Welcome to Genius

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 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 <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

Archives: mailing list archives

Meetings: See Community Meetings

Repository: git clone 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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>Release Plan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Genius User Guide</td>
<td>Genius Design doc</td>
<td>Nitrogen Test Plan</td>
<td>-</td>
</tr>
<tr>
<td>Oxygen</td>
<td>Release Plan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Genius User Guide</td>
<td>Genius Design doc</td>
<td>Oxygen Test Plan</td>
<td>-</td>
</tr>
<tr>
<td>Fluorine</td>
<td>Release Plan</td>
<td>Release Note</td>
<td>-</td>
<td>-</td>
<td>Genius User Guide</td>
<td>Genius Design doc</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neon</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Magnesium</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aluminium</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Miscellaneous

- For additional design and testing documents please head over to Genius:Documentation
- 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 ‘vpn service’ project available OpenDaylight, to be specific following modules will be used.

<table>
<thead>
<tr>
<th>Module</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface Manager</td>
<td><a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=interfacemgr;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=interfacemgr;hb=HEAD</a></td>
</tr>
<tr>
<td>Overlay Tunnel Manager</td>
<td><a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=itm;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=itm;hb=HEAD</a></td>
</tr>
<tr>
<td>Aliveness monitor</td>
<td><a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=alivenessmonitor;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=alivenessmonitor;hb=HEAD</a></td>
</tr>
<tr>
<td>ID Manager</td>
<td><a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=idmanager;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=idmanager;hb=HEAD</a></td>
</tr>
<tr>
<td>MD-SAL Utils</td>
<td><a href="https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=mdsalutil;hb=HEAD">https://git.opendaylight.org/gerrit/gitweb?p=vpnsvr.git;a=tree;f=mdsalutil;hb=HEAD</a></td>
</tr>
</tbody>
</table>