



# Open vSwitch for NFV

*Release draft (0a27666)*

**OPNFV**

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Welcome to OVSNFV's documentation!

OVSNFV is an OPNFV collaborative development project.

The OVSNFV project proposes:

- To modify the OPNFV build to include a deployment option for the software-accelerated userspace Open vSwitch build. This change will significantly improve the performance of the NFVI for network I/O.
- Future work to encompass collaborative development within the Open vSwitch project to improve the performance of the software-accelerated userspace Open vSwitch and increasing its suitability for Telco NFV deployments.



## OVSNFV GUIDES AND INSTALLATION

### 1.1 Installing OVSNFV Fuel Plugin

- On the Fuel UI, create a new environment.
- On the nodes' interface settings enable DPDK on the interface running the private network.
- In Settings > Other \* Enable “Install Openvswitch with NSH/DPDK” \* Enable “Install DPDK” \* Disable “Install NSH”
- Continue with environment configuration and deployment as normal.

#### 1.1.1 Upgrading the plugin

From time to time new versions of the plugin may become available.

The plugin cannot be upgraded if an active environment is using the plugin.

In order to upgrade the plugin:

- Copy the updated plugin file to the fuel-master.
- On the Fuel UI, reset the environment.
- On the Fuel CLI “fuel plugins -update <fuel-plugin-file>”
- On the Fuel UI, re-deploy the environment.





## OVSNFV GUIDES AND INSTALLATION

### 2.1 Open vSwitch

Open vSwitch (OVS) is a software switch commonly used in OpenStack deployments to replace Linux bridges as it offers advantages in terms of mobility, hardware integration and use by network controllers.

#### 2.1.1 Supported OPNFV Installers

Currently not all installers are supported.

##### Fuel Installer

OVSNFV project supplies a Fuel Plugin to upgrade DPDK enabled Open vSwitch on an OPNFV to 2.5.90.

##### Limitations

The same limitations that apply to using Fuel DPDK-enabled interfaces also apply when using this plugin. Including:

- Fuel9 OVS-DPDK support works only for VLAN segmentation.
- Only interfaces running the private network (and no other network) can be supported so each node needs a separate interface dedicated to the private network.
- The nodes with dpdk enabled interfaces will need to have hugepages configured and some cores reserved for dpdk.

##### Bugs



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CHAPTER  
**THREE**

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**INDICES**

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