

# Genius

## Welcome to Genius

- [Welcome to Genius](#)
- [Introduction](#)
- [Documentation](#)
- [Release Planning and Release Notes](#)
- [Miscellaneous](#)
- [Existing Code base](#)

## Introduction

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. In the the first phase (ODL-Boron time frame), Genius would provide following modules --

- Modules providing a common view of Network interfaces for different services
  - **Interface (logical port) Manager**
    - *Allows bindings/registration of multiple services to logical ports/interfaces*
    - *Ability to plugin different types of southbound protocol renders.*
  - **Overlay Tunnel Manager**
    - *Creates and maintains overlay tunnels between configured TEP's.*
- Modules providing commonly used functions as shared services to avoid duplication of code and waste of resources.
  - **Aliveness Monitor**
    - *Provides tunnel/next-hop aliveness monitoring services*
  - **ID Manager**
    - *Generates persistent unique integer IDs*
  - **MD-SAL Utils**
    - *Provides common generic APIs for interaction with MD-SAL*

## Documentation

- Please head over to our official documentation to [Genius Overview](#)

Getting Started

### Getting Started for Users

[Genius User Guide](#)

For genius overview, please refer documentation section.

### Getting Started for Developers

[Genius Design doc](#)

Committers typically do not review changes with build failures; it is the Gerrit Owner's responsibility to get them to build. If you're facing build issues you don't know how to solve, email the app-dev list asking for help (don't just wait and expect committers to notice your proposed change and help you fix its build).

Feel free to email the app-dev list after 1 week of no movement on a (green ticked build passing) Gerrit.

### Getting Started for Committers

We do not "self merge" our own changes, but add other committers as reviewers. The first reviewing committer will +1, the second reviewing committer will +2. Any other committers can merge proposed changes with at least x2 +1 from contributors.

The one exception to the rule is that we allow self merging critical changes required to unblock broken builds.

If you've been added as a Reviewer to a change you don't feel comfortable reviewing, or don't anticipate to have the time to review within say 1 week, then you may want to remove yourself from the review, ideally with a short comment, to signal that to the owner, so that he can find others willing to review (or make changes to significantly simplify or further extensively document and re-add), instead of "doing nothing" and letting reviews "linger" for too long with no action.

## Project Facts

Project Creation Date: March 24, 2016

Lifecycle Status: Incubation

Type: Protocol

Primary Contact: [Hema Gopalakrishnan](#)

Project Lead: [Hema Gopalakrishnan](#)

Committers:

- [Hema Gopalakrishnan <hema.gopalakrishnan@ericsson.com>](#)
- [Faseela <k.faseela@gmail.com>](#)

Emeritus Committers:

- [@Vivek Srivatsa <vivek.v.srivastava@ericsson.com>](#)
- [@Vishal Thapar <vthapar@redhat.com>](#)
- [@Sam Hague <shague@redhat.com>](#)
- [@David Suarez Fuentes <david.suarez.fuentes@gmail.com>](#)
- [@Michael Vorburger <vorburger@redhat.com>](#)
- [@Andre Fredette <anfredette@gmail.com>](#)
- [@Brady Allen Johnson <bjohnson@inocybe.ca>](#)
- [Sasidharan S <sasidharan.s.sambasivam@ericsson.com>](#)
- [@Yi Y Yang <yi.y.yang@intel.com>](#)

IRC: [freenode.net](#)  
[#opendaylight-genius](#)

Mailing List: [app-dev@lists.opendaylight.org](mailto:app-dev@lists.opendaylight.org)

Archives: [mailing list archives](#)

Meetings: See [Community Meetings](#)

Repository: [git clone https://git.opendaylight.org/gerrit/genius](https://git.opendaylight.org/gerrit/genius)

Jenkins: [Genius Jenkins Silo](#)

Trello Board: [Genius Trello Board](#)

Gerrit Patches: [code patches /reviews](#)

Open Bugs:

- [Report Bug](#)
- [Open Bugs](#)

We aim to [review all pending Gerrits which have passed Verify and have no merge conflicts and no -1/-2 \(and only those\)](#) in the weekly meeting. We ignore pending Gerrits which are not Verify. (Here are those [with -1/-2 reviews.](#))

We occasionally review the list of [all pending very old Gerrits which may be should and can be abandoned](#) (or need to poke people).

## Release Planning and Release Notes

Release	Release Plan	Release Notes	Release Review	Installation Guide	User Guide	Developer Guide	Testplan	How-To's /Tutorials
Boron	<a href="#">Release Plan</a>	<a href="#">Release Note</a>	<a href="#">Release Review</a>	-	<a href="#">Genius User Guide</a>	<a href="#">Genius Design doc</a>	<a href="#">Boron Test Plan</a>	-
Carbon	<a href="#">Release Plan</a>	-	<a href="#">Release Review</a>	-	<a href="#">Genius User Guide</a>	<a href="#">Genius Design doc</a>	<a href="#">Carbon Test Plan</a>	-
Nitrogen	<a href="#">Release Plan</a>	-	-	-	<a href="#">Genius User Guide</a>	<a href="#">Genius Design doc</a>	<a href="#">Nitrogen Test Plan</a>	-
Oxygen	<a href="#">Release Plan</a>	-	-	-	<a href="#">Genius User Guide</a>	<a href="#">Genius Design doc</a>	<a href="#">Oxygen Test Plan</a>	-
Fluorine	<a href="#">Release Plan</a>	<a href="#">Release Note</a>	-	-	<a href="#">Genius User Guide</a>	<a href="#">Genius Design doc</a>	-	-
Neon	-	-	-	-	-	-	-	-
Sodium	-	-	-	-	-	-	-	-
Magnesium	-	-	-	-	-	-	-	-
Aluminium	-	-	-	-	-	-	-	-

## Miscellaneous

- For additional design and testing documents please head over to [Genius:Documenatation](#)
- Please head over to our official documentation to [Genius:Sharding evolution](#)
- Please head over to our official documentation to [App co-existence with Genius](#)

## Existing Code base

Genius project will leverage codebase from existing 'vpnservice' project available Opendaylight, to be specific following modules will be used.

<b>Interface Manager</b>	<a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=interfacemgr;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=interfacemgr;hb=HEAD</a>
<b>Overlay Tunnel Manager</b>	<a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=itm;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=itm;hb=HEAD</a>
<b>Aliveness monitor</b>	<a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=alivenessmonitor;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=alivenessmonitor;hb=HEAD</a>
<b>ID Manager</b>	<a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=idmanager;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=idmanager;hb=HEAD</a>
<b>MD-SAL Utils</b>	<a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=mdsalutil;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnservice.git;a=tree;f=mdsalutil;hb=HEAD</a>