Beryllium: Release Review

OpenDaylight OVSDB:Beryllium Release Review

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Project Name

OVSDB NetVirt

Features

Beryllium marked the fourth release of the OVSDB NetVirt project. The release delivers increased code and testing coverage and improved network virtualization integration with OpenStack.

Release Deliverables

- · Code quality, stability and usability
- Remove deprecated AD-SAL APIs
- Netvirt updates for flow optimizations and config migration
- ODL SFC and OPNFV SFC integration, application pipeline coexistence
- Increased Neutron parity by adding Security Groups and Metadata support
- Enhanced L3 DVR functionality
- Hardware VTEP southbound support
- Open_vSwitch southbound support for QoS and Queue
- Clustering/HA/Persistence support
- DPDK enhancements to the Southbound and NetVirt to support DPDK

Experimental Deliverables

Experimental support is added for the following features:

- Clustering using the openflowplugin-li plugin. The feature is odl-ovsdb-openstack-clusteraware.
- Network Virtualization DLUX user interface. The feature is the odl-ovsdb-ui.

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

- Release notes
- OVSDB Tutorial
- ovsdbtutorial15_2.ova
- Tutorial Presentation on YouTube

ASCII doc gerrits

- OVSDB Developer Guide
- QoS and Queue

Architectural Issues

OpenStack SFC integration requires a workaround when used with the current NSH OVS implementation as described in VTEP Workaround for OpenStack Instantiated VMs

Security Considerations

No known issues.

Quality Assurance (test coverage, etc)

Every module in the OVSDB project has UT, IT and system test coverage.

- Sonar: UT: 14.5%, IT: 35.7% there is an issue with the jacoco instrumentation not being able to accurately report statistics from bundles using certain versions of powermock.
- · System test is covered via a variety of testing:
 - $^{\circ}\,$ via the OpenStack upstream which runs tempest tests against the latest OpenDaylight Lithium release.
 - o numerous CSIT tests for the Southbound and NetVirt. The tests also exercise teh clustering support.

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

N/A

Bugzilla (summary of bug situation)

No blocker bugs.

OVSDB NetVirt Open Bugs

- 25% of bugs are related to clustering. OVSDB NetVirt has support for the both openflowplugin versions so the bugs need to be triaged further to eliminate duplicates.
- 25% bugs are related to controller restart and reconciliation
- 25% are new feature requests to be looked at in boron
- 25% valid bugs mainly around cleanup and corner cases

Standards (summary of standard compliance)

- OpenFlow v1.3
- RFC7047: The Open vSwitch Database Management Protocol
- OpenStack Neutron ML2 Plugin

Schedule (initial schedule and changes over the release cycle)

Beryllium Release Plan