

A graphic element in the bottom-left corner consisting of overlapping yellow and orange geometric shapes: a large right-angled triangle, a smaller square, and a rectangle.

**OpenDaylight has Oomph!**  
and more about useful tooling for ODL developers

# \$ whoami

Michael [Vorburger.ch](http://Vorburger.ch)  
[@vorburger](https://twitter.com/vorburger)



OPENDAYLIGHT

This OpenDaylight SDK presentation is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).



WITH A FOREWORD BY GARY HAMEL

HARVARD BUSINESS REVIEW PRESS

What questions  
should I be  
asking myself?

1. Why?

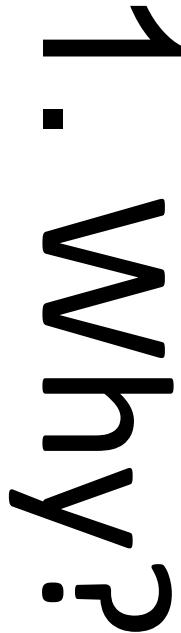
2. What?

3. How?

4. The Hot Wheels logo, featuring the word "HOT WHEELS" in a stylized, flame-like font with a red and yellow gradient.

5. The NET logo, which is a black hexagonal prism with the letters "NET" written vertically in red, yellow, and pink, and a green "X" on the side.

6. Q & A



GettingStarted: Ecl... × 

https://wiki.opendaylight.org/view/Eclipse\_Setup   Search      

- 1.1 Introduction
  - 1.1.1 Quick Start / Useful Tips
- 1.2 Installing Eclipse
  - 1.2.1 Automatically Avoiding Trailing Whitespace
  - 1.2.2 Automatically Using Spaces instead of Tabs
  - 1.2.3 Eclipse Maven Integration (m2e) version
- 1.3 Importing the Source Into Eclipse
- 1.4 Help - I still have Red X's! (i.e. Eclipse compile errors)
- 1.5 Debugging the Controller
  - 1.5.1 Attaching the Debugger to a Running ODL
  - 1.5.2 Debugging a Start Up Issue
- 1.6 Debugging Weird Errors
  - 1.6.1 Frequent gotchas
  - 1.6.2 Advantages
- 1.7 Alternative way without m2eclipse plugin - for CLI-fans
- 1.8 Import ordering
- 1.9 Integrating Eclipse with Gerrit and Git

## Help - I still have Red X's! (i.e. Eclipse compile errors)

*"Eclipse is no longer able to compile OpenDayLight. The reason is three maven plugins which are used by OpenDayLight but are not integrated into Eclipse: maven-plugin-plugin, karaf-maven-plugin and maven-antrun-plugin. This means you will always have Eclipse compile errors in the project (this could go up to 100000 errors).*

*You can use Eclipse for editing easily but to compile the project you need to open a terminal window and do the compilation (...)"*

Share Team Test  
Download Debug Setup  
Preferences IDE  
Git Checkstyle Eclipse  
Extensions FindBugs  
Gerrit Plugins Build  
M2E



And you just wanted to contribute  
your very first open source bug fix  
today, not get a black belt in IDE-  
ology!



2.  
What:

Eclipse Downloads

https://www.eclipse.org/downloads/

eclipse

Google Custom Search

GETTING STARTED MEMBERS PROJECTS MORE ▾

HOME / DOWNLOADS

» Packages | Developer Builds

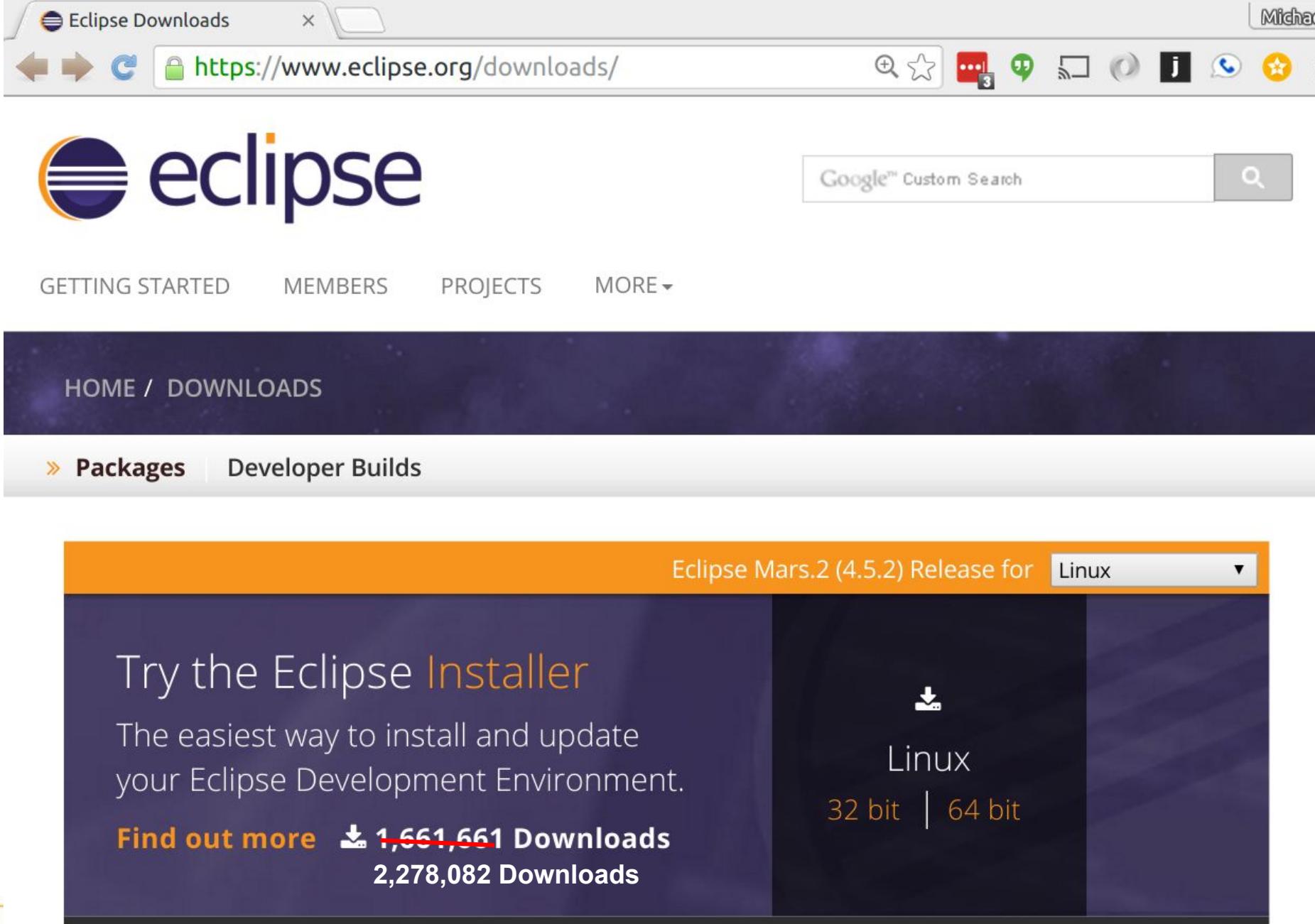
Eclipse Mars.2 (4.5.2) Release for Linux

Try the Eclipse Installer

The easiest way to install and update your Eclipse Development Environment.

[Find out more](#)  1,661,661 Downloads  
2,278,082 Downloads

Linux  
32 bit | 64 bit





eclipseinstaller by Oomph

type filter text

 **Eclipse IDE for Java Developers**  
The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven integration and WindowBuilder

 **Eclipse IDE for Java EE Developers**  
Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn, EGit and others.

 **Eclipse IDE for C/C++ Developers**  
An IDE for C/C++ developers with Mylyn integration.

 **Eclipse IDE for JavaScript and Web Developers**  
The essential tools for any JavaScript developer, including JavaScript language support, Git client, Mylyn and editors for JavaScript, HTML, CSS and XML.

 **Eclipse IDE for PHP Developers**  
The essential tools for any PHP developer, including PHP language support, Git client, Mylyn and editors for JavaScript, HTML, CSS and XML.

 **Eclipse IDE for Eclipse Committers**  
Package suited for development of Eclipse itself at Eclipse.org; based on the Eclipse Platform adding PDE, Git, Marketplace Client, source code and developer documentation.

 **Eclipse DSL Tools**  
The essential tools for Java and DSL developers, including a Java Xtend IDE, a DSL Framework (Xtext), a Git client, XML Editor, and Maven integration.

 **Eclipse IDE for Java and Report Developers**  
Java EE tools and BIRT reporting tool for Java developers to create Java EE and Web applications that also have reporting needs.

**PRODUCT CATALOGS...**

**ADVANCED MODE...**

**BUNDLE POOLS...** 

**ABOUT**

**EXIT**



Eclipse Importer

Projects  
Check the projects you want to provision, and for each choose its stream in the table column.

Oomph

type filter text

- ▶  Xtext
- ▶  Xpand
- ▶  XSD
- ▶  Github Projects
  - ▶  <User>
  - ▶  FXDiagram
  - ▶  Javamm
  - ▶  Jbase
  - ▶  m2e-code-quality
  - ▶  openHAB
  - ▶  TLA+
  - ▶  Xpect
  - ▶  Xsemantics
- ▶  OpenDaylight.org
  - ▶  aaa
  - ▶  alto
  - ▶  atrium
  - ▶  bgpcep
  - ▶  capwap
  - ▶  cardinal
  - ▶  centinel
  - ▶  controller
  - ▶  didm
  - ▶  dlux
  - ▶  docs
  - eclipse-setup

**OpenDaylight.org**

OpenDaylight is leading the transformation to Open Software Defined Networking (SDN). This catalog lists all projects at [opendaylight.org](http://.opendaylight.org) that provide automated Eclipse workspace setup support.

