

# Guide to the XenServer Plugin for Fuel 6.1

## Intro

This document will guide you through the steps of install, configure and use of the XenServer Plugin for Fuel

## Sections

## XenServer Plugin for Fuel 6.1

XenServer is an Open Source hypervisor with commercial support options provided by Citrix. This plugin provides a new Release definition in Mirantis OpenStack to allow easy installation of production environments based on XenServer with Fuel.

## Requirements

| Requirement               | Version/Comment |
|---------------------------|-----------------|
| Fuel                      | 6.1             |
| XenServer                 | 6.5 SP1         |
| XenServer plugin for Fuel | 1.0.0           |

- This plugin will not install XenServer or configure the Virtual Machines used to run the OpenStack services. Installation of XenServer and configuration of these Virtual Machines must be performed manually.
- Each hypervisor must have the same access credentials as Fuel does not support per-node settings.
- One Virtual Machine, which will be used to run Nova (the compute node), must exist on each hypervisor. This must be created as an HVM guest (in XenCenter, use the "Other Install Media" template) and configured to PXE boot from the PXE network used by Fuel.
- XenCenter is expected to be used to configure VMs, and is required by the HIMN tool in the installation steps
- Network 'br100' must exist on the XenServer hypervisors. This network will be added automatically to Virtual Machines and the compute nodes must have access to this network.

## Limitations

- The plugin is **only** compatible with OpenStack environments deployed with **Nova Network** as network configuration in the environment configuration options. The plugin will disable incompatible options when the XenServer Release is selected.

## Installation Guide

### Install the Plugin

To install the XenServer Fuel plugin:

1. Download it from the [Fuel Plugins Catalog](#)
2. Copy the *rpm* file to the Fuel Master node:

```
[root@home ~]# scp fuel-plugin-xenserver-1.0-1.0.0-1.noarch.rpm root@fuel-master:/tm
```

3. Log into Fuel Master node and install the plugin using the [Fuel CLI](#):

```
[root@fuel-master ~]# fuel plugins --install /tmp/fuel-plugin-xenserver-1.0-1.0.0-1.
```

4. Verify that the plugin is installed correctly:

```
[root@fuel-master ~]# fuel plugins
id | name | version | package_version
---|-----|-----|-----
9 | fuel-plugin-xenserver | 1.0.0 | 2.0.0
```

## Add Management Network tool

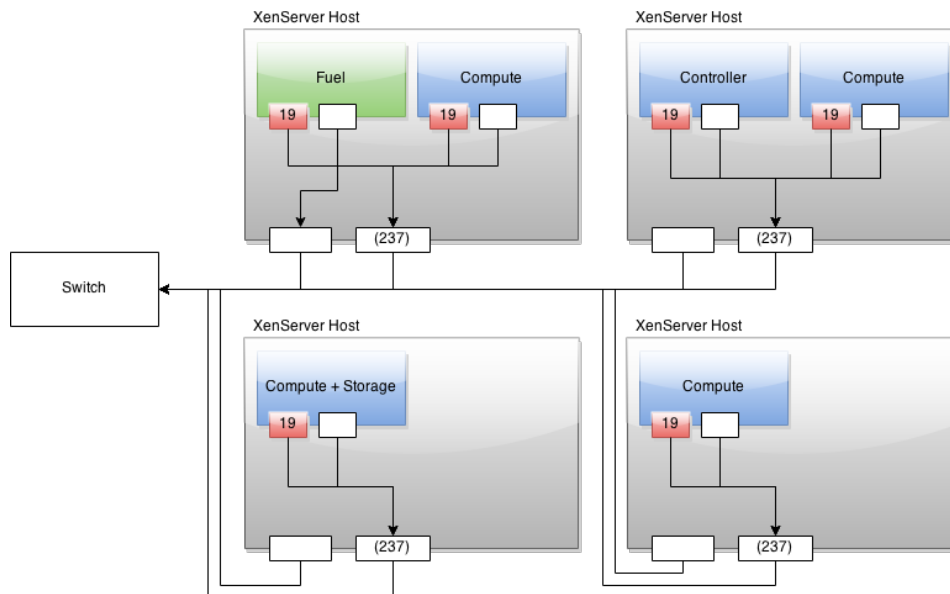
1. Download the [HIMN tool](#)
2. Stop XenCenter if it is running
3. Install the HIMN tool
4. Re-start XenCenter

## Xenserver Fuel Plugin User Guide

Once the Fuel XenServer plugin has been installed (following [Installation Guide](#)), you can create *OpenStack* environments that use XenServer as the underlying hypervisor

### Prepare infrastructure

1. Prepare a cluster of at least 4 XenServer machines with 2 physical NICs.
2. Download and install XenServer 6.5 with SP1 and HIMN tool as install guide mentioned. Use it for future VM creation and network configuration.
3. While many networking setups are expected to work, the following setup is recommended to use:
  - eth0 / "Access network": Used to access the XenServer hosts and Fuel Master during setup
  - eth1 / "VLAN network": Carries all traffic during setup + use of OpenStack. Untagged packets are tagged at the switch to ensure isolation from eth0.
  - VLAN 19 / "PXE network": Used for node bootstrapping.
  - br100
4. To simplify setup, the fuel master is also installed on the XenServer hosts (so XenServer hosts can fully control the network setup), but this is not required.

