Create CentOS 7.4 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 CentOS 7.4

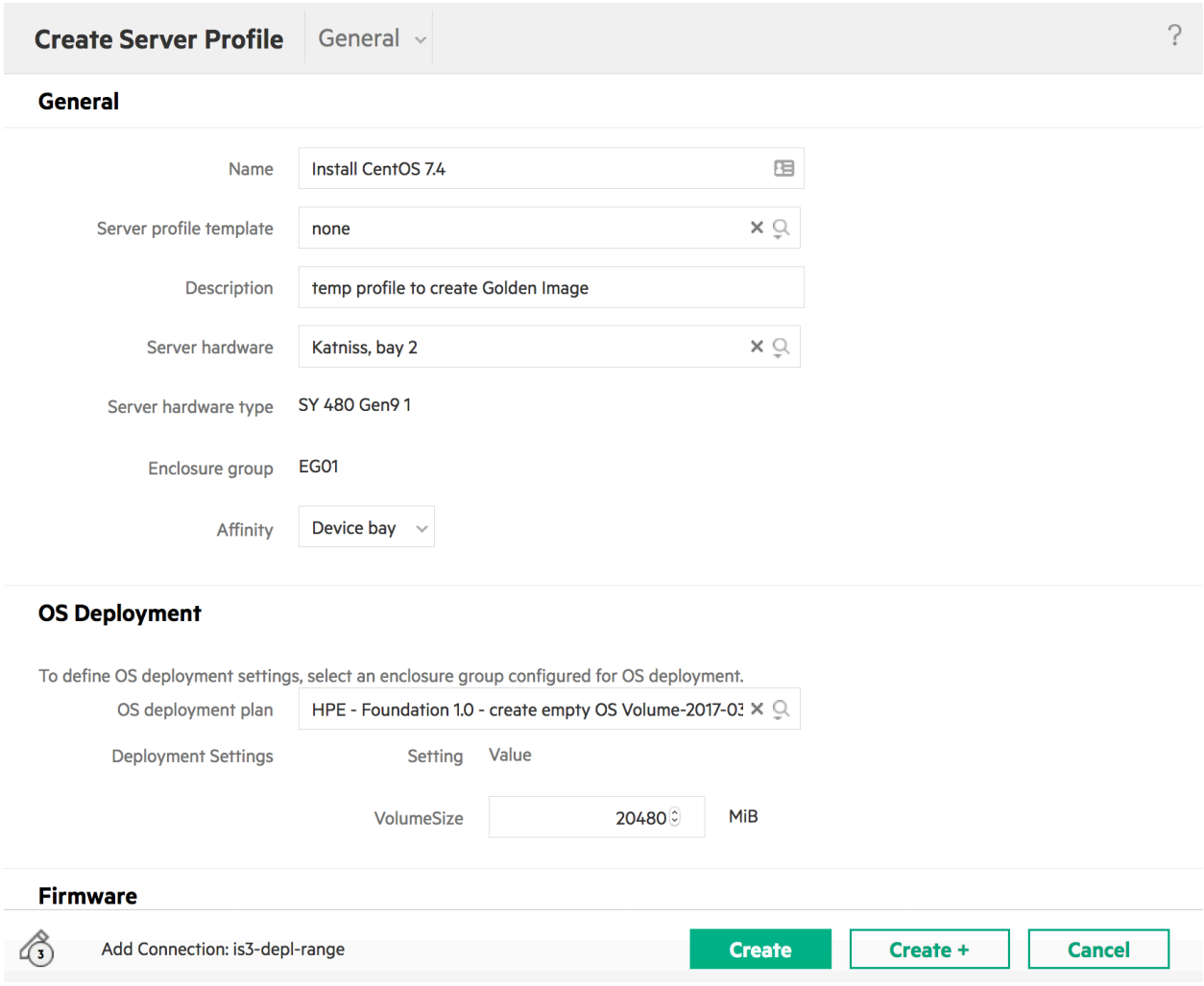
3.0 Login to OS and configure Networking and Multipathing

