Projects

Table of Contents

- Project Dependencies
  - Silicon
  - Aluminum
  - Magnesium
- Projects
  - Kernel Projects
  - Protocol Projects
  - App Projects
  - Service Projects
  - Support Projects
  - Archived Projects

Project Dependencies

Silicon

OpenDaylight Project Dependencies

Aluminum
**Magnesium**

**Projects**

<table>
<thead>
<tr>
<th>Project</th>
<th>Quick Description</th>
<th>PTL</th>
<th>Docs</th>
</tr>
</thead>
</table>

**OpenDaylight Dependencies**

- odiparent
- yangtools
- mdsal
- controller
- infrautis
- aaaa
- serviceutis
- netconf
- openflowplugin
- daexim

**OpenDaylight Managed Project Dependencies**

- odiparent
- yangtools
- mdsal
- controller
- infrautis
- aaaa
- serviceutis
- netconf
- openflowplugin
- daexim

**Projects**

<table>
<thead>
<tr>
<th>Project</th>
<th>Quick Description</th>
<th>PTL</th>
<th>Docs</th>
</tr>
</thead>
</table>
## Kerne I Proje cts

<table>
<thead>
<tr>
<th>AAA</th>
<th>Authentication, Authorization, and Accounting (AAA) ODL Project</th>
<th>Robert Varga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archetypes</td>
<td>This project hosts OpenDaylight example project templates, initially in the form of Maven archetypes.</td>
<td>Michael Vorburer</td>
</tr>
<tr>
<td>Infrastructure Utilities</td>
<td>This project offers technical utilities and infrastructures for other projects to use.</td>
<td>Faseel a K</td>
</tr>
<tr>
<td>MD-SAL</td>
<td>The Model-Driven Service Adaptation Layer (MD-SAL) is a message-bus inspired extensible middleware component that provides messaging and data storage functionality based on data and interface models defined by application developers (i.e. user-defined models).</td>
<td>Robert Varga</td>
</tr>
<tr>
<td>ODL Root Parent</td>
<td>ODL Root Parent provides common settings for all the projects participating in simultaneous release. ODL Root Parent Project contains a POM that includes common external dependencies, distribution management, plugin management, repository information, etc that is common to all the projects. This POM has only defaults which other projects will inherit if the defaults are not specified.</td>
<td>Robert Varga</td>
</tr>
<tr>
<td>Controller</td>
<td>OpenDaylight Controller is a Java-based, the model-driven controller using YANG as its modeling language for various aspects of the system and applications and with its components serves as a base platform for other OpenDaylight applications.</td>
<td>Robert Varga</td>
</tr>
<tr>
<td>Plastic</td>
<td>Plastic is a model-to-model transformation library supporting northbound and southbound payloads</td>
<td>Allan Clarke</td>
</tr>
<tr>
<td>ServiceUtilities</td>
<td>ServiceUtilities is an infrastructure project for OpenDaylight aimed at providing utilities that will assist in the Operation and Maintenance of different services provided by OpenDaylight. A service is a functionality provided by the ODL controller as seen by the operator. These services can be categorized as Networking services, e.g. L2, L3/VPN, NAT, etc., and Infra services, e.g. Openflow. These services are provided by different ODL projects like Netvirt, Genius, and Openflowplugin and are comprised of a set of Java karaf bundles and associated MD-SAL datastores.</td>
<td>Faseel a K</td>
</tr>
<tr>
<td>YANG Tools</td>
<td>YANG Tools is an infrastructure project aiming to develop necessary tooling and libraries providing support of NETCONF and YANG for Java (JVM-language based) projects and applications, such as Model-Driven SAL for Controller (which uses YANG as its modeling language) and Netconf / OFConfig plugins.</td>
<td>Robert Varga</td>
</tr>
</tbody>
</table>

## Protoc ol Proje cts

| BGP LS  | The OpenDaylight controller provides an implementation of BGP (RFC 4271) as a south-bound protocol plugin and a north-bound REST /JAVA API. | Robert Varga |
| PCEP | | |
| Genius | The genius project provides Generic Network Interfaces, Utilities & Services. Any ODL application can use these to achieve interference-free co-existence with other Applications using Genius. | Hema Gopalkrishnan |
| NETCONF | NETCONF is an XML-based protocol used for configuration and monitoring devices in the network. The base NETCONF protocol is described in RFC-6241. | Jamo Luhrsena |
| LISP Flow Mapping | The Lisp Flow Mapping service provides LISP Mapping System services. This includes LISP Map-Server and LISP Map-Resolver services, to store and serve the mapping data to data plane nodes as well as to OpenDaylight applications. | Lori Jakab |
| OpenFlow Plugin | | Arunprakash D |
| OVSDB Integration | The OVSDB project of OpenDaylight provides southbound plugins to manage OVS devices. | Chetan Araker Gowdru |
| P4 Plugin | P4 Plugin is used to make the controller be able to work in conjunct with P4 targets. It will provide basic functions, such as channel, device management, table management, and packet processing and etc. | Han Jie |
| Transport PCE | TransportPCE primary function is to control an optical transport (WDM or OTN) infrastructure using a non-proprietary South Bound Interface. Currently, the project supports NETCONF devices relying on the OpenROADM MSA specifications. | Gilles Thouennon |

