

NeutronNorthbound: Boron Release Notes

Major Features

Ideally less than 10 bullets.

- New yang models for neutron API and northbound RESTCONF(Only frontend. actual backend implementation is up to openstack service provider like netvirt, gbp, vtn...)
- neutron L2GW API(model and northbound)
- neutron networking-SFC API(model and northbound)
- neutron QoS API(model and northbound)
- neutron port-security extension(model and northbound)
- hostconfig for neuron portbinding(model only)
- extension for neutron capability discovery(model only)
- neutron-logger feature for debug/monitoring(new feature)

Target Environment

For Execution

- No special requirement but normal.opendaylight java environment

For Development

- No special requirement but normal.opendaylight java environment

Known Issues and Limitations

- Particular known bugs and workarounds.
- Testing methodology. How extensive was it? What should be expected to work? What hasn't been tested as much?
- https://wiki.opendaylight.org/view/Weather#Neutron_Northbound_must_be_loaded_before_any_other_JAXB_feature Neutron Northbound must be loaded before any other JAXB feature
 - workaround: load odl-neutron-service before any other jaxb feature. typically in karaf case, featuresBoot in etc/org.apache.karaf.features.cfg will be edited so that featureBoot includes odl-neutron-service in early place
 - networking-odl/devstack includes this workaround
- https://bugs.opendaylight.org/show_bug.cgi?id=3423 Data missing from Neutron NB datastore
- https://bugs.opendaylight.org/show_bug.cgi?id=4527 Security Groups : For "Other Protocol" rule, NeutronSecurityRule.getSecurityRuleProtocol() is set to NULL
 - Discussion can be found at <https://lists.opendaylight.org/pipermail/release/2016-February/005502.html> and https://wiki.opendaylight.org/view/Weather#Bug_4527_Security_Groups:_For_22Other_Protocol.22_rule.2C_NeutronSecurityRule.getSecurityRuleProtocol.2829_is_set_to_NULL
 - The work around is don't use integer as protocol value. Only predefined protocol names are allowed.
- https://bugs.opendaylight.org/show_bug.cgi?id=4550 SecurityGroupCRUD is not updated when a security rule is created/delted

For more details

- https://bugs.opendaylight.org/buglist.cgi?bug_status=__open__&list_id=63410&order=Importance&product=neutron&query_format=specific
- <https://bugs.launchpad.net/networking-odl>

- QoS northbound API: In openstack Neutron in Newton cycle, the public API is being changed. Until its API free

Changes Since Previous Releases

Bugs Fixed in this Release

- updated yang models for neutron. which can be incompatible way.
- various fixes to address exceptions.

Migration from Previous Releases

- OpenStack version

It's recommended to use OpenStack Newton release which is planned to be released on Oct, 2016. Although OpenStack Mitaka would work, various fixes have been committed since Mitaka release.

- security group and protocol name/number

https://bugs.opendaylight.org/show_bug.cgi?id=4527 https://wiki.opendaylight.org/view/Weather#Bug_4527_Security_Groups:_For_22Other_Protocol.22_rule.2C_NeutronSecurityRule.getSecurityRuleProtocol.28.29_is_set_to_NULL With OpenStack Mitaka, only the small set of known protocol names are supported. With OpenStack Newton release, It's planned to support protocol number in addition to symbolic protocol name.

- possible build breakage as yang model change/fix.

Yang model in Neutron Northbound was updated in incompatible manner to fix the inconsistency with openstack Neutron API/Data model. This affects ODL openstack service providers that listens to those yang models. The patches are found at <https://git.opendaylight.org/gerrit/#/q/status:merged+project:neutron+branch:master+topic:yang-model-revise> The details information can be followed from https://wiki.opendaylight.org/view/Weather#Neutron_Northbound:_neutron_yang_model_revise_and_I.2AAware.28AD-SAL.29_interface_removal

The fixes were provided to ODL projects. netvirt, gbp, nic and vpnservice(It turned out that vtn didn't need fix. lispflowmapping disabled openstack support for boron cycle.) Those fixes are mostly trivial for developers. like renaming variables, appending getValue() to fix build breakage.

- I*Aware interface removal

The deprecated I*Aware AD-SAL interface was removed in Boron release. This affects ODL openstack service providers which used those interfaces. The code needs to be re-write so that it listens to the change on yang models of Neutron northbound and react on those data tree change notification. The details can be found at <http://docs.opendaylight.org/en/stable-boron/developer-guide/neutron-service-developer-guide.html> The patch to remove it can be found at <https://git.opendaylight.org/gerrit/#/c/35505/>

Compatibility with Previous Releases

- Incompatible yang model changes

Deprecated, End of Lived, and/or Retired Features/APIs

No deprecated one. The following two End of Lived(removed).

- I*Aware interfaces: End of Lived(removed)
- dummyprovider feature: End of Lived(removed). neutron-logger feature has been introduced as alternative for debug/monitoring