1. **Introduction.**

This document describes how to install PRISM Neutron Plugin with RHOSP15. Kulcloud PRISM is a software approach to abstract legacy L2 and IP routing/forwarding using Openflow and Linux. PRISM Neutron Plugin provides integration between Neutron and PRISM.

PRISM Neutron Plugin replaces the core plugin and router service plugin.

1. **Precondition**

* If you want to use PRISM Neutron plugin, you must have PRISM SDN Controller.
* If you want to use PRISM Neutron plugin, each OpenStack node must be connected to the Whitebox Switch that is managed PRISM SDN Controller.

1. **Installation using Red Hat containers**

The container image of Neutron server to which PRISM Neutron Plugin is applied can be downloaded with the following command.

|  |
| --- |
| docker pull registry.connect.redhat.com/kulcloud/rhosp15-openstack-neutron-server-prism-plugin |

When overcloud deploy, user has to modify the DockerNeutronApiImage and DockerNeutronConfigImage parameter to this container image in environment file

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|  |
| --- |
| parameter\_defaults:  ContainerImageRegistryLogin: true  ContainerImageRegistryCredentials:  registry.connect.redhat.com:  user: password  DockerNeutronApiImage: registry.connect.redhat.com/kulcloud/rhosp15-openstack-neutron-server-prism-plugin  DockerNeutronConfigImage: registry.connect.redhat.com/kulcloud/rhosp15-openstack-neutron-server-prism-plugin |

And add the following attribute to /etc/neutron/plugins/ml2/ml2\_conf.ini config file.

|  |
| --- |
| [nbapi]  server = {PRISM\_CONTROLLER\_IP\_ADDRESS}  port = {PRISM\_NBAPI\_PORT\_NUMBER} |

In the server attribute, enter the IP of PRISM SDN Controller server. (ex: 10.0.0.1)

In the port attribute, enter the port number of PRISM SDN Controller NBAPI port. (ex: 8181)

1. **Install manually**

The source code is published on git below.

|  |
| --- |
| git clone https://github.com/backguyn/rhosp15-neutron-prism-plugin.git |

After downloading the code, copy the kulcloud\_plugin.py file to below path:

|  |
| --- |
| cp kulcloud\_plugin.py {NEUTRON\_PATH}/plugins/ml2/ |

And copy the kulcloud\_l3\_router\_plugin.py file to below path:

|  |
| --- |
| cp  kulcloud\_l3\_router\_plugin.py  {NEUTRON\_PATH}/services/l3\_router/ |

Modify core\_plugin attribute in /etc/neutron/neutron.conf file as below.

|  |
| --- |
| core\_plugin=**neutron.plugins.ml2.kulcloud\_plugin.KulcloudMl2Plugin** |

Disable router service in the service\_plugins attribute in the /etc/neutron/neutron.conf and add the service as below:

|  |
| --- |
| service\_plugins=qos,segments,trunk,**neutron.services.l3\_router.kulcloud\_l3\_router\_plugin.KulcloudL3RouterPlugin** |

If the neutron service was running, restart the neutron-server.