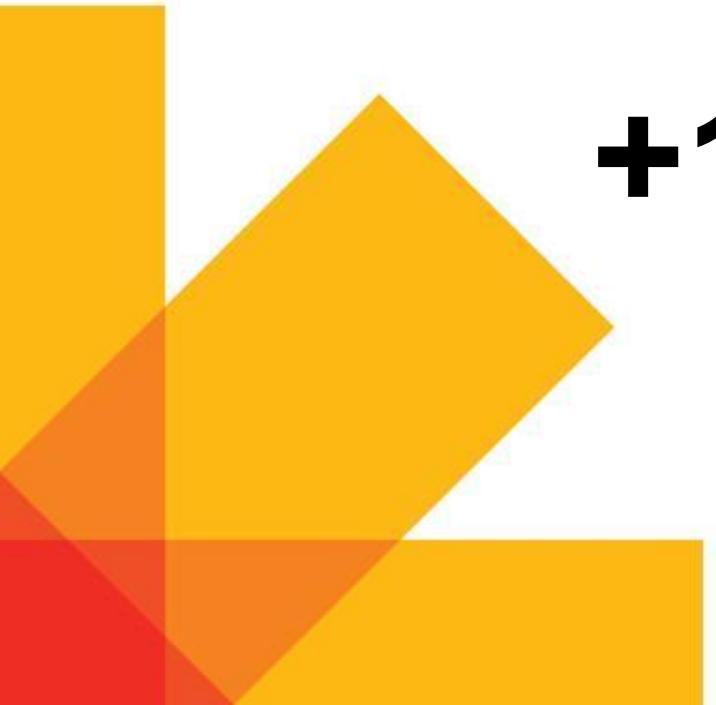
Catalog	Project	Stream
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> yangtools	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> yangide	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> mdsal	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> lispflowmapping	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> odlparent	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> eclipse-setup	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> netconf	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> unimgr	<input type="checkbox"/> master
<input type="checkbox"/> OpenDaylight.org	<input type="checkbox"/> ovldb	<input type="checkbox"/> master

< Back | Next > | Cancel | Finish



You **Tube**™

+10'





**redhat**

OpenDaylight has Oomph, and you can set up an Eclipse-based development workspace for OpenDaylight projects by:

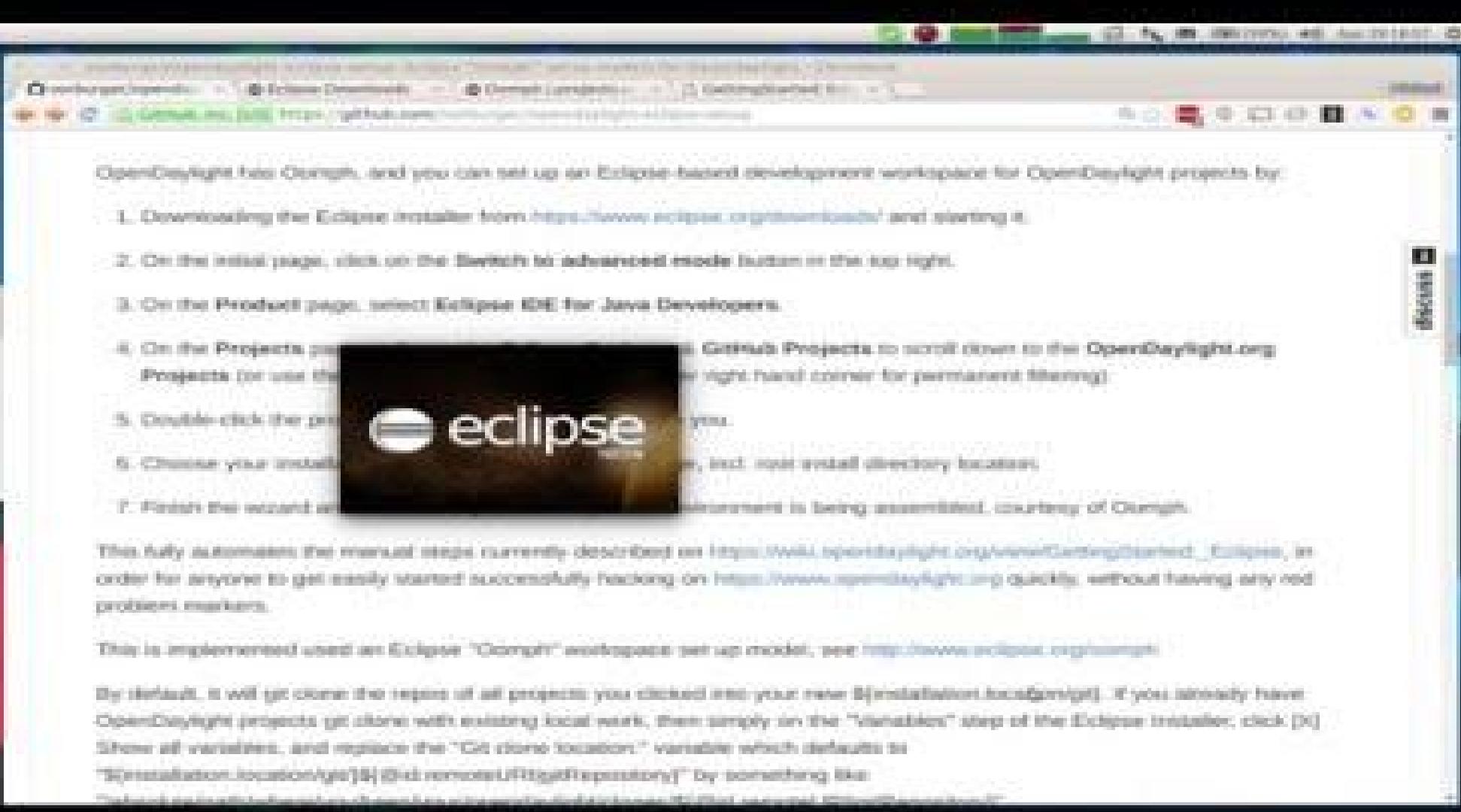
1. Downloading the Eclipse installer from <https://www.eclipse.org/downloads/> and starting it.
2. On the initial page, click on the Switch to advanced mode button in the top right.
3. On the Product page, select Eclipse IDE for Java Developers.
4. On the Products page, click on the Advanced search icon (magnifying glass) in the top right, then click on GitHub Projects to scroll down to the OpenDaylight.org Projects (or use the search bar in the top right and type "OpenDaylight" in the right-hand corner for permanent filtering).
5. Double-click the project you want to install.
6. Choose your installation path, click Next, then click Finish.
7. Finish the wizard and wait for the download to complete. Your development environment is being assembled, courtesy of Oomph.

This fully automates the manual steps currently described on [https://www.opendaylight.org/getting-started\\_eclipse](https://www.opendaylight.org/getting-started_eclipse), in order for anyone to get easily started successfully hacking on <https://www.opendaylight.org> quickly without having any red project markers.

This is implemented using an Eclipse "Oomph" repository (not yet checked; see <https://www.opendaylight.org>).

By default, it will get clone the repos of all projects you clicked into your new \$[installation.localProject]. If you already have OpenDaylight projects get cloned with existing local work, then simply on the "Variables" step of the Eclipse installer, click  Show all variables, and replace the "Get cloned location:" variable which defaults to "\$[installation.localPath]/\$[id] (if remote URL is specified)" by something like:

\$[installation.localPath]/\$[id] (if remote URL is specified)



OpenDaylight has Oomph, and you can set up an Eclipse-based development workspace for OpenDaylight projects by:

1. Downloading the Eclipse installer from <https://www.eclipse.org/downloads/> and starting it.
2. On the initial page, click on the Switch to advanced mode button in the top right.
3. On the Product page, select Eclipse IDE for Java Developers.
4. On the Products page, click on the Advanced search icon (magnifying glass) in the top right, then click on GitHub Projects to scroll down to the OpenDaylight.org Projects (or use the search bar in the top right and type "OpenDaylight" in the right-hand corner for permanent filtering).
5. Double-click the project you want to install.
6. Choose your installation path, click Next, then click Finish.
7. Finish the wizard and wait for the download to complete. Your development environment is being assembled, courtesy of Oomph.

This fully automates the manual steps currently described on [https://www.opendaylight.org/getting-started\\_eclipse](https://www.opendaylight.org/getting-started_eclipse), in order for anyone to get easily started successfully hacking on <https://www.opendaylight.org> quickly without having any red project markers.

This is implemented using an Eclipse "Oomph" repository (not yet checked; see <https://www.opendaylight.org>).

By default, it will get clone the repos of all projects you clicked into your new \$[installation.localProject]. If you already have OpenDaylight projects get cloned with existing local work, then simply on the "Variables" step of the Eclipse installer, click  Show all variables, and replace the "Get cloned location:" variable which defaults to "\$[installation.localPath]/\$[id] (if remote URL is specified)" by something like:

\$[installation.localPath]/\$[id] (if remote URL is specified)

# What's in it for you?

- git clone, import
- Working Set (dyn)
- MAGIC (m2e)
- 20+ Plugins
- 20+ Preferences
- YANG Editor
- Goodies



# YANG IDE

- Builder
- Folding
- Validation
- Doc Hover
- Formatting
- Highlighting
- Code Completion
- Comment Toggle
- Navigation (F3)
- Templates
- Outline

ws - Java - org.opendaylight.controller.samples.sample-toaster/src/main/yang/toaster.yang - Eclipse

File Edit Source Navigate Search Project Run Window Help

Quick Access

HelloModule... AbstractHell... DependencyRe... AbstractFact... FtlTemplate.... RuntimeRegis... \*toaster.yang »1

```
71
72 container toaster {
73     presence
74         "Indicates the toaster service is available";
75     description
76         "Top-level container for all toaster database objects.";
77     leaf toasterManufacturer {
78         type DisplayString;
79         config false;
80         mandatory true;
81         description
82             "The name of the toaster's manufacturer. For instance,
83                 Microsoft Toaster.";
84     }
85
86     leaf toasterModelNumber {
87         type DisplayString;
88         config false;
89         mandatory true;
90
91         • config
92         • default
93         • description
94         • if-feature
95         • mandatory
96         • must
97         • reference
         • status
         • type
98     }
99 }
```

's model. For instance,

Source Diagram Yin

Infinitest is waiting for cha

able Smart Insert 90 : 9 893M of 1179M

# Eclipse Tips

- Don't disable Auto Build
- No separate workspaces
- Red? Alt-F5 (mvn), not clean
- If too much auto. rebuilding?  
Consider closing projects.  
(Note: Open/Close is also available on Working Sets.)

*FYI: ODL projects needed adjustments to previously done M2E lifecycle mapping, for correct in-IDE build. Your project's pom.xml may also need tweaks; raise it on dev list, or IRC/email me, if unclear.*



# Code Quality (IDE?)

Bug prevention (incl. security);  
uniformity lowers friction

# What do these have in common?

*“Please change import statements to be alphabetically ordered”*

*“Move comment to previous line, as this will trigger a Sonar warning”*

*“java.util.Optional preferred over com.google.common.base.Optional”*

*“Field logger should be called LOG”*

...

# What do these have in common?

*"Please change import statements to be alphabetically ordered"*

"Move ~~These kind of code review comments on changes~~ ~~ing~~"

"java.~~I~~ proposed via Gerrit are all a waste of not just 1 but of ~~nal~~"

"Field ~~I~~ 2 people's productive time!"

