

Create Fedora 27 Server Golden Image

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This document describes the following steps required for Golden Image creation:

- 1.0 Create temporary Server Profile and assign to node**
- 2.0 Boot the node and install Fedora 27 Server**
- 3.0 Login to OS and configure Networking and Multipathing**
- 4.0 Capture the Golden Image**
- 5.0 Unassign and delete temporary Server Profile**

1.0 Create temporary Server Profile and assign to node

Connect to Synergy OneView, login as Administrator, and identify a node that is not in use. Create a new profile with OS Deployment Plan “HPE - Foundation 1.0 - create empty OS Volume” and change size to 20480 (20GB) as shown below:

Create Server Profile General ▾

General

Name

install_fedora27

Server profile template

none

Description

Server hardware

Katniss, bay 7

Server hardware type

SY 480 Gen9 1

Enclosure group

EG01

Affinity

Device bay ▾

OS Deployment

To define OS deployment settings, select an enclosure group configured for OS deployment.

OS deployment plan

HPE - Foundation 1.0 - create empty OS Volume-2017-03

Deployment Settings

Setting	Value
VolumeSize	20480 MiB

A connection to the deployment network will automatically be included in the profile. Click to add another connection, using a network set that has external access. This will enable the node to reach the network during the installation and after it boots.

Add Connection?

General

Name

ether-A

Function type

Ethernet

Network

CentOS Net Set

x

🔍

Port

Auto

x

🔍

Requested bandwidth (Gb/s)

10

⬆

⬇

⬆

Requested virtual functions

☒ None

☐ Custom

☐ Auto

Boot

Not bootable

▼

☐ Use user-specified IDs

Add

Add +

Cancel

Create Server ProfileFirmware?

Firmware

Connections

ID	Name	Network	Port	Boot
1	Deployment Network A	<u>is3-depl-range</u> vlan906	Mezzanine 3:1-a	iSCSI primary
	Type	Ethernet		
	MAC address	Auto		
	Requested bandwidth	2.5 Gb/s		
	Initiator name	pending assignment		
	Initiator IP address	pending assignment		
	OS volume	pending assignment		
	Target name	pending assignment		
	Target LUN	pending assignment		
	Target IP address	pending assignment		
2	ether-A	<u>CentOS Net Set</u> (network set)	Auto	Not bootable
	Type	Ethernet		
	MAC address	Auto		
	Requested virtual functions	None		
	Requested bandwidth	10 Gb/s		

Add Connection

4 Add Connection: CentOS Net Set

Create

Create +

Cancel

Click “Create” to apply the profile to the node.

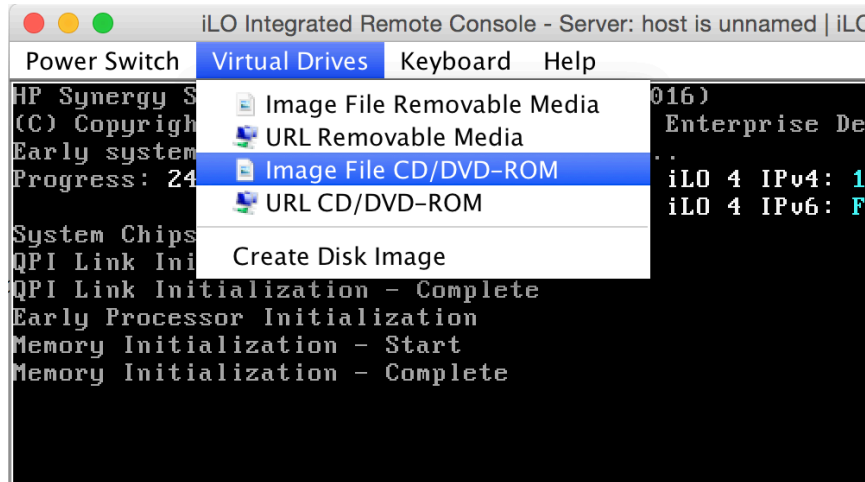
2.0 Boot the node and install Fedora 27 Server

Download Fedora 27 Server DVD ISO and save to a directory on your local system that is connected to Synergy OneView.