4.0 Capture the Golden Image

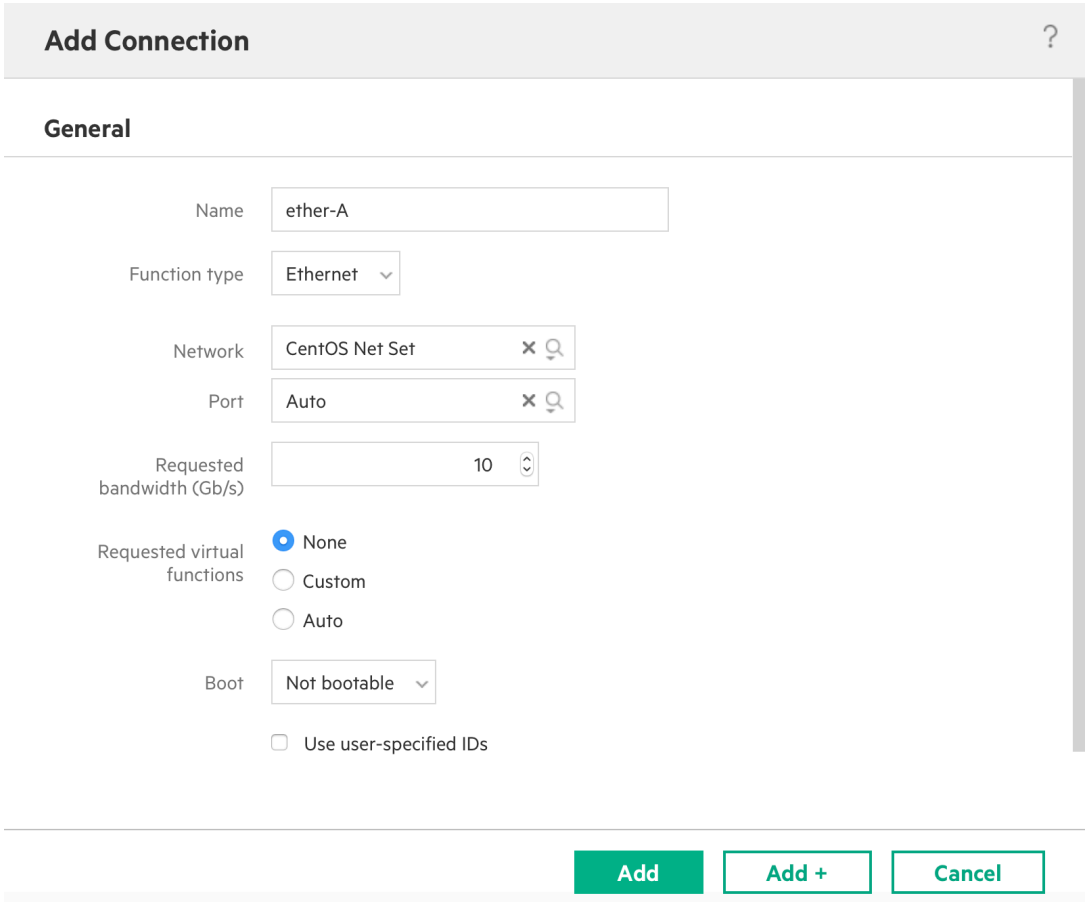
5.0 Unassign and delete temporary Server Profile

