



# **SDNVPN Colorado documentation**

*Release draft (f401139)*

**OPNFV**

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This document will give the user instructions on how to deploy the SDN VPN scenarios verified for the Colorado release of the OPNFV platform, using the Fuel installer.

A sister document covers installation using the APEX installer.



## INTRODUCTION

This document provides guidelines on how to install and configure the os-odl\_l2\_bgpvpn\_ha and os-odl\_l2\_bgpvpn\_ha scenarios of OPNFV including required software and hardware configurations.

Description of bgpvpn scenarios Internal transport tunnel mesh Install Neutron BGPVPN additions (networking-bgpvpn) Neutron odl additions (networking-odl) install and configure Quagga (incl. config on ODL side) configure OVS to connect to ODL and set up the right bridges (network architecture) set up iptables to allow connections between OVS and ODL set up HA proxy so that ODL can be reached





## HARDWARE REQUIREMENTS

### 2.1 Bare metal deployment on Pharos Lab

Hardware requirements for bare-metal deployments of the OPNFV infrastructure are specified by the Pharos project. The Pharos project provides an OPNFV hardware specification for configuring your hardware at: <http://artifacts.opnfv.org/pharos/docs/pharos-spec.html>.

### 2.2 Virtual deployment hardware requirements

To perform a virtual deployment of an OPNFV scenario on a single host, that host has to meet the hardware requirements outlined in the <missing spec>.



## PREPARING YOUR HOST TO INSTALL FUEL BY SCRIPT

Before starting the installation of the <scenario> scenario some preparation of the machine that will host the Fuel VM must be done.

### 3.1 Setting up the host

### 3.2 Installation of required packages



## FUEL SERVER INSTALLATION AND SCENARIO DEPLOYMENT

This section describes the installation of the OPNFV installation server (jumphost) as well as the deployment of the os-odl\_l2-bgpvpn-ha or os-odl\_l2-bgpvpn-noha OPNFV reference platform stack across a server cluster.

### 4.1 Preparation

clone fuel repo download opnfv iso create dea.yaml and dha.yaml based on existing examples from FUEL repo

### 4.2 Installation procedures

We describe several alternative procedures in the following.

#### 4.2.1 Full automatic jumphost installation and deployment

call deploy.sh with scenario string

#### 4.2.2 Automatic Fuel server installation and manual scenario deployment

call deploy.sh with -e option to only install FUEL server i.e. no platform deployment Log into Fuel web GUI and configure scenario options, including activation of SDN VPN feature PXE boot compute nodes from Fuel server Trigger deployment through web GUI

#### 4.2.3 Update Fuel server settings without re-installation

In case of having to change the jumphost settings without having to reinstall the whole jumphost, it is possible to call deploy.sh with the -f option, which will only update the settings without reinstalling the host, saving a lot of time.



## REFERENCES

### 5.1 OPNFV

1. OPNFV Home Page
2. OPNFV documentation- and software downloads

### 5.2 OpenStack

3. OpenStack Liberty Release artifacts
4. OpenStack documentation

### 5.3 OpenDaylight

5. OpenDaylight artifacts

### 5.4 Fuel

6. The Fuel OpenStack project
7. Fuel documentation overview
8. Fuel planning guide
9. Fuel quick start guide
10. Fuel operations guide
11. Fuel Plugin Developers Guide
12. Fuel OpenStack Hardware Compatibility List

### 5.5 Fuel in OPNFV

13. OPNFV Installation instruction for the Brahmaputra release of OPNFV when using Fuel as a deployment tool
14. OPNFV Build instruction for the Brahmaputra release of OPNFV when using Fuel as a deployment tool

15. [OPNFV Release Note for the Brahmaputra release of OPNFV when using Fuel as a deployment tool](#)



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