org.eclipse.lyo.resourcetable
- org.eclipse.lyo.tools.common

● [LDP](#) - W3C Linked Data Platform implementation, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.ldap.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.ldap.git)

- org.eclipse.lyo.ldap.build
- org.eclipse.lyo.ldap.sample.loaders
- org.eclipse.lyo.ldap.server
- org.eclipse.lyo.ldap.server.jena
- org.eclipse.lyo.ldap.webapp

● [RIO](#) - OSLC 2.0 and 3.0 reference implementations, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.rio.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.rio.git) There are three versions of the RIO:

1. org.eclipse.lyo.rio.cm (etc.) the old minimal implementation
  2. org.eclipse.lyo.oslc4j.changemanagement - newer OSLC 2.0 implementation built OSLC4J client and server APIs
  3. oslc.v3.sample - the new sample OSLC CM 3.0 implementation on LDP.
- org.eclipse.lyo.oslc.v3.sample
  - org.eclipse.lyo.oslc4j.automation
  - org.eclipse.lyo.oslc4j.automation.common
  - org.eclipse.lyo.oslc4j.automation.test
  - org.eclipse.lyo.oslc4j.changemanagement
  - org.eclipse.lyo.oslc4j.changemanagement.common

- org.eclipse.lyo.oslc4j.changemanagement.test
- org.eclipse.lyo.oslc4j.qualitymanagement
- org.eclipse.lyo.oslc4j.qualitymanagement.common
- org.eclipse.lyo.oslc4j.qualitymanagement.test
- org.eclipse.lyo.oslc4j.rio.build
- org.eclipse.lyo.rio.am
- org.eclipse.lyo.rio.cm
- org.eclipse.lyo.rio.core
- org.eclipse.lyo.rio.rm
- org.eclipse.lyo.rio.template-webapp
- org.eclipse.lyo.rio.trs
- org.eclipse.lyo.rio.trs.tests

Server - Server SDK, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.server.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.server.git)

- org.eclipse.lyo.samples.bugzilla
- org.eclipse.lyo.samples.excel
- org.eclipse.lyo.samples.hudson
- org.eclipse.lyo.samples.sharepoint
- org.eclipse.lyo.server.oauth.consumerstore
- org.eclipse.lyo.server.oauth.core
- org.eclipse.lyo.server.oauth.webapp
- org.eclipse.lyo.server.oauth.webapp.sample
- org.eclipse.lyo.server.releng

TestSuite - OSLC Test suites, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.testsuite.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.testsuite.git), see [Building and running the OSLC Test Suite](#)

- org.eclipse.lyo.testsuite.build
- org.eclipse.lyo.testsuite.server
- org.eclipse.lyo.testsuite.trs

Tools - code generator tools and utilities, [git://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.tools.git](https://git.eclipse.org/gitroot/lyo/org.eclipse.lyo.tools.git)

- org.eclipse.lyo.tools.adaptormodel.edit
- org.eclipse.lyo.tools.adaptormodel.editor
- org.eclipse.lyo.tools.adaptormodel.model
- org.eclipse.lyo.tools.adaptormodel.tests
- org.eclipse.lyo.tools.codegenerator.feature
- org.eclipse.lyo.tools.codegenerator.ui
- org.eclipse.lyo.tools.domainmodels
- org.eclipse.lyo.tools.toolchain.design
- org.eclipse.lyo.tools.toolchain.edit
- org.eclipse.lyo.tools.toolchain.editor



- org.eclipse.lyo.tools.toolchain.feature
- org.eclipse.lyo.tools.toolchain.model
- org.eclipse.lyo.tools.toolchain.model.tests
- org.eclipse.lyo.tools.update.site

## **Components of OSLC4J and the corresponding eclipse projects**

- oslc-java-client-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.client/  
org.eclipse.lyo.client.java
- oslc-query-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.core.query
- oslc-trs-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/org.eclipse.lyo.core.trs
- oslc4j-core-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.oslc4j.core
- oslc4j-jena-provider-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.oslc4j.provider.jena
- oslc4j-json4j-provider-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.oslc4j.provider.json4j
- oslc4j-utils-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.core.utils
- oslc4j-wink-3.0.0-SNAPSHOT.jar - org.eclipse.lyo.core/  
org.eclipse.lyo.oslc4j.wink