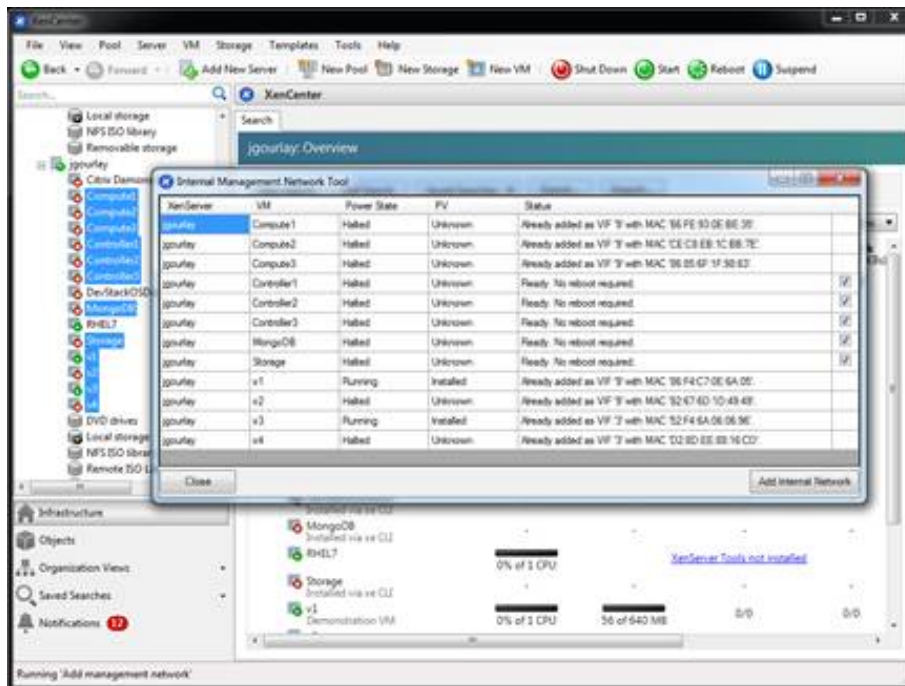


5. As HA and multihost are enabled, a topology of 3 Controller Nodes + 3 Compute Nodes + 1 Storage Node will be recommended to be created as VMs on XenServer machines.
6. Right click on all Compute Nodes to add an internal management network.

## Select Environment

1. Create a new environment with the Fuel UI wizard. Select "Juno+Citrix XenServer on Ubuntu 14.04.1" from OpenStack Release dropdown list. At the moment you will see most of options are disabled in the wizard.

2. Create new VMs in XenCenter for the compute nodes
3. Select all Compute virtual Machines, Right click on one of the Virtual Machines and select "Add Management Network"
4. Use the dialog to add the Host Internal Management Network to the compute virtual machines



5. Add new VMs to the new environment according to [Fuel User Guide](#) and configure them properly. A typical topology of 1 controller node + 3 compute nodes + 1 storage node is recommended.
6. Go to Settings tab and scroll down to "XenServer Plugin" section. You need to input the common access credentials to all XenServers that previously are used to create new VMs.

☒ **Xenserver Plugin**

**Username**

**Password**

Password cannot be empty

## Finish environment configuration

1. Run [network verification check](#)
2. Press [Deploy button](#) to once you are done with environment configuration.
3. After deployment is done, you will see in Horizon that all hypervisors are xen.

Project

Admin

System

Overview

Hypervisors

Host Aggregates

Instances

Volumes

Flavors

Images

Defaults

System Information

admin

All Hypervisors

Hypervisor Summary

VCPU Usage  
Used 2 of 12

Hypervisor

Compute Host

Hypervisors

| Hostname                   | Type | VCPUs (used) |
|----------------------------|------|--------------|
| <a href="#">megadodo</a>   | xen  | 0            |
| <a href="#">jaglan</a>     | xen  | 1            |
| <a href="#">cottington</a> | xen  | 1            |

Displaying 3 items