

LAB 0

LAB 0.1

<https://45.121.60.129:8006>

Proxmox VE Login

User name:

Password:

Realm: Linux PAM standard authentication 1

Language: Linux PAM standard authentication
Proxmox VE authentication server 2

Login

Proxmox VE Login

User name: 3

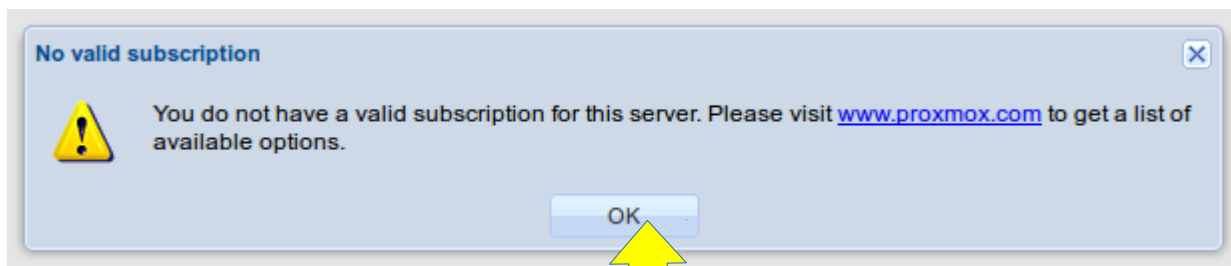
Password: 4

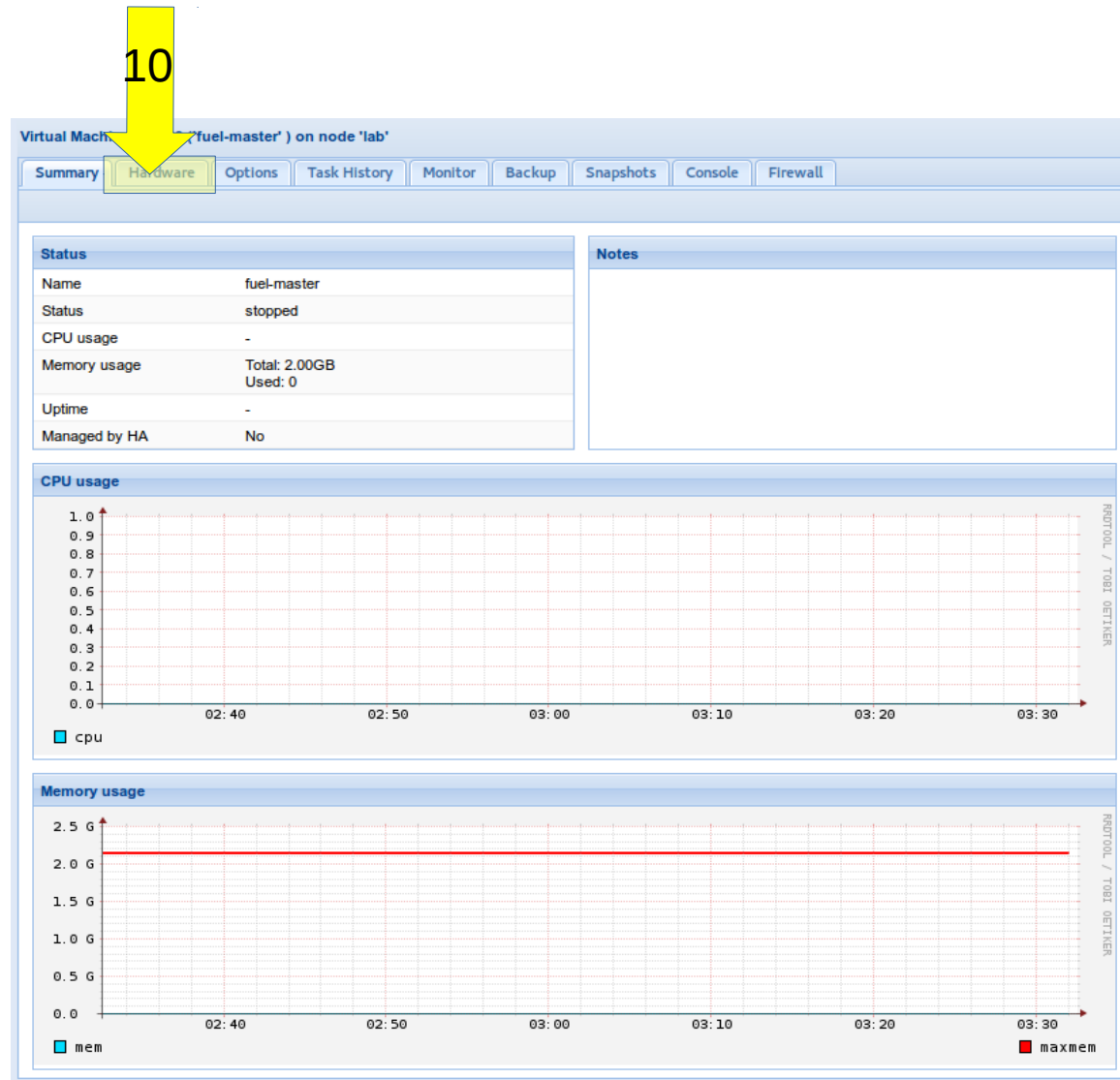
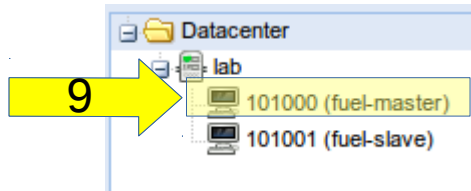
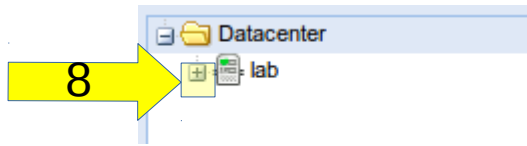
Realm: Proxmox VE authentication server