## App Proje cts
<table>
<thead>
<tr>
<th>Daexim</th>
<th>Data Export/Import provides RPCs to request the bulk transfer of ODL system data between data stores and the local file system.</th>
<th>Shaleen Saxena</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>FaaS</td>
<td>FaaS project aims to create a common abstraction layer on top of a physical network, so northbound API or services can be easier to be mapped onto the physical network as concrete device configuration.</td>
<td>Xingjun Chu</td>
<td>Link</td>
</tr>
<tr>
<td>JSONRPC</td>
<td>JSON RPC 2.0 aims to provide a binding for ODL Datastore, RPC, and Notification operations and map them onto JSON RPC 2.0 calls over ZMQ and HTTP(S) transports.</td>
<td>Anton Ivanov</td>
<td>Link</td>
</tr>
<tr>
<td>NetVirt</td>
<td>Netvirt is a Network Virtualization application developed on OpenDaylight consisting of modular sub-services such as L2(ELAN), L3 (L3VPN), ACL, NAT, DHCP, IPv6 Control, and more.</td>
<td>Karthik Krishnan</td>
<td>Link</td>
</tr>
<tr>
<td>Neutron Northbound</td>
<td>The neutron northbound project is focused on the communication from the ODL drivers in OpenStack to the ODL neutron service and saves the neutron models into ODL data store for other providers to use.</td>
<td>Achuth Maniyedath</td>
<td>Link</td>
</tr>
<tr>
<td>Service Automation Framework</td>
<td></td>
<td>Prem Sankar G</td>
<td></td>
</tr>
<tr>
<td>Unimgr</td>
<td>The User Network Interface (UNI) Manager project within OpenDaylight provides data models and APIs that enable software applications and service orchestrators to configure and provision connectivity services; in particular, Carrier Ethernet services as defined by MEF Forum, in physical and virtual network elements.</td>
<td>Donald Hunter</td>
<td>Link</td>
</tr>
<tr>
<td>Support Projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td>This project is responsible for managing the OpenDaylight documentation at <a href="https://docs.opendaylight.org">https://docs.opendaylight.org</a> and any other relevant materials related to project documentation.</td>
<td></td>
<td>Link</td>
</tr>
<tr>
<td>Integration/Distribution</td>
<td>The project to integrate artifacts from all Java-based ODL projects into a common Karaf distribution.</td>
<td>Luis Gomez</td>
<td>Link</td>
</tr>
<tr>
<td>Integration/Packaging</td>
<td>Packaging and Deployment support, including packages (RPMs), configuration management tools (Ansible, Puppet) and pre-built images (containers, Vagrant base boxes).</td>
<td>Anil Belur</td>
<td>Link</td>
</tr>
<tr>
<td>Integration/Test</td>
<td>Project for all the system test code and system test tools (test tools that are specific to ODL but not specific to a particular ODL project and do not need to concern themselves with changing internal APIs of an ODL project</td>
<td>Jarno Luhrsen</td>
<td>Link</td>
</tr>
<tr>
<td>ODLGuice</td>
<td>Move the Guice dependencies from infra-utils into a separate project to enable consumption in the rest of ODL.</td>
<td>Tejas Nevrekar</td>
<td></td>
</tr>
<tr>
<td>ODLMicro</td>
<td>Run a typical OpenDaylight SDN component such as NETCONF or OpenFlowPlugin without requiring the Apache Karaf OSGi runtime container.</td>
<td>Tejas Nevrekar</td>
<td></td>
</tr>
<tr>
<td>ODL Tools</td>
<td>OpenDaylight tools that may be useful in troubleshooting, monitoring, and analyzing OpenDaylight and its deployments.</td>
<td>Tim Rozet</td>
<td>Link</td>
</tr>
<tr>
<td>RelEng/Autorelease</td>
<td>The Release Engineering - Autorelease project is targeted at building the artifacts that are used in the release candidates and final full release.</td>
<td>Anil Belur</td>
<td>Link</td>
</tr>
<tr>
<td>RelEng/Builder</td>
<td>The Release Engineering - Builder project is targeted at hosting the scripts and information needed for building up VM images and creating jobs in Jenkins as well as build pipelines.</td>
<td>Anil Belur</td>
<td>Link</td>
</tr>
</tbody>
</table>

**Archived Projects**

- Affinity Metadata Service
- Alt-datastores
- ALTO
- Ansible
- Armoury
- Atrium
- BIER
- BIER App
- CAPWAP
• Cardinal
• Centinel
• COE
• Controller Core Functionality Tutorials
• Controller Shield
• Defense4All
• DetNet
• DIDM
• Discovery
• DLUX
• EMAN
• Federation
• Group Based Policy (GBP)
• Honeycomb/VBD
• IoTDM
• Kafka Producer
• L2 Switch
• LACP
• Messaging4Transport
• NATApp Plugin
• NEMO
• NetIDE
• Network Intent Composition
• NeXi
• OCP Plugin
• ODL-SDNi App
• OF-CONFIG
• OpenDaylight OFextensions Circuitsw
• OpenDaylight SDN Controller Platform (OSCP)
• OpenDaylight Toolkit
• OpenDOVE
• Openflow Protocol Library
• OpFlex
• Packaging archive proposal
• PacketCablePCMM
• Persistence
• Puppet archive proposal
• Reservation
• SecureNetworkBootstrapping
• Service Function Chaining
• SNMP4SDN
• SNMP Plugin
• Southbound plugin to the OpenContrail platform
• Spectrometer
• SXP
• SystemMetrics
• Table Type Patterns
• TCPMD5
• Telemetry
• Topology Processing Framework
• TSDR
• USC
• VPNService
• VTN
• YangIDE
• YANG PUBSUB