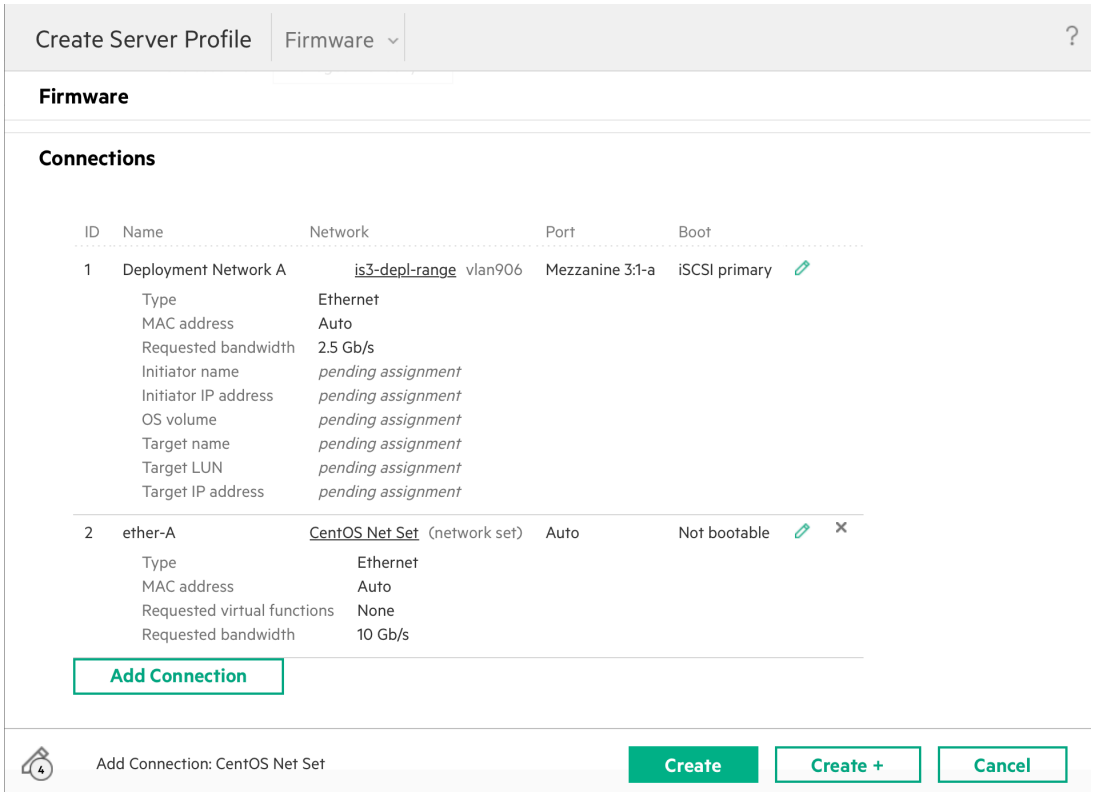
1.0 Create temporary Server Profile and assign to node

Connect to Synergy OneView, login as Administrator. 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:



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 CentOS node to reach the network after it boots and install additional packages.





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

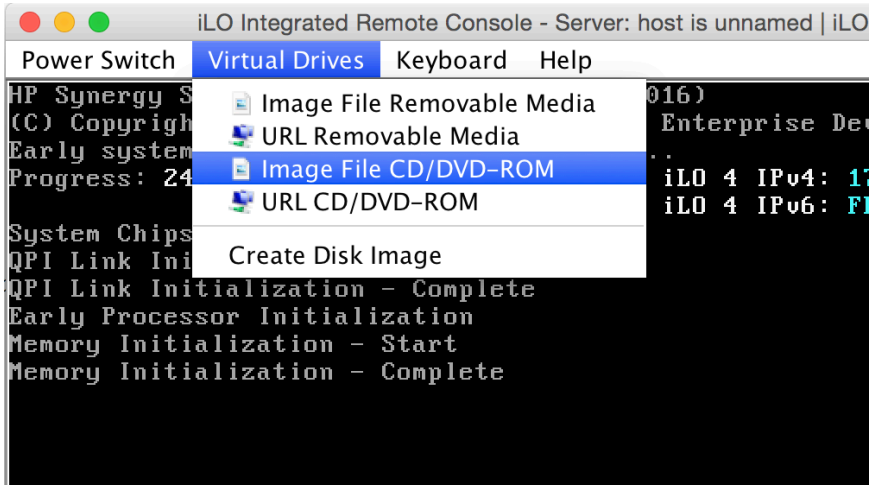
2.0 Boot the node and install CentOS 7.4

Download CentOS 7.4 minimal ISO and save to a directory on your local system that is connected to Synergy OneView.