...

Developer should have already been informed about anything like this right there while typing it! (Same principle for post merge Sonar.)

# Checkstyle & Sonar

- Eclipse Plugins for Checkstyle autom. installed!
- Even more importantly, autom. m2e pre-configured!!
- Sonar same (Eclipse plugin, config; manually activate)
  
- Efforts to drive reasonable sensible common shared set of Checkstyle rules in odl-parent for all of ODL.

```
2+ * Copyright (c) 2015 Dell, Inc. and others. All rights reserved.□
8
9 package org.opendaylight.netvirt.openstack.netvirt.sfc;
10
11+import org.opendaylight.yang.gen.v1.urn.cisco.params.xml.ns.yang.sfc.rsp.rev140701.rendered.service.path
12
13+/*
14+ * Open vSwitch OpenFlow 1.3 Networking Provider for Netvirt SFC
15+ * @author Arun Yerra
16+ */
17
18 public interface INetvirtSfcOF13Provider {
19
20     /**
21      * Method installs the OF rules corresponding to rules within an ACL
22      * on a given Service Function Forwarder. DataObject which is identified by InstanceIdentifier.
23      *
24      * @param bridge - Service Function Forwarder
25      * @param acl - Access list includes rules that need to be installed in a SFF.
26      */
27     void addClassifierRules(Bridge bridge, Acl acl);
28     void addClassifierRules(Bridges bridges, Acl acl);
29
30     /**
31      * 'METHOD_DEF' should be separated from previous statement.
32      * Press 'F2' for focus
33
34     */
```



Description	Resource	Path
▶ <span style="color: red;">✖</span> Errors (8 items)		
▼ <span style="color: orange;">⚠</span> Warnings (11 items)	INetvirtSfcOF13Provider.java	/org.opendaylight.netvirt.openstack.net-

⚠ 'METHOD\_DEF' should be separated from previous statement.

# Format & Import (Ctrl-Shift-F & O)

*Wrong lexicographical order for '...' import. Should be before '...' ?*

Just **Source > Organize Imports**, it works “as expected”, because it’s correctly configured to “do the right thing” for ODL Checkstyle.

Source > Format is aligned as well.

Q: Auto Format & Organize Imports on Save?

A: Cool, but would require to clean everything, first..

# Goodies (other)

- EGit & EGerrit
- Docker & Vagrant; Terminal
- MouseFeed ;)
- *FindBugs, PMD, EclEmma, YEdit, InfiniTest, AnyEdit, ...*





Package Explorer JUnit

- Other Projects [hello master]
  - org.opendaylight.vorburger.hello.hello-aggregator [hello master]
  - org.opendaylight.vorburger.hello.hello-api [hello master]
  - org.opendaylight.vorburger.hello.hello-artifacts [hello master]
  - org.opendaylight.vorburger.hello.hello-features [hello master]
  - org.opendaylight.vorburger.hello.hello-impl [hello master]
  - org.opendaylight.vorburger.hello.hello-it [hello master]
  - org.opendaylight.vorburger.hello.hello-karaf [hello master]
  - releng-builder
- netvirt
- nic
- integration/test
- integration/distribution
- integration
- integration/packaging
- aaa
- openflowplugin
- openflowjava
- controller [controller archetypesSelfTesting]
- docs
- ovsdb [ovsdb master]
- unimgr
- netconf [netconf master]
- eclipse-setup [opendaylight-eclipse-setup master]
- odlparent [odlparent checkstyleJavaDoc]
- lispflowmapping
- mdsal [mdsal master]
- yangide
- yangtools [yangtools gitignore-factorypath]
- checkstyle-eclipse
- root
- jboss-logging [jboss-logging-example demo]

BaseYangSwaggerGenerator.java

```

        String resourcePath = getDataStorePath("/operations/", context);
        addRpcs(rpcDefinition, apis, resourcePath, schemaContext);
    }

    LOG.debug("Number of APIs found {}", apis.size());

    if (!apis.isEmpty()) {
        doc.setApis(apis);
        JSONObject models = null;

        try {
            models = jsonConverter.convertToJsonSchema(m, schemaContext);
            doc.setModels(models);
            if (LOG.isDebugEnabled()) {
                LOG.debug(mapper.writeValueAsString(doc));
            }
        } catch (IOException | JSONException e) {
            LOG.error("Exception occurred in ModelGenerator", e);
        }
    }
}

```

Launch Terminal

Settings

Hosts:	<input type="text" value="localhost"/>
Host:	<input type="text" value="localhost"/>
User:	<input type="text" value="karaf"/>
Password:	<input type="password" value="*****"/>
Timeout (sec):	<input type="text" value="0"/>
KeepAlive (sec):	<input type="text" value="300"/>
Port:	<input type="text" value="8101"/>
Encoding:	<input type="text" value="UTF-8"/>
<input checked="" type="checkbox"/> Save user <input checked="" type="checkbox"/> Save password	

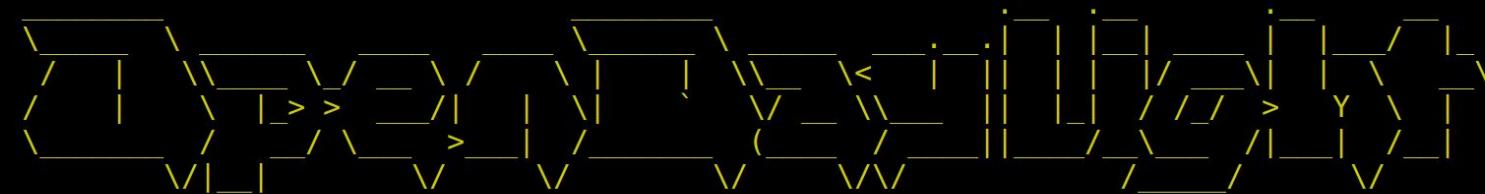
?

Cancel

OK

Problems Javadoc Search Console Progress Repository Explorer Properties Git Staging History Error Log Rebase Interactive Gerrit Dashboard (EGerrit) Terminal

SSH karaf@localhost:8101 (5/31/16 1:22 PM)



Hit '**<tab>**' for a list of available commands  
 and '**[cmd] --help**' for help on a specific command.  
 Hit '**<ctrl-d>**' or type '**system:shutdown**' or '**logout**' to shutdown OpenDaylight.

opendaylight-user@root&gt;

ws - Docker Tooling - Eclipse

File Edit Navigate Search Project Run Window Help

Docker Explorer

- dreamy\_rosalind (sha256:9d69e5d9c65d67fbe633458c)
- drunk\_cori (sha256:6ac5e098725c607cb09205eda017d)
- evil\_brattain (sha256:bba7ad758da0dee0f93ebfff2018)
- focused\_archimedes (sha256:469ff5133da69904c46d6c44196ce)
- focused\_nobel (hello-world:latest)
- furious\_jennings (opendaylight/base-edition)
- gloomy\_lumiere (sha256:567aaa39d58687185d049a06)
- happy\_ride (sha256:93cb5268d55c98ae431519300ca1)
- high\_chandrasekhar (sha256:6ac5e098725c607cb09205eda017d)
- jovial\_noxy (sha256:9d69e5d9c65d67fbe633458e78b)
- kickass\_euclid (sha256:93cb5268d55c98ae431519300c)
- lobby\_config (lobby\_config\_img)
- lonely\_williams (hello-world:latest)
- mad\_gates (sha256:469ff5133da69904c46d6c44196ce)
- ovs (mgkwill/openvswitch:2.3.2)**

- Links
- Ports
  - 0.0.0.0:6641 -> 6640 (tcp)
- Volumes

- pedantic\_archimedes (sha256:7fb8994b7a3c00b61b6)
- pedantic\_bhaskara (sha256:2a8485b49de7716ad34b5)
- prickly\_joliot (sha256:331f04763571650059574496da)
- prickly\_stallman (sha256:a945c90868956a26fee47af2d)
- reverent\_blackwell (vorburger/opendaylight-nexus-miu)
- sharp\_hodgkin (sha256:6ac5e098725c607cb09205eda017d)
- silly\_lalande (sha256:7fb8994b7a3c00b016b16afdfce69)
- small\_mcclintock (sha256:d815e529ba352071c77fc1)
- stoic\_elion (sha256:06ca093a72ef779f8ec4e4088370b)
- stupefied\_dubinsky (sha256:b15e0f5d57fdfe88d253d)
- stupefied\_euler (sha256:9d69e5d9c65d67fb633458e)
- stupefied\_wescoff (sha256:2039abbf6acc5a46baa18f1)
- survival\_config (survival\_config\_img)

Docker Images

ID	Repo Tags	Created	Virtual Size
87cb9c9cbdd5	vorburger/opendaylight-nexus-mirror:latest	2016-05-26	747.2 MB
933fedfaecc7	vorburger/opendaylight-build-fedoral:latest	2016-05-26	746.3 MB
2eeff0b903ff	vorburgeryangide-jenkins	2016-05-20	736.2 MB
77bd697ef2c3	jenkins:latest	2016-05-12	710.1 MB
8b8d264107be	survival_config_img:latest	2016-05-04	655.3 MB
69bc032f28f4	creative_config_img:latest	2016-05-04	655.3 MB
f6920c1ee9a9	lobby_config_img:latest	2016-05-04	656.8 MB
cd46cedeb7f	bungee_config_img:latest	2016-05-04	642.7 MB
60a462cff929	docker/compose:1.7.0	2016-04-13	58.6 MB
9329beb2f0e	zxiir0/jjb-docker:latest	2016-04-07	390.2 MB
081ce13c85db	java:8	2016-04-05	642.7 MB