Language: English

Login 5

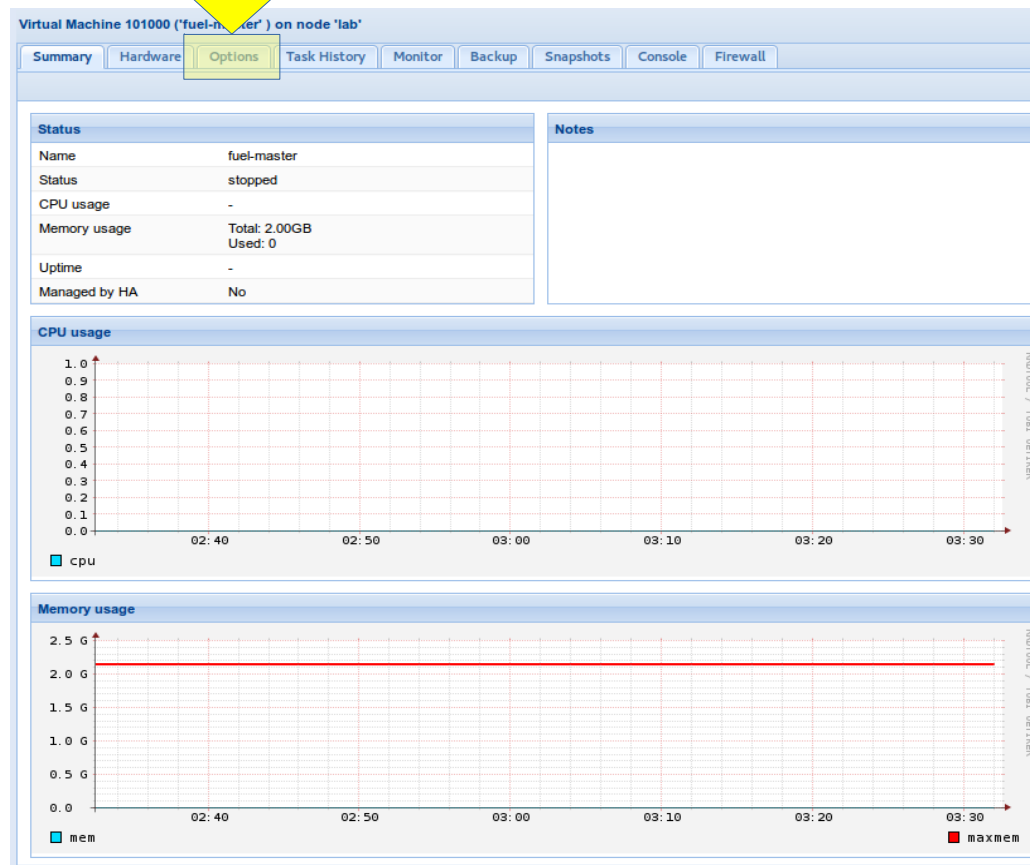
user Name : hero0(H)
password : nipalab





	Keyboard Layout	Default
	Memory	2.00GB
	Processors	2 (1 sockets, 2 cores)
	Display	Default
	CD/DVD Drive (ide2)	local:iso/fuel-9.0-community-4462-2016-07-26_08-26-09.iso,media=cdrom
	Hard Disk (virtio0)	local:101000/vm-101000-disk-1.qcow2,size=100G
	Network Device (net0)	e1000=66:61:33:38:35:37,bridge=vmbr0
	Network Device (net1)	e1000=62:30:64:64:34:31,bridge=vmbr10

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Name	fuel-master
Start at boot	No
Start/Shutdown order	order=any
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)
Boot order	CD-ROM, Disk 'virtio0', Network
Use tablet for pointer	Yes
Hotplug	Disk, Network, USB
ACPI support	Yes
SCSI Controller Type	Default (LSI 53C895A)
BIOS	Default (SeaBIOS)
KVM hardware virtualization	Yes
Freeze CPU at startup	No
Use local time for RTC	No
RTC start date	now
SMBIOS settings (type1)	uuid=8d2f6406-dd0f-487c-9c0c-fd511e2693b4
Qemu Agent	No
VM protection	No

Server View

Virtual Machine 101000 ('fuel-master') on node

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Start

Shutdown

Stop

Reset

Remove

Migrate

Console

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Datacenter

lab

101000 (fuel-master)

101001 (fuel-slave)

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Summary

Hardware

Options

Task History

Monitor

Backup

Snapshots

Console

Firewall

Edit Revert

Name fuel-master

Start at boot No

Start/Shutdown order order=any

OS Type Linux 4.X/3.X/2.6 Kernel (l26)

Boot order CD-ROM Disk 'virtio0' Network

Tasks

Cluster log

Start Time	End Time	Node	User name	Description	Status
Sep 14 20:12:41	Sep 14 20:12:46	lab	hero00@pve	VM 101000 - Stop	OK
Sep 14 20:12:35	Sep 14 20:12:56	lab	hero00@pve	VM/CT 101000 - Console	Error: command '/bin/nc6 -l -p 5900 ...
Sep 14 20:12:33	Sep 14 20:12:36	lab	hero00@pve	VM 101000 - Start	OK