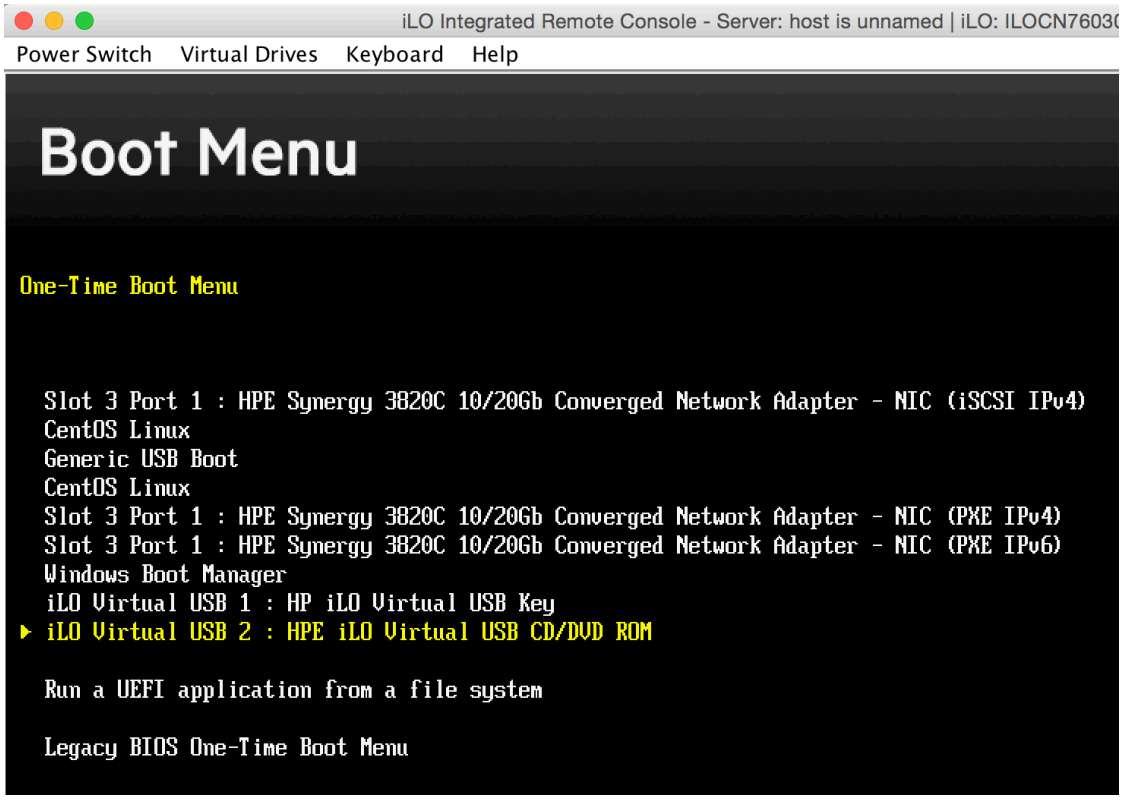
In OneView, select the new profile and click Actions → "Power On"

Click Actions → "Launch Console"

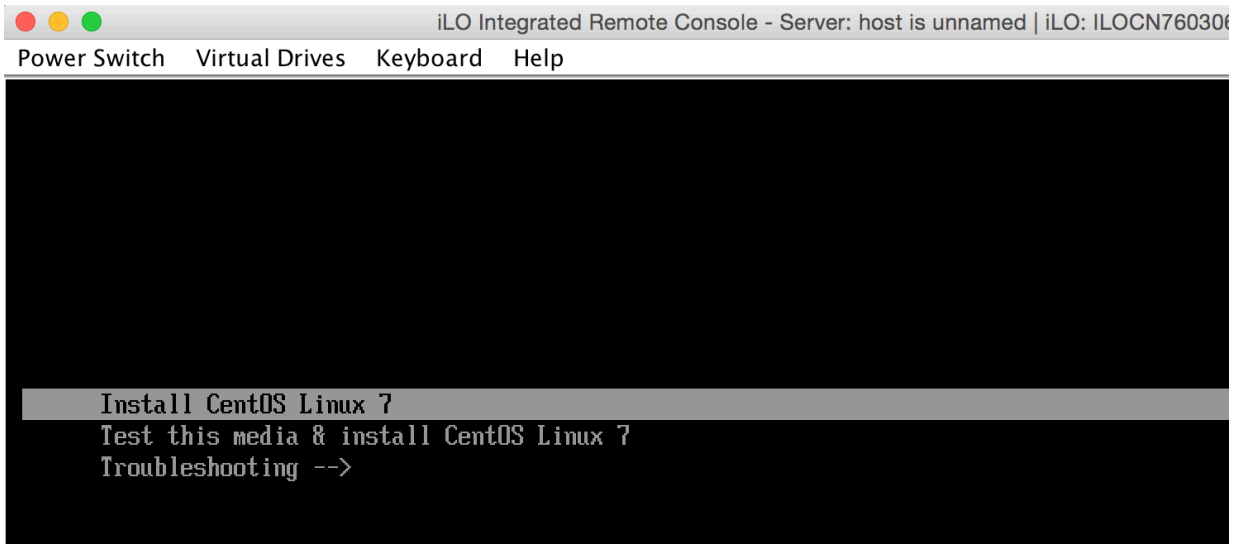
Map the "Image File CD/DVD-ROM" to the CentOS 7.4 minimal .iso on your local system