Docker Containers

Name	Image	Created	Command	Ports	Status
ovs	mgkwill/openvswitch:2.3.2	2016-06-16	/usr/bin/supervisord	0.0.0.0:6641->6640/tcp	Up 3 minutes
amazing_cori	sha256:0544a29f01970768efb7a	2016-05-26	/bin/bash -c "/usr/share/nexus-* /bin/nexus"	0.0.0.0:8080->8080/tcp	Created
angry_pare	sha256:93cb5268d55c98ae431519300ca1	2016-05-26	bash		Exited (0) 3 weeks ago
awesome_wing	sha256:bba7ad758da0dee0f93e	2016-05-26	/bin/sh -c 'curl -sSL http://archive.apache.org/dist/maven,		Exited (2) 3 weeks ago
compassionate_stonebraker	sha256:469ff5133da69904c46d	2016-05-26	/usr/share/nexus-2.13.0-01/bin/nexus status		Exited (1) 3 weeks ago
determined_poincare	sha256:22daac7bf03457b8104	2016-05-26	/bin/sh -c 'curl http://www.sonatype.org/downloads/		Exited (1) 3 weeks ago
dreamy_rosalind	sha256:9d69e5d9c65d67fbe63	2016-05-26	/bin/sh -c 'wget -q -O https://raw.githubusercontent.com		Exited (1) 3 weeks ago
drunk_cori	sha256:6ac5e098725c607cb09205eda017d	2016-05-26	bash -c '/opt/sonatype/nexus/bin/nexus console		Exited (1) 3 weeks ago
evil_brattain	sha256:bba7ad758da0dee0f93e	2016-05-26	/bin/sh -c 'curl http://www.eu.apache.org/dist/maver		Exited (2) 3 weeks ago
focused_archimedes	sha256:469ff5133da69904c46d	2016-05-26	/usr/share/nexus-2.13.0-01/bin/nexus start	0.0.0.0:8080->8080/tcp	Created

Console

ovs (mgkwill/openvswitch:2.3.2)

Property	Value
Inspect	
Id	348d49fb981
Name	/ovs
Created	2016-06-16
State	
ExitCode	0
Finished at	2016-06-16T15:10:00Z
Running	false
Paused	false
Pid	0
Args	
Driver	devicemapper
ExecDriver	
Config	
AttachStderr	false
AttachStdin	false
AttachStdout	false
Cmd	/usr/bin/supervisord
CpuSet	
CpuShares	
Domains	

Terminal

```

/ovs
2016-06-17T15:20:33Z|00020|jsonrpc|DBG|unix:/usr/local/var/run/openvswitch/db.sock: received
rue}, id=1
ovs-vswitchd stderr | 2016-06-17T15:20:33Z|00021|bridge|INFO0|ovs-vswitchd (Open vSwitch) 2.3
ovs-vswitchd stderr | 2016-06-17T15:20:35Z|00022|poll_loop|DBG|wakeup due to [POLLIN] on fd
openvswitch/db.sock) at lib/stream-fd-unix.c:124 (0% CPU usage)
ovs-vswitchd stderr | 2016-06-17T15:20:35Z|00023|jsonrpc|DBG|unix:/usr/local/var/run/openvsw
ification, method="update", params=[null,{"Manager":{"45527bde-c067-4f0b-a62f-5f053aaae39b":["set",[],"target":"ptcp:6640","other_config":["map",[]]}}, {"f33e55f4-7186-4aaa-9b1b-902f2da
_mode":["set",[],"target":"ptcp:6640","other_config":["map",[]]}}, {"Open_vSwitch":{"5d9829c
52e": {"old": {"manager_options": [{"uuid": "45527bde-c067-4f0b-a62f-5f053aaae39b"}], "bridges": [{"set",[]}], "other_confi
,[]}, "next_cfg":0,"cur_cfg":0}}}], "new": {"stat
r_options": [{"uuid": "45527bde-c067-4f0b-a62f-5f053aaae39b"}], "bridges": [{"set",[]}], "other_confi
,[]}, "next_cfg":0,"cur_cfg":0}}}]
2016-06-17 15:20:35,548 INFO exited: configure-ovs (exit status 0; expected)
ovsdb-server stderr | 2016-06-17T15:20:42Z|00002|memory|INFO0|14204 kB peak resident set size
2016-06-17T15:20:42Z|00003|memory|INFO0|cells:24 monitors:1 sessions:1

```

Infinisht is waiting for changes

1 item selected

Quick Access

767M of 1179M



[GETTING STARTED](#)[MEMBERS](#)[PROJECTS](#)[MORE ▾](#)[HOME](#) / [PROJECTS](#) / [TOOLS PROJECT](#) / [OOMPH](#)

# HOW OOMPH

[Overview](#)[Downloads](#)[Who's Involved](#)[Developer Resources](#)[Governance](#)[Contact Us](#)

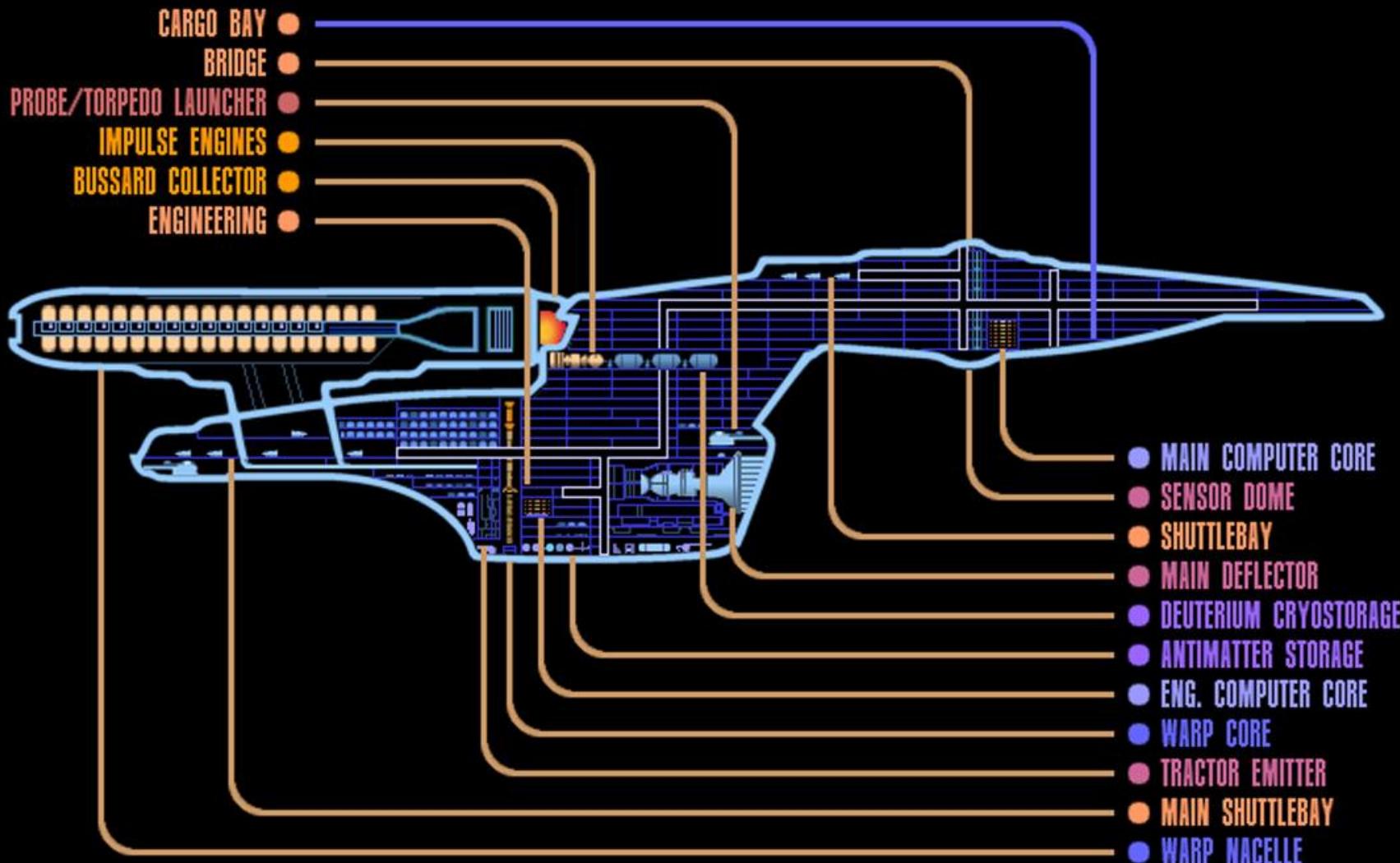
The Oomph project provides tools based on extensible frameworks, packaged as fine-grained features that allow consumers to pick and choose. The basic building blocks include the following:

- An EMF model for manipulating Eclipse preferences.
- An EMF model for specifying predicate-based logical sets of projects.
- An EMF model for enforcing profiles of project-specific settings (driven by the predicates model).
- An EMF model for inducing dynamic working sets (driven by the predicates model).
- An EMF model for managing modular PDE target platforms (based on composable targets).
- An EMF model for describing IDE configurations.

Based on these building blocks Oomph initially provides the following tools:

- A tool for browsing the Eclipse preference structure.
- A tool for maintaining consistent project-specific settings across a large number of projects.
- A tool for creating dynamic working sets that update automatically as new projects are added to the workspace.





LENGTH: 478.5 M

BEAM: 293 M

HEIGHT: 116.4 M

MASS: 3,100,000 M.T.

platform:/resource/org.opendaylight.eclipse.setup/org.opendaylight.projects.setup

- OpenDaylight.org
  - BrandingInfo
  - Global Variables
  - User Preferences
    - UserPreferences
    - net.sf.eclipses.cs.core
    - org.eclipse.compare
    - org.eclipse.egerrit.core
    - org.eclipse.egit.ui
    - org.eclipse.jdt.core
    - org.eclipse.jdt.ui
  - org.eclipse.m2e.core

eclipse.m2.autoUpdateProjects = true

eclipse.m2.globalSettingsFile = \${git.clone.opendaylight.odlparent.location}/settings.xml

eclipse.m2.WorkspacelifecycleMappingsLocation = \${workspace.location}/.metadata/.plugins/org.eclipse.

org.eclipse.oomph.setup.ui

org.eclipse.oomph.ui

org.eclipse.ui

org.eclipse.ui.ide

org.eclipse.wst.xml.core

org.infinitest.eclipse

JavaSE-1.8 = \${jre.location-1.8}

Eclipse Ini -Xmx2048m

Eclipse Ini -XX:MaxPermSize512m

Eclipse Ini -Declipse.m2.stats.allow=true

Resource Creation \${workspace.location|uri}/.metadata/.plugins/org.eclipse.jdt.ui/dialog\_settings.xml

Resource Creation \${workspace.location|uri}/.metadata/.plugins/org.eclipse.m2e.core/lifecycle-mapping-metadata.xml

(\*)=eclipse.target.platform (default: Neon)

P2 Director

ssh://\${opendaylight.user.id}@git.opendaylight.org:29418/odlparent.git (\${scope.project.stream.name})

**Eclipse Installer**

**Projects**

Check the projects you want to provision, and for each

Oomph

type filter text

+ Eclipse Projects

+ Github Projects

- OpenDaylight.org

- aaa
- alto
- atrium
- bgpcep
- capwap
- cardinal
- centinel
- controller
- coretutorials
- didm
- dlux
- docs

**eclipse-setup**

in the flow

TM

The Hot Wheels logo is prominently displayed in a stylized, arched font. The letters are primarily red, transitioning to yellow at the bottom, and are set against a background of dynamic, orange and red flame-like patterns. The word "HOT" is larger than "WHEELS". A small "TM" symbol is located in the bottom right corner of the arch.