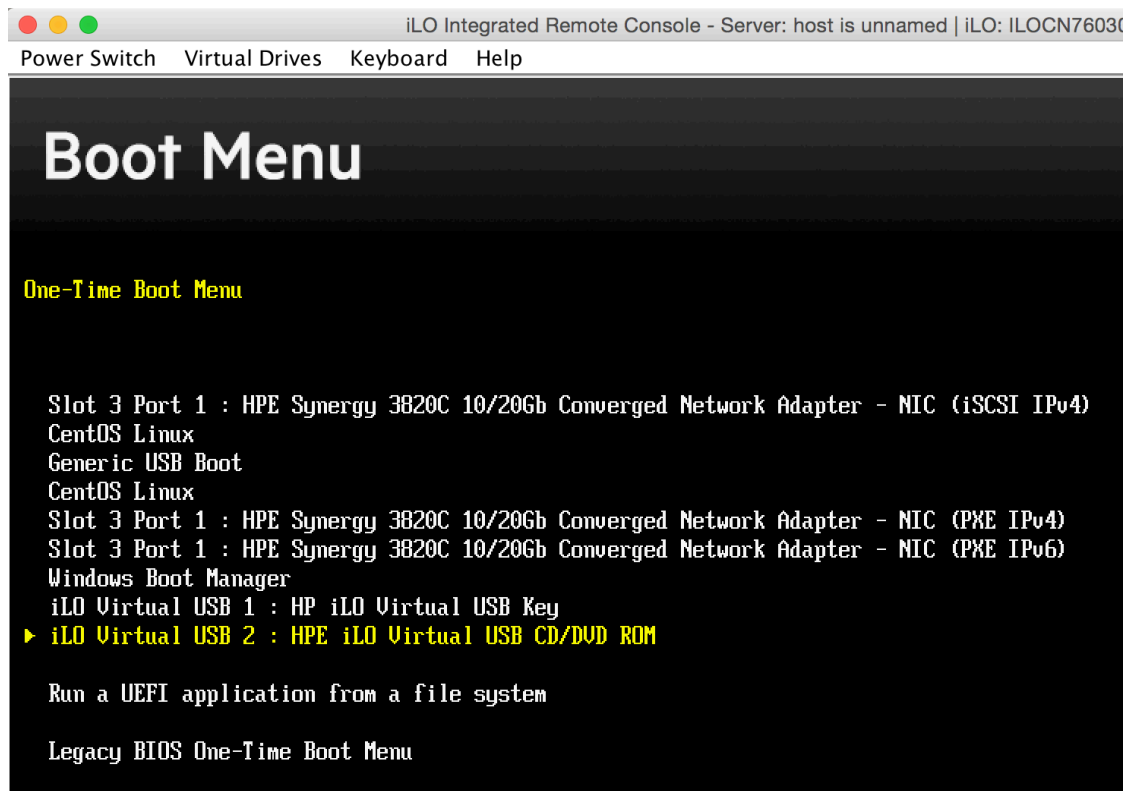
In OneView, select the new profile and click Actions → “Power On”

Click Actions → “Launch Console”

Map the “Image File CD/DVD-ROM” to the .iso on your local system



Press F11 to access the boot menu and choose to boot from Virtual CD/DVD ROM

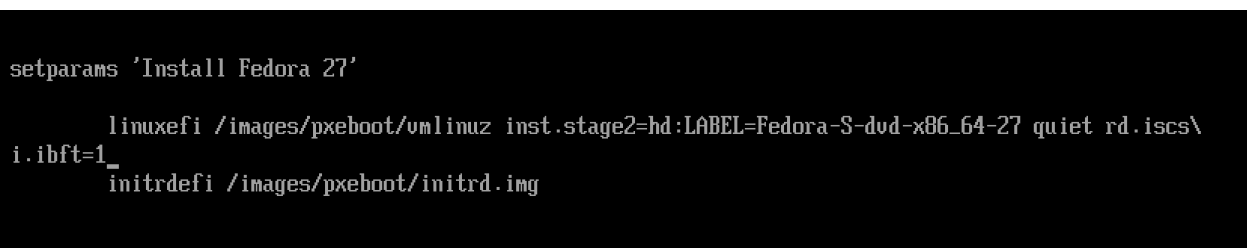


When grub menu appears, arrow-up to highlight "Install Fedora 27" and press "e" to edit