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 CentOS 7 Linux" 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:

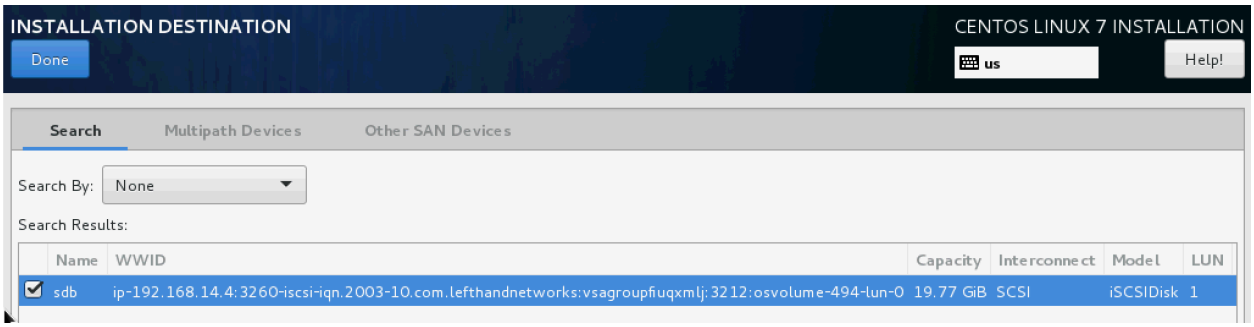
rd.iscsi.ibft=1

Press Ctrl-X to boot

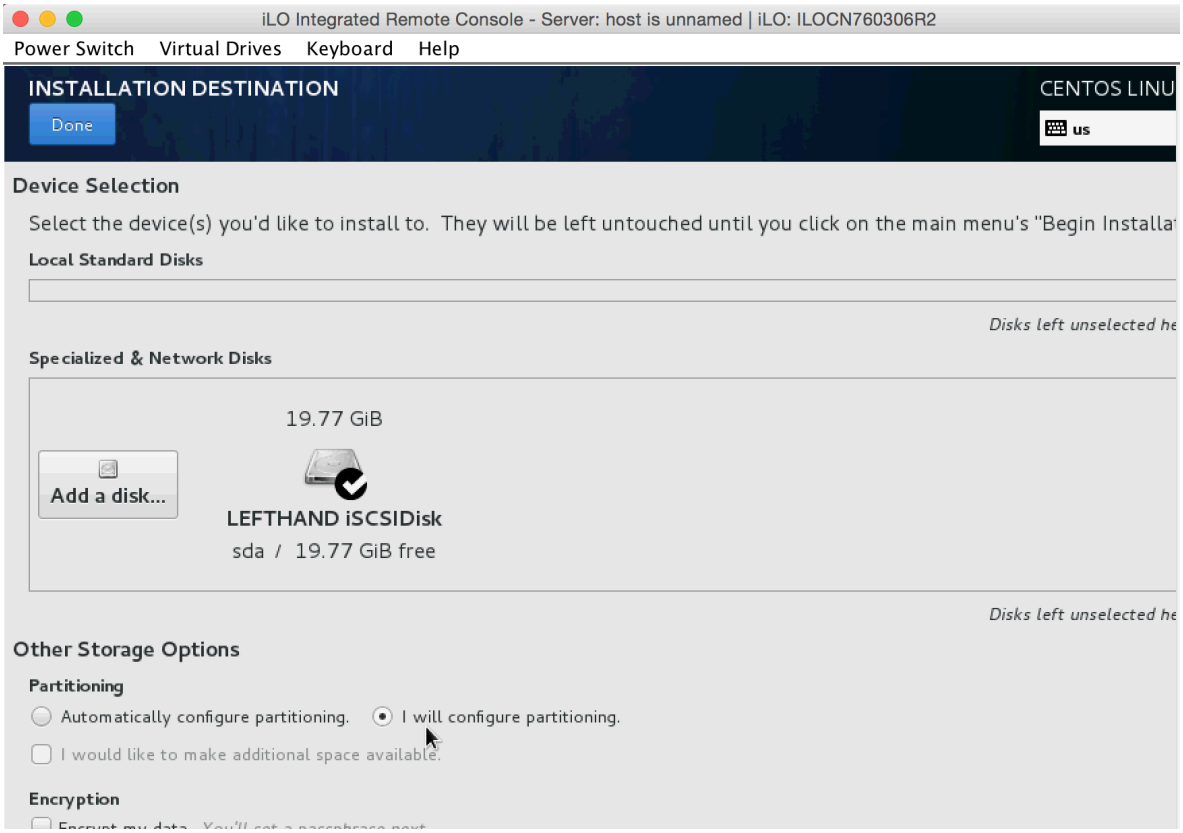
Installation UI should open automatically