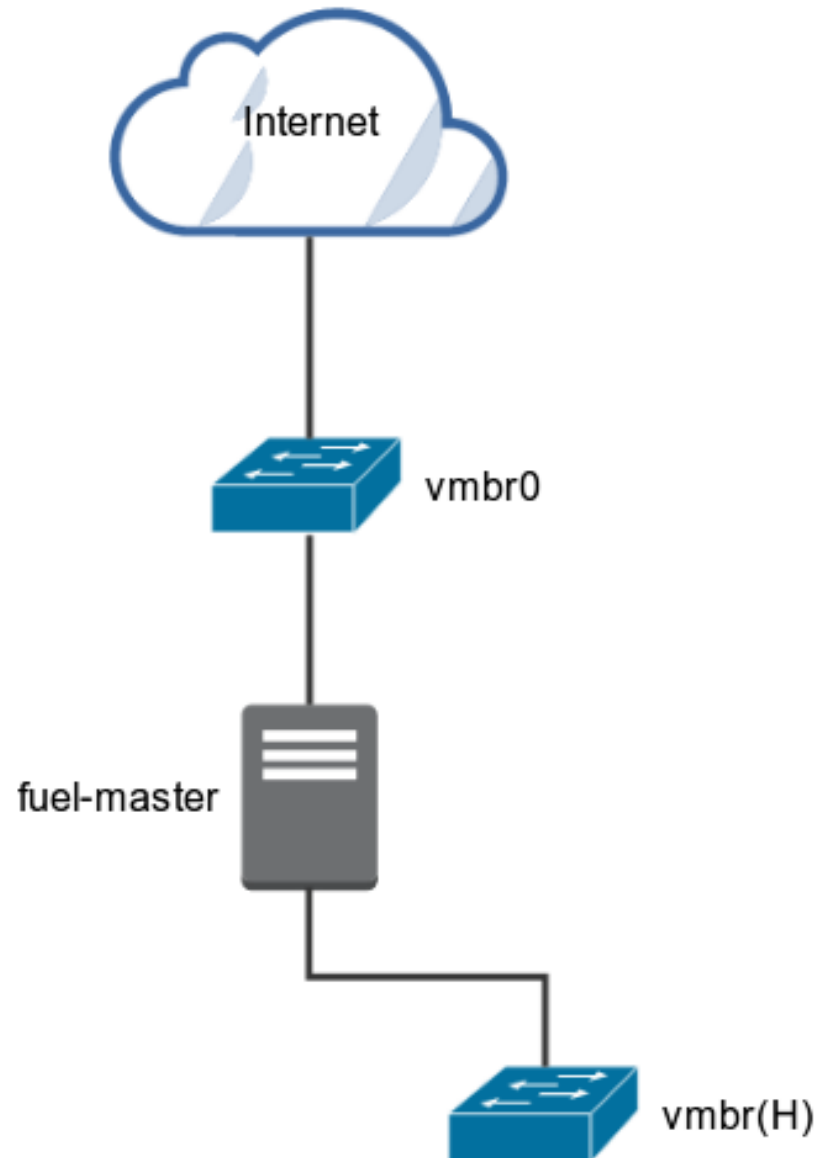
Datacenter

lab

101000 (fuel-master)

101001 (fuel-slave)

LAB 0.1 Environment (Physical)



LAB 0.1 Environment (Logical)



https://45.121.60.129:8006/?console=kvm&novnc=1&vmid=101000&vmname=fuel-mast

Connected (encrypted) to: QEMU (fuel-master)



Welcome to Fuel Installer (version: 9.0)

1. Fuel Install (Static IP)
2. Fuel Advanced Install (Static IP)

Press [Tab] to edit options

Automatic boot in 19 seconds...