# -Pq Quick Build



- |                                |          |
|--------------------------------|----------|
| 1. mvn [-o] clean install      | 7:41 min |
| 2. mvn [-o] <u>-Pq</u> install | 1:16 min |

*Timings from ovsdb, as an example.*

# -Pq

mvn -Pq install skips:

- Tests compilation
- Unit tests running
- Karaf features testing
- Integration tests running
- Coverage instrumentation (Jacoco)
- FindBugs analysis
- Checkstyle analysis
- JavaDoc generation
- Source JAR building
- Maven site building
- Invoker, Enforcer



# bundle:watch

bundle:watch \*

Shift-Alt-X-M

-Pq -o -DaddInstallRepositoryPath=



-Pq = Quick. This ^^^ is another Q..



# What NeXT ?



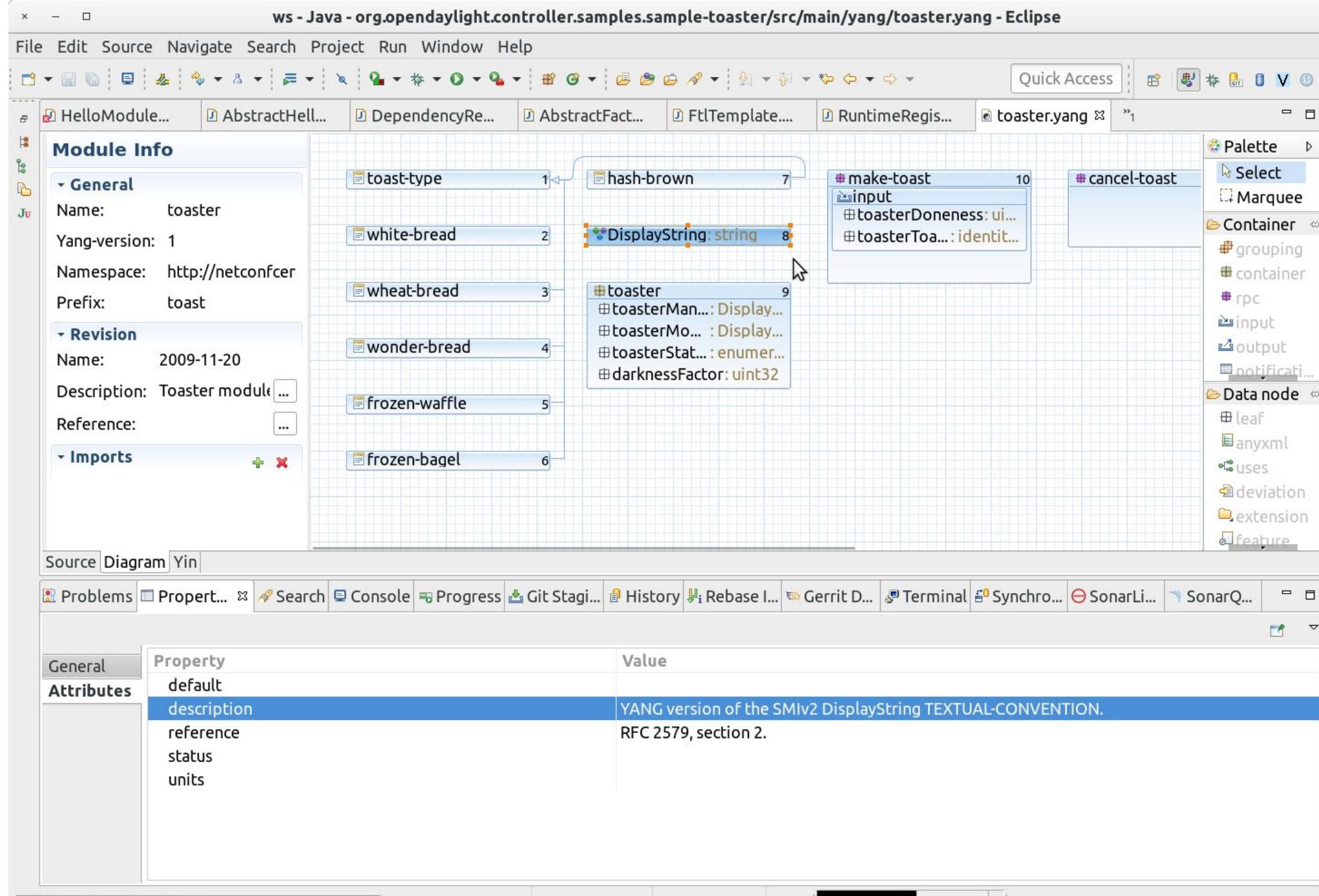
- HOT
- WS Build Performance?
- Checkstyle: ++Adoption; (incl. refinements, if needed)
- FindBugs? Null analysis?
- Bndtools? The OSGi IDE:
  - Instant bundle JAR builder
  - Semantic Versioning, in IDE...
  - Launchers for lightweight in-container FAST OSGi integration testing (Karaf?)
  - bnd.bnd ⇌ pom.xml (mvn?)bnd-based; ODL already uses, via maven-bundle-plugin.



# BACKUP SLIDES

Not used in the 30' presentation (too much)







New Maven Project

New Maven project  
Select an Archetype

Catalog: All Catalogs

Filter: org.opendaylight

Group Id	Artifact Id	Version
org.opendaylight.controller	config-module-archetype	0.5.0-SNAPSHOT
org.opendaylight.controller	.opendaylight-configfile-archetype	1.4.0-SNAPSHOT
org.opendaylight.controller	.opendaylight-karaf-distro-archetype	1.3.0-SNAPSHOT
org.opendaylight.controller	.opendaylight-karaf-features-archetype	1.3.0-SNAPSHOT
org.opendaylight.controller	.opendaylight-startup-archetype	1.2.0-SNAPSHOT
org.opendaylight.controller.archetypes	odl-model-project	1.4.0-SNAPSHOT
org.opendaylight.dlux	dlux-app	0.4.0-SNAPSHOT

Archetype for new module managed by configuration subsystem  
<https://nexus.opendaylight.org/content/repositories/opendaylight.snapshot>

Show the last version of Archetype only  Include snapshot archetypes

Advanced  Resolve Workspace projects

Profiles:

Name template:

< Back

# Sonar

- Checkstyle **VS** Sonar? Checks have some overlap (*inconsistencies*)
- Sonar does not run for Gerrit check builds (could & should it?)
- Sonar in-IDE, same config as on sonar.opendaylight.com:

```
63
64
65 public static class LogMessageOccurrence {
66     public final String javaSourceFilePath; // relative to current project root
67     public final int lineNumber;
68     public final String message;
```

The screenshot shows the Eclipse IDE interface with the SonarLint plugin installed. The top menu bar includes 'Problems', 'Search', 'Console', 'Progress', 'Git Staging', 'History', 'Rebase Interactive', 'Gerrit Dashboard (EGerrit)', 'Terminal', 'Synchronize', 'SonarLint Issues', and 'SonarQube Servers'. The 'Problems' view is active, displaying one error: 'Move this trailing comment on the previous empty line.' located at line 65 of 'LogMessageExtractorCheck.java' in the file '/org.opendaylight.yangtools.checkstyle-logging/src/main/java/org/opendaylight/yangtools/checkstyle'. A red circle highlights the 'SonarLint Issue' column header in the table below.

Description	Resource	Path	Location	Type
Errors (1 item)	LogMessageExtractorCheck.java	/org.opendaylight.yangtools.checkstyle-logging/src/main/java/org/opendaylight/yangtools/checkstyle	line 65	SonarLint Issue

**Select Source**

Select source for creating branch.

|

Local

- activateCheckstyle e6ba418 Checkstyle Import order as per original ODL convention on Wiki
- change/37623\_jacoco 699b144 Fixed Eclipse IDE setup: m2e's no longer whines about jacoco
- change/39495\_CheckstyleEnforce 792c3c9 Fix Checkstyle warnings, and make them errors for the future**
- checkstyleAllowedAbbreviationLength3 b3eed93 Refine Checkstyle rules: allowedAbbreviationLength 3 instead 1
- checkstyleEmptyLineSeparatorNoPackageToken dfe2b4b Allow license header to be glue to "package" statement
- checkstyleFeaturesTestFixedAndNowEnforced db2f098 Fix Checkstyle warnings, and make them errors for the future
- checkstyleGitIgnore a1db247 .gitignore .checkstyle files created by Checkstyle Eclipse plugin
- checkstyleImportOrderPurelyAlphabetical 5644f36 Checkstyle Import order as per original ODL convention on Wiki
- checkstyleJavaDoc 6c37d38 Checkstyle JavaDoc presence not enforced, but if present, check style
- checkstyleJavaDocConstructorAndGetterSetter 8136602 Refine Checkstyle rules: optional JavaDoc on c'str & getter/setter
- checkstyleJavaDocStyle 7f21d28 Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules
- checkstyleMavenPluginUpgrade216to217 06ba3ea Bump Checkstyle Maven plugin version from 2.16 to 2.17
- checkstyleMoveMethodName b32a188 Move Checkstyle module MethodName up in XML.
- checkstyleNewRulesFromYangtoolsCheckstyleLogging 034d1b2 Move Checkstyle rules not related to slf4j logging from yangtools
- checkstyleParameterSingleLetterOK 9721088 Refine Checkstyle rules: single letter parameter OK
- checkstylePlus3FromController b646667 Move 3 Checkstyle from controller/checkstyle to odlparent
- checkstyleRmOdlLicenseDependency 117a2f2 Cleanup: Checkstyle does NOT require dependency to odl-license
- checkstyleRuntimeVersion 2bf167b Bump Checkstyle version from 6.2 to 6.16
- checkstyleSeparateRuntimeVsPluginVersionWithoutActuallyUpgradingEither 808ded6 Separate the Checkstyle Runtime Core VS. Maven plugin version
- fixM2EIllegalArgumentExceptionMissingParameterForPluginExecutionFilterGroupId 3416a5a Fix for improved Eclipse IDE setup: m2e's no longer exp
- gitignore-factorypath 9c5fb59 .gitignore .factorypath created by m2e-apt
- goalPrefixKarafInsteadOfKarafPlugin 835d495 Improved Eclipse IDE experience: Fixed WARN from m2e in Error Log
- m2e-AllGerritsCombined 83c14f1 Fix for improved Eclipse IDE setup: m2e Checkstyle ConversionException
- m2eCheckstyleConversionException 3b8a0b3 Fix for improved Eclipse IDE setup: m2e Checkstyle ConversionException
- m2eMavenDependencyPluginUnpackLicenseIgnoreInsteadOfExecute 0ea8cb6 Improved Eclipse IDE experience: m2e's maven-dependency-plugin
- master e6ba418 Checkstyle Import order as per original ODL convention on Wiki
- paxExamUpgrade 12351a0 Upgrade PAX Exam from version 4.4.0 to 4.9.1
- paxExamUpgradeAvoidStatic b5bbf42 Fix use of BAD BAD BAD static class initializer code block
- Q ae48d61 Introduce "mvn -Pq install" to just build JAR, but no tests, QA etc.
- revertJacksonUpgrade 2389a4f Revert "Upgrade Jackson 2.3.2 -> 2.7.4"
- rmCheckstylePluginManagedVersionOverride c7c837d removing <version> as previously declared in <pluginManagement>
- rmDuplicateGroupIdVersion 01c3cee removing duplicate <groupId>/<version> which are identical to <parent>

References

Remote Tracking

gerrit/master 6170d32 Revert "Bump akka to 2.4.6"

Cancel      OK

**Fetch a change from Gerrit**

**Fetch a change from Gerrit into repository odlparent**



**Please provide a change**

URI: ssh://vorburger@git.opendaylight.org:29418/odlparent.git

Change: |

Action to perform after fetch

Create a local branch       Checkout new branch

Branch name:  Edit Branches...