Arrow-down to the "linuxefi" line and arrow-right to the end of the line. Type the following at the end of the line:

```
rd.iscsi.ibft=1
```



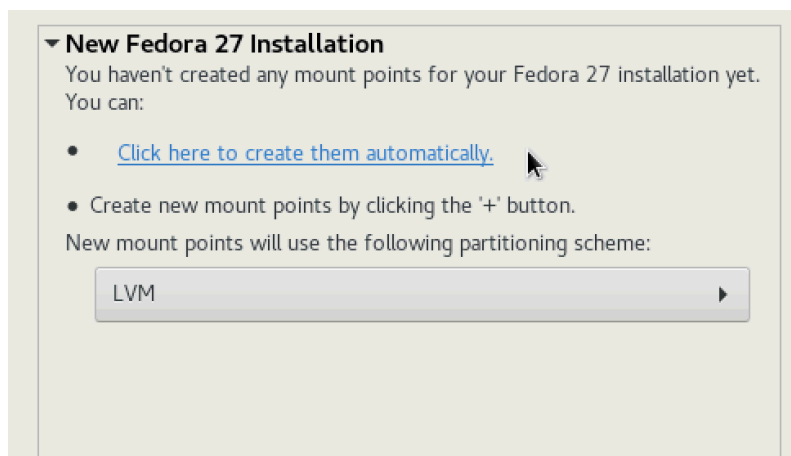
Press Ctrl-X to boot

Installation UI should open automatically

Choose language, timezone, and then click "Installation Destination"

The LEFTHAND iSCSIDisk should already be selected. Click "Custom" under Storage Configuration and click "Done"

Click to create partitions automatically.



Click the / partition in the list and choose “ext4” from the File System pulldown (ext3 or ext4 filesystem type is required for Guestfish compatibility).

Click “Update Settings”, then click “Done” and “Accept Changes”.

Click “Begin Installation” and click to set the root password. Do not create any user accounts.

Click “Reboot” when installation is complete.

Click “Virtual Drives” in the console menu and deselect the Image File CD/DVD-ROM.

3.0 Login to OS and configure Networking and Multipathing

Login as root user (password was chosen during the installation)

Disable NetworkManager and enable network:

```
# systemctl disable NetworkManager  
# systemctl enable network
```

The multipathing package should be installed by default.

Enable multipath, allow it to use user_friendly_names, as well as to find_multipaths

```
# mpathconf --enable --user_friendly_names y --find_multipaths y --with_multipathd y
```

Multipathing configuration will be handled by the Build Plan Scripts and future DAS disks will be available to the OS as /dev/mapper/mpatha, /dev/mapper/mpathb, etc

4.0 Capture the Golden Image

Connect to the ImageStreamer UI

If you have not already done so, import and extract the HudsonAlpha Fedora27 Artifact Bundle.

Choose “OS Volumes” from the main menu.

Identify the OS Volume number that corresponds to the test profile that you created.


Choose “Golden Images” from the main menu.

Click “Create Golden Image” and select the appropriate OS Volume and “HudsonAlpha_Fedora27_capture” OS Build Plan.

Click “Create”

Create Golden Image ?

Name	<input type="text" value="Fedora 27 Golden Image"/>
Description	<div>Fedora 27 Server, includes <u>multipathing</u> (<u>NetworkManager</u> disabled)</div>
OS volume	<input type="text" value="OSVolume-25"/>
Capture OS build plan	<input type="text" value="HudsonAlpha_Fedora27_capture"/>

 Changed: Capture OS build plan to "HudsonAlpha_Fedora27_capt...

Create

Create +

Cancel

Fedora 27 Golden Image should now appear in the Golden Images list.

5.0 Unassign and delete temporary Server Profile

In OneView UI, click the temporary Server Profile and click Actions → “Power off”

Click “Edit” and pull-down “Server Hardware” to “Unassigned”

Click “OK”

Once the Server Profile has been unassigned, click Actions → “Delete”

You are now ready to create Deployment Plans.