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

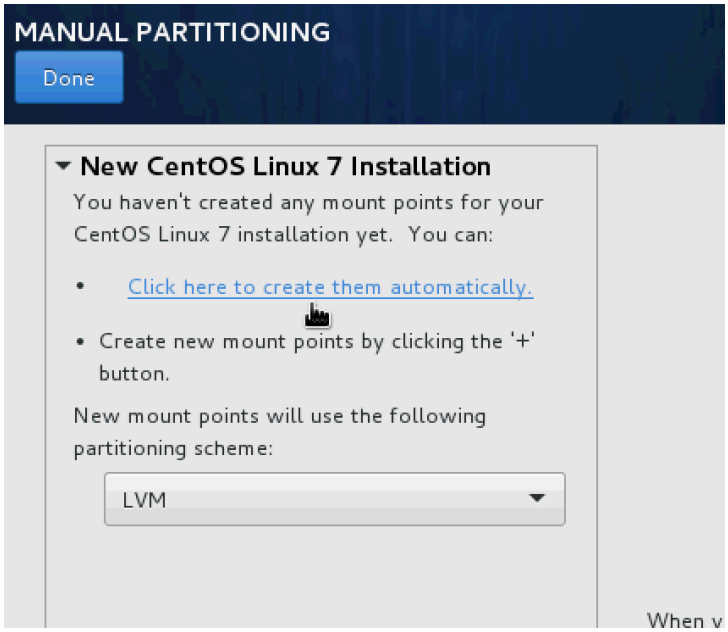
If the LEFTHAND iSCSIDisk is not shown in “Specialized and Network Disks”, click “Add a Disk” and check the box next to the iSCSI volume. Click “Done”



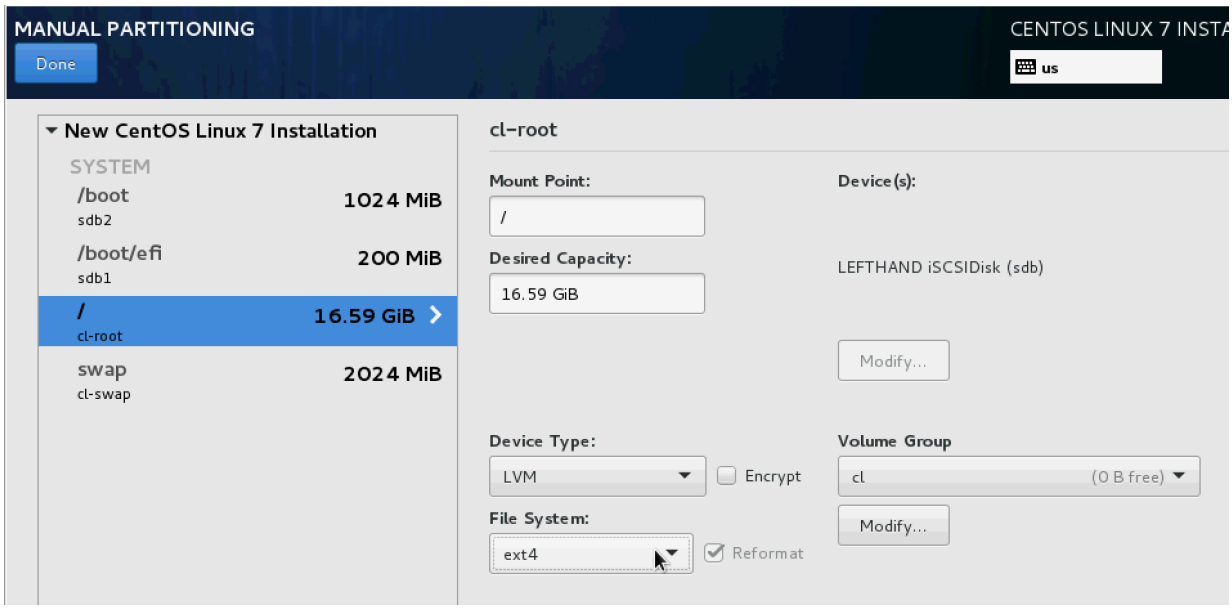
On the disk summary screen, under “Other Storage Options”, select “I will configure partitioning” and click “Done”



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 an iSCSI boot volume).