Create and checkout a tag  
 Checkout FETCH\_HEAD  
 Update FETCH\_HEAD only

Run in background

Cancel      Finish

ws - Java - 39406 - Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules - lc924345a670e2938ee12b7c4f41bdc382aad2409 - Eclipse

File Edit Navigate Search Project Run Window Help

Package Explorer JUnit Quick Access

Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules

ID: 39406 NEW Subject: Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules

Activate Comment Markers Delete Revision Patch Sets 2/2

History	Messages	Details
Date	Author	Message
03:04 AM	jenkins-releng	Patch Set 2: Verified+1 Build Successful https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/: SUCCESS
02:50 AM	jenkins-releng	Patch Set 2: -Verified Build Started https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/
02:50 AM	Sam Hague	Patch Set 2: test-distribution
May 25	Michael Vorburger	Patch Set 2: Build failure appears to be completely unrelated to this change: [ERROR] Failed to execute goal on project features-integration-index: Could not resolve dependencies for project org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Failed to collect dependencies for org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Failed to resolve org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT from central (https://repo.maven.apache.org/maven2) Caused by: Failed to read artifact descriptor for org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Could not resolve all dependencies for module org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Failed to collect dependencies for org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Failed to resolve org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT from central (https://repo.maven.apache.org/maven2)
May 25	Michael Vorburger	Patch Set 2: Code-Review+1

Patch Set 2: -Verified

Build Started https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/

File Path	Comments	Size
A COMMIT_MSG -	+10/-0	
M odl_checks.xml - checkstyle/src/main/resources	+5/-0	

Refresh Submit Abandon Rebase Download Cherry-Pick Reply ... Draft ...

Problems Javadoc Search Console Progress Repository Explorer Properties Git Staging History Error Log Rebase Interactive Gerrit Dashboard (EGerrit) Beagle

All My Documentation

OpenDaylight Total reviews: 27

ID	Subject	Status	Owner	Project	Branch	Upd
39518	.gitignore .factorypath created by m2e-apt	NEW	Michael Vorburger	odlparent	master	11:5
39517	.gitignore .factorypath created by m2e-apt	NEW	Michael Vorburger	yangtools	master	11:5
★ 39406	Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules	NEW	Michael Vorburger	odlparent	master	03:0
39495	Fix Checkstyle warnings, and make them errors for the future	NEW	Michael Vorburger	odlparent	master	May
39275	Add src/main/yang as source path in build-helper-maven-plugin	NEW	Michael Vorburger	mdsal	master	May
39416	Move Checkstyle rules not related to slf4j logging from yangtools	NEW	Michael Vorburger	odlparent	master	May
39277	Add src/main/yang as source path in build-helper-maven-plugin	NEW	Michael Vorburger	controller	master	May
39484	Fix broken Maven archetypes, and ensure their future automated testing	NEW	Michael Vorburger	controller	master (archetypesSelf)	May
39482	Clean up pom.xml of archetypes projects (not archetypes content)	NEW	Michael Vorburger	controller	master	May
39175	Format startup archetype much more nicely, and clean up stuff	NEW	Michael Vorburger	controller	master	May
39422	Remove M2E lifecycle-mapping <ignore/> for maven-checkstyle-plugin	NEW	Michael Vorburger	controller	master	May
39417	Remove all not directly custom Logger check related modules declarations	NEW	Michael Vorburger	yangtools	master	May
39041	Fix bad generated path for generated sources	NEW	Michael Vorburger	openflowplugin	master	May
39403	Move Checkstyle module MethodName up in XML.	NEW	Michael Vorburger	odlparent	master (checkstyleMov	May
39410	New LogMessageExtractorCheck which writes out TXT report of all loggers	NEW	Michael Vorburger	yangtools	master	May
39396	Fix @Deprecated checkstyle.api.Check to new AbstractCheck	NEW	Michael Vorburger	yangtools	master	May
38876	Clean up code, incl. fix Checkstyle warnings (without real changes)	NEW	Michael Vorburger	yangtools	master	May
39132	Improve p2deploy scripts to support snapshot deploy	DRAFT	Thanh Ha	releng/builder	master (nexus-site-arch	May
39043	Remove M2E lifecycle-mapping <execute/> for yang-maven-plugin	NEW	Michael Vorburger	openflowplugin	master	May

Infinitest is waiting for changes 635M of 8091

File Edit Navigate Search Project Run Window Help



Quick Access

Package Explorer		
<input checked="" type="checkbox"/> Other Projects		
▶	↳	nic
↳	integration/test	
↳	integration/packaging	
↳	integration/distribution	
▶	↳	integration
▶	↳	aaa
↳	↳	openflowplugin
↳	↳	openflowjava
▶	↳	controller [controller archetypesSelfTesting]
↳	↳	docs
↳	↳	ovsdb
↳	↳	unimgr
↳	↳	netconf
↳	↳	eclipse-setup [opendaylight-eclipse-setup master]
▶	↳	odlparent [odlparent .gitignore-factorypath]
↳	↳	lispflowmapping
▶	↳	mdsal [mdsal build-helper-maven-plugin_add-source_src-main-yang]
↳	↳	yangide [yangide master]
↳	↳	yangtools [yangtools gitignore-factorypath]
▶	↳	checkstyle-eclipse
↳	root	
▶	↳	jboss-logging [jboss-logging-example demo]

Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules							
History		Messages		Details			
Date	Author	Message					
03:04 AM	jenkins-releng	Patch Set 2: Verified+1	BUILD SUCCESSFUL	https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/	: SUCCESS		
02:50 AM	jenkins-releng	Patch Set 2: -Verified	BUILD STARTED	https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/			
02:50 AM	Sam Hague	Patch Set 2: test-distribution					
May 25	Michael Vorburger	Patch Set 2: Build failure appears to be completely unrelated to this change: [ERROR] Failed to execute goal on project features-integration-index: Could not resolve dependencies for project org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT: Failed to find artifact org.opendaylight:features-integration-index:pom:1.0-SNAPSHOT in central (https://repo.maven.apache.org/maven2)					
May 25	Michael Vorburger	Patch Set 2: Code-Review+1					

Patch Set 2: -Verified

Build Started <https://jenkins.opendaylight.org/releng/job/odlparent-distribution-check-boron/291/>

File Path	Comments	Size
A COMMIT_MSG -	+10/-0	
M odl_checks.xml - checkstyle/src/main/resources	+5/-0	

**EGerrit Tip**

You may write comments by entering text in the editor

Don't show this message again OK

OpenDaylight Total reviews: 27

ID	Subject	Author	Project	Branch	Review Status	Reviewer	Comments	Size
39518	.gitignore .factorypath created by m2e-apt	Michael Vorburger	odlparent	master	NEW	Michael Vorburger	odlparent	11:5
39517	.gitignore .factorypath created by m2e-apt	Michael Vorburger	yangtools	master	NEW	Michael Vorburger	yangtools	11:5
★ 39406	Add JavadocStyle & NonEmptyAtclauseDescription checkstyle modules	Michael Vorburger	odlparent	master	NEW	Michael Vorburger	odlparent	03:0
39495	Fix Checkstyle warnings, and make them errors for the future	Michael Vorburger	odlparent	master	NEW	Michael Vorburger	odlparent	May
39275	Add src/main/yang as source path in build-helper-maven-plugin	Michael Vorburger	mdsal	master	NEW	Michael Vorburger	mdsal	May
39416	Move Checkstyle rules not related to slf4 logging from yangtools	Michael Vorburger	odlparent	master	NEW	Michael Vorburger	odlparent	May
39277	Add src/main/yang as source path in build-helper-maven-plugin	Michael Vorburger	controller	master	NEW	Michael Vorburger	controller	May
39484	Fix broken Maven archetypes, and ensure their future automated testing	Michael Vorburger	controller	master	NEW	Michael Vorburger	controller	master (archetypesSelfTesting)
39482	Clean up pom.xml of archetypes projects (not archetypes content)	Michael Vorburger	controller	master	NEW	Michael Vorburger	controller	May
39175	Format startup archetype much more nicely, and clean up stuff	Michael Vorburger	controller	master	NEW	Michael Vorburger	controller	May
39422	Remove M2E lifecycle-mapping <ignore/> for maven-checkstyle-plugin	Michael Vorburger	controller	master	NEW	Michael Vorburger	controller	May
39417	Remove all not directly custom Logger check related modules declarations	Michael Vorburger	yangtools	master	NEW	Michael Vorburger	yangtools	May
39041	Fix bad generated path for generated sources	Michael Vorburger	openflowplugin	master	NEW	Michael Vorburger	openflowplugin	May
39403	Move Checkstyle module MethodName up in XML.	Michael Vorburger	odlparent	master	NEW	Michael Vorburger	odlparent	master (checkstyleMove)
39410	New LogMessageExtractorCheck which writes out TXT report of all loggers	Michael Vorburger	yangtools	master	NEW	Michael Vorburger	yangtools	May
39396	Fix @Deprecated checkstyle.api.Check to new AbstractCheck	Michael Vorburger	yangtools	master	NEW	Michael Vorburger	yangtools	May
38876	Clean up code, incl. fix Checkstyle warnings (without real changes)	Michael Vorburger	yangtools	master	NEW	Michael Vorburger	yangtools	May
39132	Improve p2deploy scripts to support snapshot deploy	Thanh Ha	releng/build	master	DRAFT	Thanh Ha	releng/build	master (nexus-site-arch)
39043	Remove M2E lifecycle-mapping <execute/> for yang-maven-plugin	Michael Vorburger	openflowplugin	master	NEW	Michael Vorburger	openflowplugin	May

