Genius: Carbon:Release Review

Contents

- 1 Contents
- 2 Project Name
- 3 Features
- 3.1 New features and enhancements added in Carbon
- 4 Non-Code Aspects (user docs, examples, tutorials, articles)
- 5 Architectural Issues
- 6 Security Considerations
- 7 Quality Assurance (test coverage, etc)
 - 7.1 Test Coverage
 - o 7.2 CSIT
- 8 End-of-life (API/Features EOLed in Release)
- 9 Bugzilla (summary of bug situation)
- 10 Standards (summary of standard compliance)
- 11 Schedule (initial schedule and changes over the release cycle)

Project Name

• Genius (GEneric Network Interface Utilities and Services)

Features

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. OpendayLight Carbon Genius provides following modules --

- 1. Interface (logical port) Manager allows bindings/registration of multiple services to logical ports/interfaces
- 2. Overlay Tunnel Manager (ITM) creates and maintains overlay tunnels between configured tunnel endpoints
- 3. Aliveness Monitor provides tunnel/nexthop aliveness monitoring services
- 4. ID Manager generates cluster-wide persistent unique integer IDs
- 5. MD-SAL Utils provides common generic APIs for interaction with MD-SAL
- 6. Resource Manager provides a resource sharing framework for applications sharing common resources e.g. table-ids, group-ids etc.
- 7. FCAPS Application generates various alarms and counters for the different genius modules
- 8. FCAPS Framework module collectively fetches all data generated by fcaps application. Any underlying infrastructure can subscribe for its events to have a generic overview of the various alarms and counters

Features URL: https://git.opendaylight.org/gerrit/gitweb?p=genius.git;a=blob_plain;f=features/src/main/features/features.xml

- Feature Name: odl-genius-rest
 - 1. Provides all functionalities provided by genius modules.
 - 2. Top Level: Yes, User Facing: Yes, Experimental: No
- Feature Name: odl-genius-ui
 - 1. Adds dlux ui on top of genius features
 - 2. Top Level: Yes, User Facing: Yes, Experimental: No
- Feature Name: odl-genius-fcaps-application
 - 1. includes genius FCAPS application
 - 2. Top Level: Yes, User Facing: Yes, Experimental: Yes
- Feature Name: odl-genius-fcaps-framework
 - 1. includes FCAPS framework
 - 2. Top Level: Yes, User Facing: yes, Experimental: Yes

CSIT Test: https://jenkins.opendaylight.org/sandbox/job/genius-csit-1node-genius-all-carbon/

New features and enhancements added in Carbon

Planned new features added -

- 1. ITM: OF-based tunnels
- 2. ITM: TEP auto config
- 3. IFM:Service binding on tunnel interfaces (partially complete)

Unplanned new features added (needed by Netvirt Project)

1. Load balancing and high availability of VxLAN tunnels

Enhancements added to existing features/services

- 1. Interface manager: Increase max services bind on an interface to 16
- 2. ITM to support same TEP in multiple Transport Zones

3. Bug Fixes

Enhancements added to project

- 1. Migration to Blueprint
- 2. Checkstyle enforcement
- 3. IT framework enhancements
- 4. Junits and CSIT enhancements

Non-Code Aspects (user docs, examples, tutorials, articles)

- Overview
- User Guide
- Developer Guide
- Installation Guide
- Postman collection for the sample APIs
- Carbon Test Plan
- Release Note

Architectural Issues

• There are no architectural issues.

Security Considerations

• There are no security issues found.

Quality Assurance (test coverage, etc)

Test Coverage

Unit Test

CSIT

• https://jenkins.opendaylight.org/sandbox/job/genius-csit-1node-genius-all-carbon/

End-of-life (API/Features EOLed in Release)

N/A

Bugzilla (summary of bug situation)

Standards (summary of standard compliance)

N/A

Schedule (initial schedule and changes over the release cycle)

· Project was on schedule.