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.

Mapped Virtual Drives should automatically disconnect upon reboot.

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 stop NetworkManager

systemctl enable network

systemctl stop network

Identify network interfaces:

ip a

Edit appropriate ifcfg-xxxx file (i.e. ifcfg-ens3f1) and change ONBOOT=yes

systemctl start network

Note: any ifcfg-xxxx networking files will be erased by Golden Image capture plan when Golden Image is captured.

Configure device multipathing (for direct-attached storage):

Optional: if internal yum repositories are to be used, configure /etc/yum.repos.d now. By default, yum will pull packages from CentOS mirrors

yum install –y device-mapper-multipath

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

systemctl enable multipathd

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 one or more of the HudsonAlpha CentOS 7.4 Artifact Bundle.

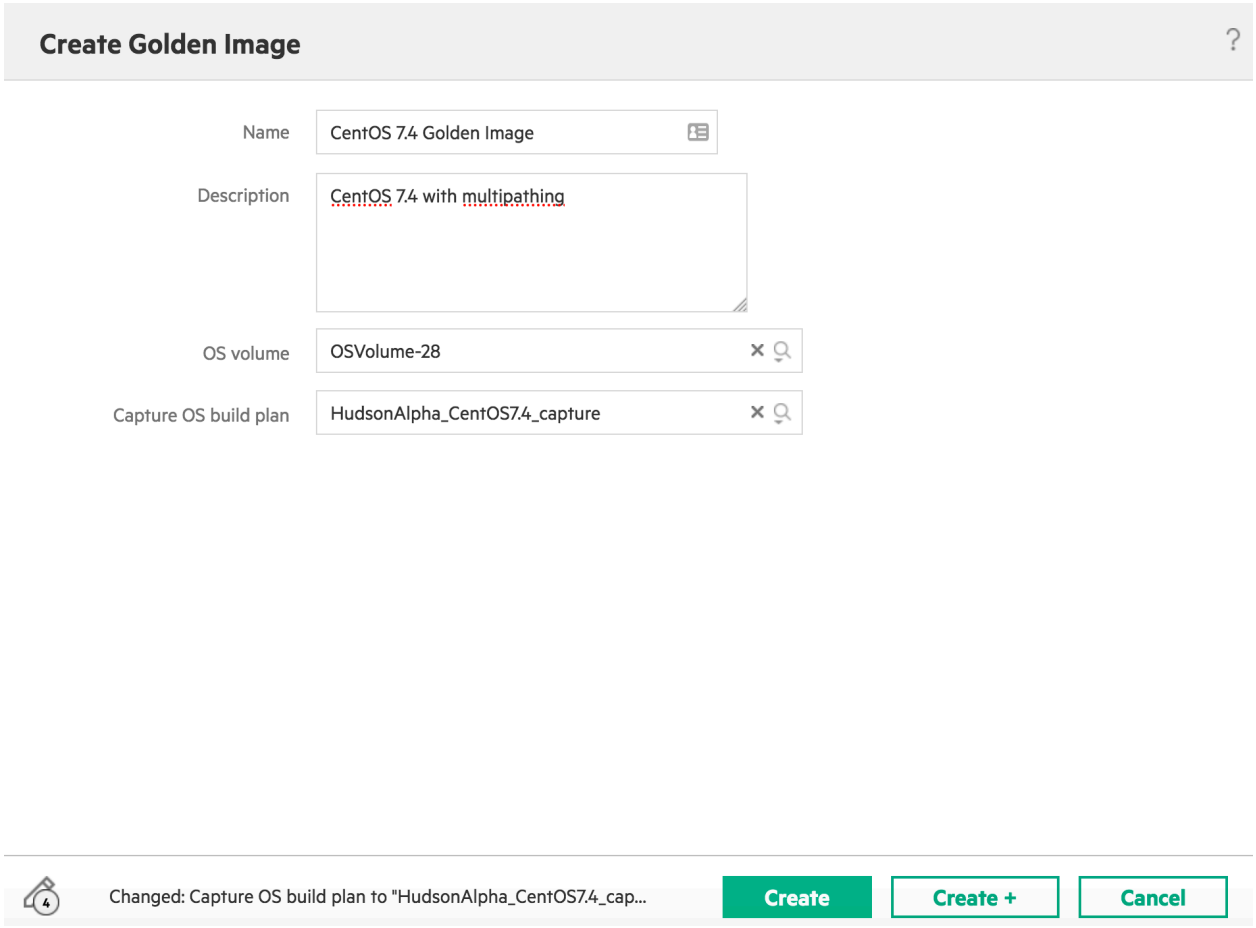
Choose “OS Volumes” from the main menu

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_CentOS7.4_capture” OS Build Plan.

Click “Create”

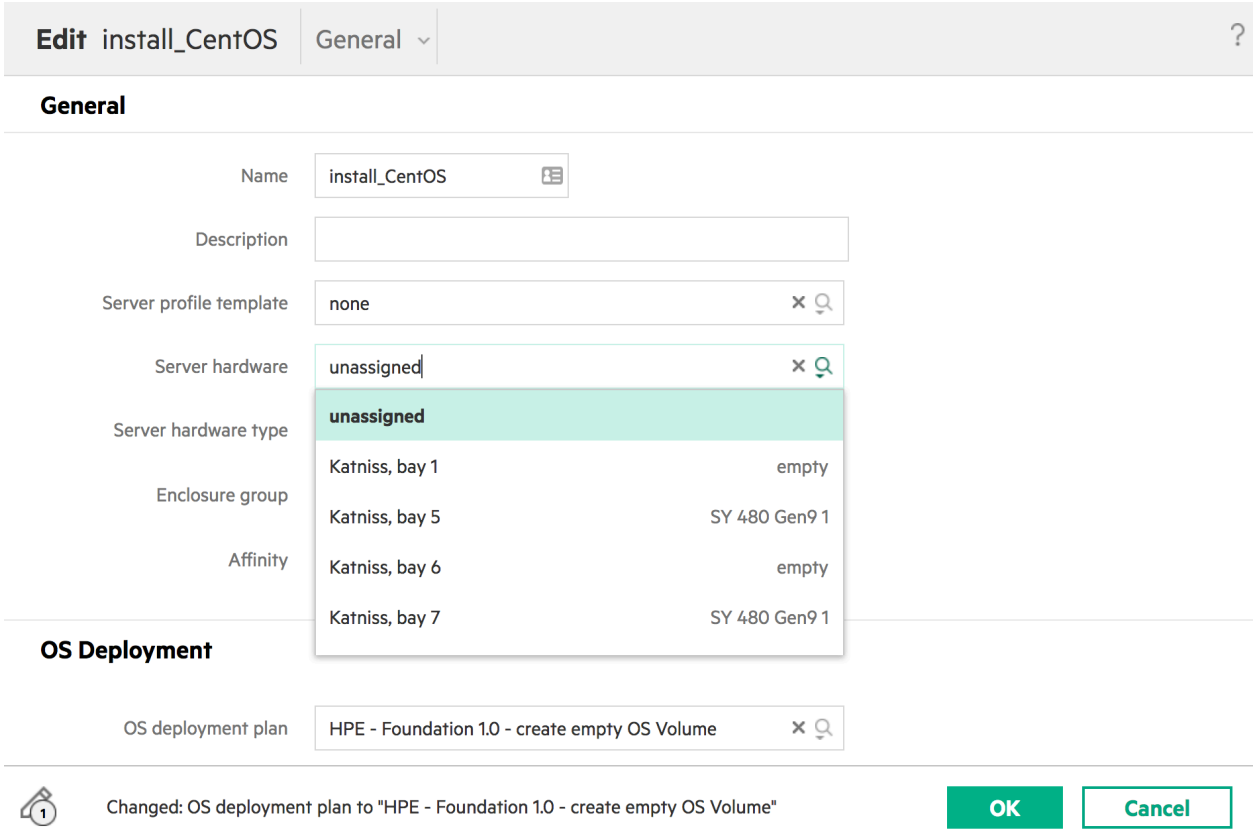


CentOS 7.4 Golden Image should now appear in the Golden Images list.

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.