Package Explorer JUnit

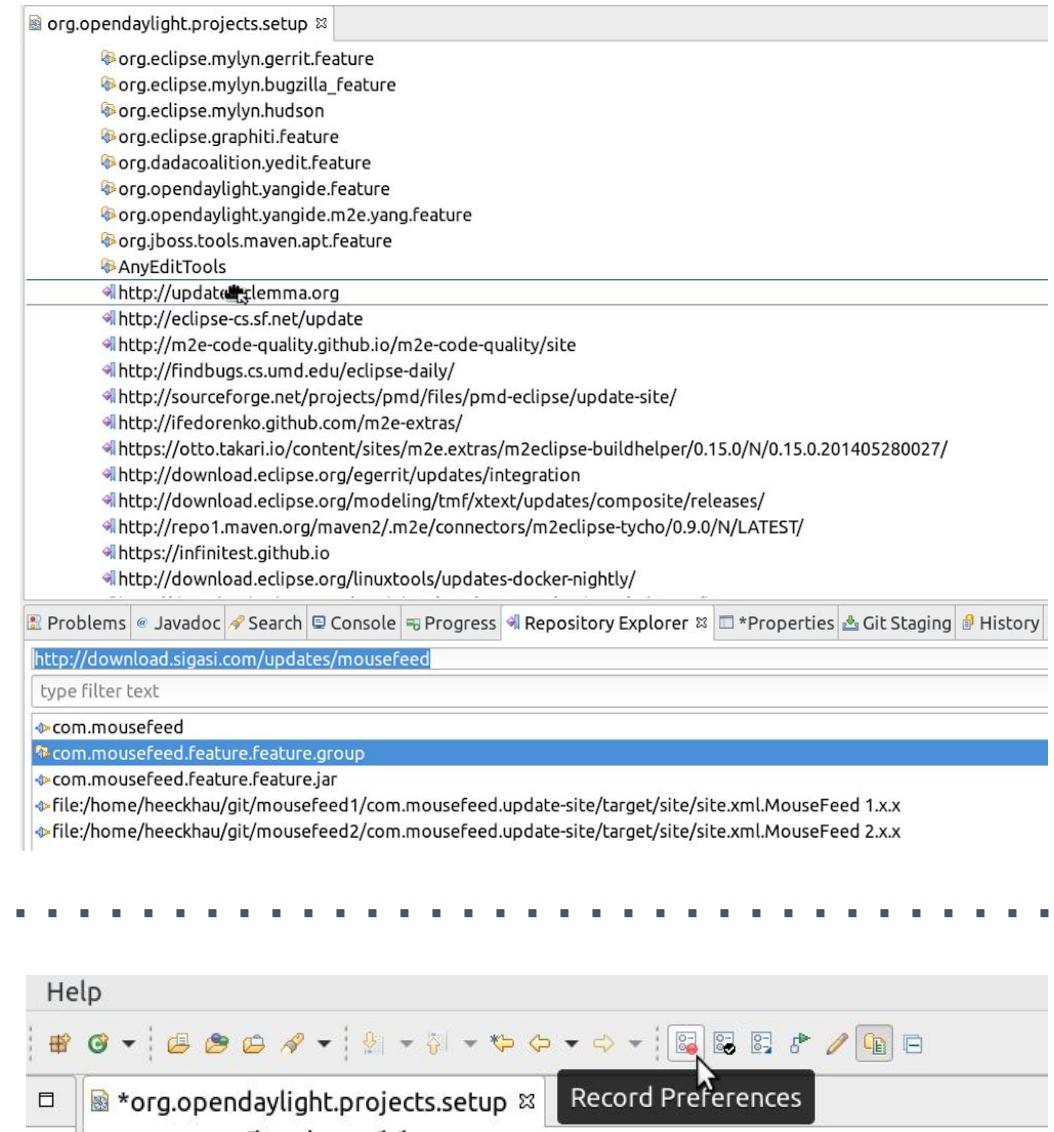
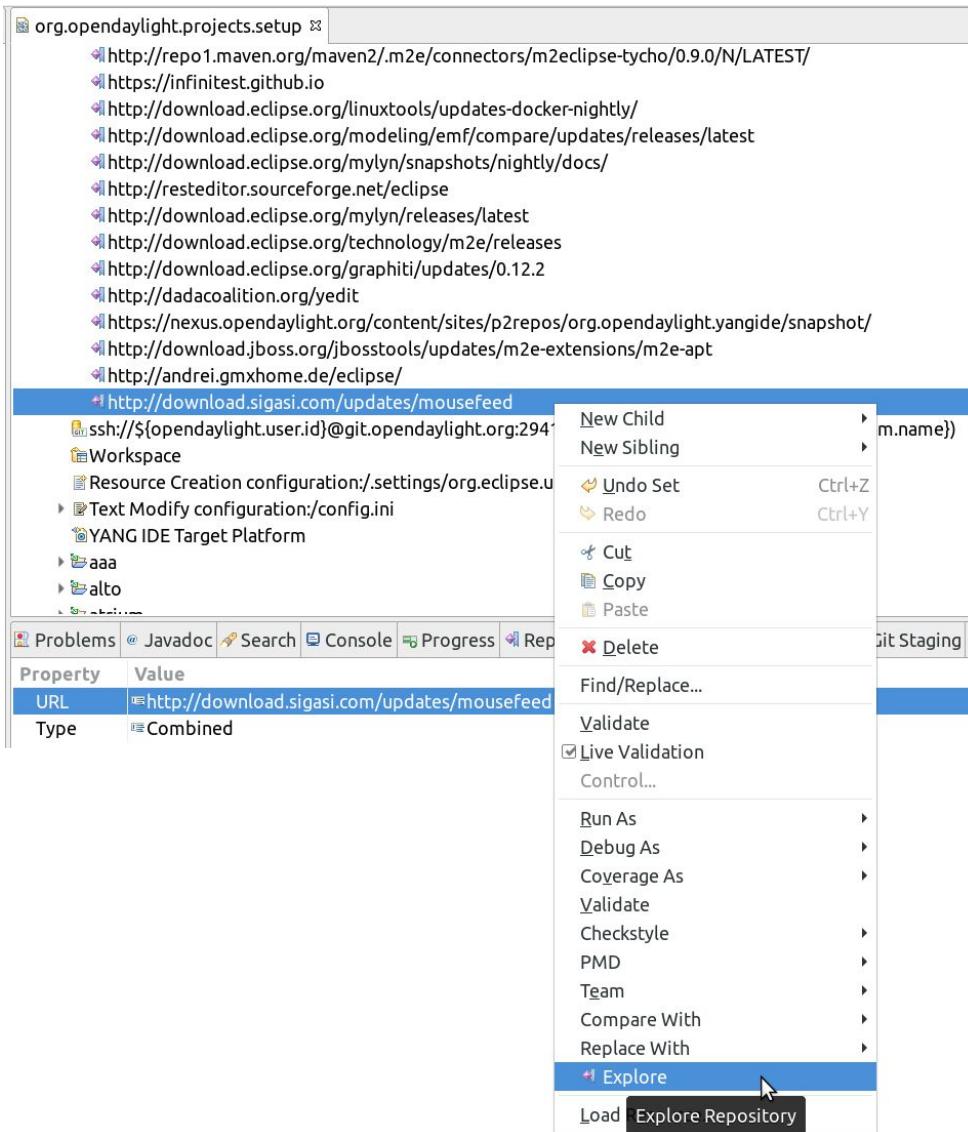
- Other Projects [releng-builder master]
  - aaa
  - openflowplugin
  - openflowjava
  - controller [controller master]
    - docs
    - ovsdb
    - unimgr
    - netconf
  - eclipse-setup [opendaylight-eclipse-setup master]
    - org.opendaylight.eclipse.setup [opendaylight-eclipse-setup master]
      - generator
      - projects
        - .project
      - LICENSE
      - org.opendaylight.eclipse.setup.setup
      - org.opendaylight.projects.setup
      - README.adoc
    - org.opendaylight.eclipse.setup.generator [opendaylight-eclipse-setup master]
  - odlparent [odlparent checkstyleRuntimeVersion]
    - lispflowmapping
    - mdsal
    - yangide
    - yangtools [yangtools checkstyleRuntimeVersionUpgradeFrom6.2to6.16]
    - checkstyle-eclipse [eclipse-cs master]

checkstyle-logging.xml org.opendaylight.odlparent.odlparent/pom.xml CheckLoggingUtil.java CheckstyleTest.java org.opendaylight.projects.setup

```

platform:/resource/org.opendaylight.eclipse.setup/org.opendaylight.projects.setup
  OpenDaylight.org
    BrandingInfo
    Global Variables
    User Preferences
      UserPreferences
        net.sf.clipscore
        org.eclipse.compare
        org.eclipse.egit.core
        org.eclipse.egit.ui
        org.eclipse.jdt.core
        org.eclipse.jdt.ui
        org.eclipse.m2e.core
          eclipse.m2.autoUpdateProjects = true
          eclipse.m2.globalSettingsFile = ${git.clone.opendaylight.odlparent.location}/settings.xml
          eclipse.m2.WorkspacelifecycleMappingsLocation = ${workspace.location}/.metadata/.plugins/org.eclipse.m2e.core/lifecycle-mapping-metadata.xml
        org.eclipse.oomph.setup.ui
        org.eclipse.oomph.ui
        org.eclipse.ui
        org.eclipse.ui.ide
        org.eclipse.wst.xml.core
        org.infiniserv.eclipse
        JavaSE-1.8 = ${jre.location-1.8}
        Eclipse Ini -Xmx2048m
        Eclipse Ini -XX:MaxPermSize512m
        Eclipse Ini -Declipse.m2.stats.allow=true
        Resource Creation ${workspace.location[uri]}/.metadata/.plugins/org.eclipse.jdt.ui/dialog_settings.xml
        Resource Creation ${workspace.location[uri]}/.metadata/.plugins/org.eclipse.m2e.core/lifecycle-mapping-metadata.xml
        eclipse.target.platform (default: Neon)
      P2 Director
        ssh://${opendaylight.user.id}@git.opendaylight.org:29418/odlparent.git (${scope.project.stream.name})
        Workspace
        Resource Creation configuration/.settings/org.eclipse.ui.ideprefs
        Text Modify configuration/config.ini
        YANG IDE Target Platform
      aaa
        ssh://${opendaylight.user.id}@git.opendaylight.org:29418/aaa.git (${scope.project.stream.name})
        Maven Import
        Working Sets (aaa)
          master
        alto
        atrium
        bgpcep
        capwap
        cardinal
        sentinel

```



File Edit Navigate Search Project Run Window Help

# When adding projects here,  
# and add a <project href=". . .".

aaa  
alto  
atrium  
bgpcep  
capwap  
cardinal  
centinel  
controller  
didm  
dlux  
docs  
faas  
genius  
groupbasedpolicy  
integration/distribution  
integration/packaging  
integration/test  
iotdm  
l2switch  
lacp  
lispflowmapping  
mdsal  
natapp  
nemo  
netconf  
netide  
netvirt  
neutron  
next  
nic  
ocppplugin  
odlpARENT  
of-config  
ofextensions  
openflowjava  
openflowplugin  
ovsdb  
packetable  
sdninterfaceapp

```

package org.opendaylight.eclipse.setup.generator

import com.google.common.base.Charsets

class ProjectsSetupGenerator {

    def generateProjectSetup(String projectName) {
        <?xml version="1.0" encoding="UTF-8"?>
        <!-- This file is auto-generated by ProjectsSetupGenerator, please do not
            change it -->
        <setup:Project
            xmi:version="2.0"
            xmlns:xmi="http://www.omg.org/XMI"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:git="http://www.eclipse.org/oomph/setup/git/1.0"
            xmlns:maven="http://www.eclipse.org/oomph/setup/maven/1.0"
            xmlns:predicates="http://www.eclipse.org/oomph/predicates/1.0"
            xmlns:setup="http://www.eclipse.org/oomph/setup/1.0"
            xmlns:setup.workingsets="http://www.eclipse.org/oomph/setup/workingsets"
            xsi:schemaLocation="http://www.eclipse.org/oomph/setup/git/1.0 http://
                name="<>${projectName}</>">
            <setupTask
                xsi:type="git:GitCloneTask"
                id="git.clone.opendaylight.<>${validId(projectName)}</>"
                remoteURI="ssh://${opendaylight.user.id}@git.opendaylight.org:29418"
                location="${installation.location/git/}<>${projectName}</>">
                <description>git clone git.opendaylight.org:29418/<>${projectName}</desc
            </setupTask>
            <setupTask
                xsi:type="maven:MavenImportTask"
                id="import.maven"
                projectNameTemplate="[groupId].[artifactId]"
                <sourceLocator
                    rootFolder="${git.clone.opendaylight.<>${validId(projectName)}.locate
                    locateNestedProjects="true"/>
            </setupTask>
            <setupTask
                xsi:type="setup.workingsets:WorkingSetTask">
                <workingSet
                    name="<>${projectName}</>">
                    <predicate
                        xsi:type="predicates:LocationPredicate"
                        pattern="${git.clone.opendaylight.<>${validId(projectName)}.locati

```

<?xml version="1.0" encoding="UTF-8"?>  
 <!-- This file is auto-generated by ProjectsSetupGenerator, please do not  
 <setup:Project  
 <xmi:version="2.0"  
 <xsi:type="http://www.omg.org/XMI"  
 <xsi:type="http://www.w3.org/2001/XMLSchema-instance"  
 <xsi:type="http://www.eclipse.org/oomph/setup/git/1.0"  
 <xsi:type="http://www.eclipse.org/oomph/setup/maven/1.0"  
 <xsi:type="http://www.eclipse.org/oomph/predicates/1.0"  
 <xsi:type="http://www.eclipse.org/oomph/setup/1.0"  
 <xsi:type="http://www.eclipse.org/oomph/setup/workingsets"  
 <xsi:schemaLocation="http://www.eclipse.org/oomph/setup/git/1.0 http://  
 <name="aaa">  
 <setupTask  
 <xsi:type="git:GitCloneTask"  
 <id="git.clone.opendaylight.aaa"  
 <remoteURI="ssh://\${opendaylight.user.id}@git.opendaylight.org:29418"  
 <location="\${installation.location/git/}aaa</location>">  
 <description>git clone git.opendaylight.org:29418/aaa</description>  
 </setupTask>  
 <setupTask  
 <xsi:type="maven:MavenImportTask"  
 <id="import.maven"  
 <projectNameTemplate="[groupId].[artifactId]">  
 <sourceLocator  
 <rootFolder="\${git.clone.opendaylight.<>\${validId(projectName)}.locate  
 <locateNestedProjects="true"/>">  
 </sourceLocator>  
 </setupTask>  
 <setupTask  
 <xsi:type="setup.workingsets:WorkingSetTask">  
 <workingSet  
 <name="aaa">  
 <predicate  
 <xsi:type="predicates:LocationPredicate"  
 <pattern="\${git.clone.opendaylight.<>\${validId(projectName)}.locati  
 </pattern>">  
 </predicate>  
 </workingSet>  
 </setupTask>  
 <stream name="master"/>  
 <logicalProjectContainer  
 <xsi:type="setup:ProjectCatalog"  
 <href="..../org.opendaylight.projects.setup/aaa.setup">  
 </logicalProjectContainer>  
 </setup:Project>

Infinitest is waiting for changes

Writable

Insert

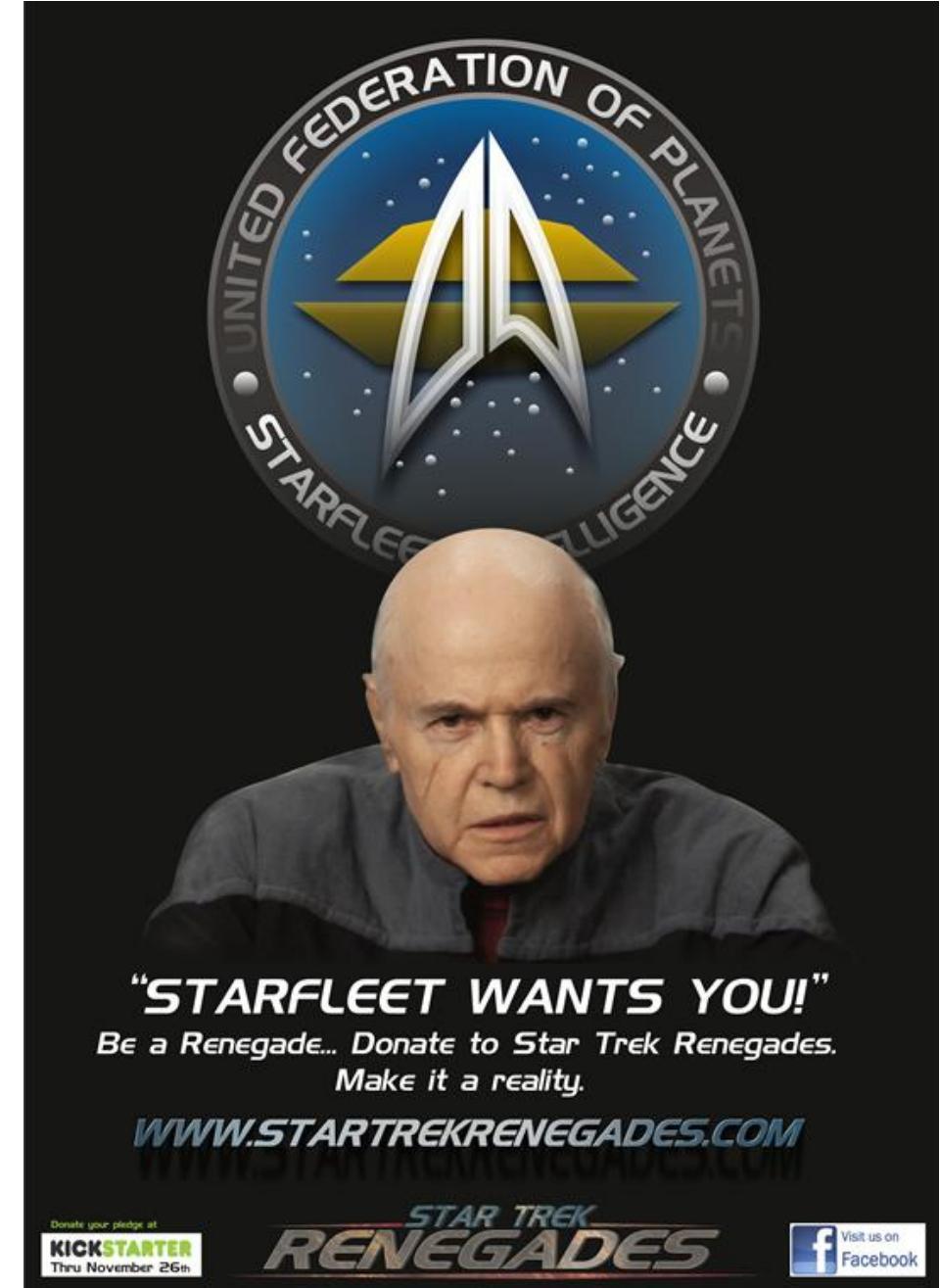
1:1

528M of 899M

# Contribute!



Eclipse Setup Models project is FLOSS.  
Like everything else in OpenDaylight.  
Now more easily than ever before:  
**You** can contribute too!



**"STARFLEET WANTS YOU!"**  
Be a Renegade... Donate to Star Trek Renegades.  
Make it a reality.

[WWW.STARTREKRENEGADES.COM](http://WWW.STARTREKRENEGADES.COM)

STAR TREK  
**RENEGADES**

Donate your pledge at  
**KICKSTARTER**  
Thru November 26th

Visit us on Facebook

# HOT Status

VS JVM hot code replacement (HCR), with karaf -debug?

1. Limitations! Really only swaps method bodies.
2. WS vs. JAR out-of-sync

Others? See list on <https://github.com/vorburger/hotea ..>  
IMHO, simple bundle classes reload is best.  
OSGi is dynamic! (Theory VS Practice)

- OK simplistic hello world bundle with Activator
- OK? UnsupportedOperationException handleChangedClass  
[https://bugs.opendaylight.org/show\\_bug.cgi?id=2855](https://bugs.opendaylight.org/show_bug.cgi?id=2855)  
<https://git.opendaylight.org/gerrit/#/c/40514/>
- NOK DynamicMBeanWithInstance attributes .
- NOK more TBD?