Connected (encrypted) to: QEMU (fuel-master)



```
[ 0.132227] Initializing cgroup subsys blkio
[ 0.132589] Initializing cgroup subsys perf_event
[ 0.132956] Initializing cgroup subsys hugetlb
[ 0.133426] CPU: Physical Processor ID: 0
[ 0.133785] CPU: Processor Core ID: 0
[ 0.134146] mce: CPU supports 10 MCE banks
[ 0.134539] Last level iTLB entries: 4KB 0, 2MB 0, 4MB 0
[ 0.134539] Last level dTLB entries: 4KB 0, 2MB 0, 4MB 0
[ 0.134539] tlb_flushall_shift: 6
[ 0.135604] Freeing SMP alternatives: 28k freed
[ 0.304601] acpihp: Slot [10] registered
[ 0.304968] acpihp: Slot [11] registered
[ 0.305354] acpihp: Slot [12] registered
[ 0.305745] acpihp: Slot [13] registered
[ 0.306114] acpihp: Slot [14] registered
[ 0.306485] acpihp: Slot [15] registered
[ 0.306853] acpihp: Slot [16] registered
[ 0.307220] acpihp: Slot [17] registered
[ 0.307590] acpihp: Slot [18] registered
[ 0.307961] acpihp: Slot [19] registered
[ 0.308464] acpihp: Slot [20] registered
[ 0.308834] acpihp: Slot [21] registered
[ 0.309207] acpihp: Slot [22] registered
[ 0.309582] acpihp: Slot [23] registered
[ 0.309947] acpihp: Slot [24] registered
```

```
[ 4.838448] [drm] Initialized drm 1.1.0 20060810
[ OK ] Mounted Configuration File System.
[ 4.871622] ACPI: PCI Interrupt Link [LNKC] enabled at IRQ 10
[ 4.872066] virtio-pci 0000:00:03.0: virtio_pci: leaving for legacy driver
[ 4.894164] ACPI: PCI Interrupt Link [LNKB] enabled at IRQ 10
[ 4.894678] virtio-pci 0000:00:0a.0: virtio_pci: leaving for legacy driver
[ 4.916438] vda: vda1 vda2 vda3 vda4 vda5
[ 5.183314] input: ImExPS/2 Generic Explorer Mouse as /devices/platform/i8042/serio1/input/input3
[ 5.184048] tsc: Refined TSC clocksource calibration: 2399.973 MHz
[ 5.210043] e1000 0000:00:12.0 eth0: (PCI:33MHz:32-bit) 66:61:33:38:35:37
[ 5.210480] e1000 0000:00:12.0 eth0: Intel(R) PRO/1000 Network Connection
[ 5.211768] scsi host0: ata_piix
[ 5.212234] scsi host1: ata_piix
[ 5.212609] ata1: PATA max MWDMA2 cmd 0x1f0 ctl 0x3f6 bmdma 0xe100 irq 14
[ 5.213002] ata2: PATA max MWDMA2 cmd 0x170 ctl 0x376 bmdma 0xe108 irq 15
[ 5.213922] [TTM] Zone kernel: Available graphics memory: 1024436 kiB
[ 5.214330] [TTM] Initializing pool allocator
[ 5.214698] [TTM] Initializing DMA pool allocator
[ 5.215260] [drm] fb mappable at 0xFC000000
[ 5.215638] [drm] vram aper at 0xFC000000
[ 5.215997] [drm] size 33554432
[ 5.216360] [drm] fb depth is 24
[ 5.216710] [drm] pitch is 3072
[
[
[
[
[ 7.482718] dracut-initqueue[548]: RTNETLINK answers: Network is unreachable
```

vda drive contains partition table:
Model: Virtio Block Device (virtblk)
Disk /dev/vda: 107GB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags: pmbr_boot

Number	Start	End	Size	File system	Name	Flags
1	17.4kB	25.2MB	25.1MB		primary	bios_grub
2	25.2MB	235MB	210MB	fat16	primary	
3	235MB	445MB	210MB	xfs	primary	
4	445MB	10.9GB	10.5GB			lvm
5	10.9GB	107GB	96.4GB			lvm

Are you sure you want to erase ALL data on disk vda? (y/N)y

Connected (encrypted) to: QEMU (fuel-master)



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Welcome to Fuel Installer (version: 9.0)

1. Fuel Install (Static IP)
2. Fuel Advanced Install (Static IP)

Press [Tab] to edit options

Automatic boot in 21 seconds...



Name	fuel-master
Start at boot	No
Start/Shutdown order	order=any
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)
Boot order	CD-ROM, Disk 'virtio0', Network
Use tablet for pointer	Yes
Hotplug	Disk, Network, USB
ACPI support	Yes
SCSI Controller Type	Default (LSI 53C895A)
BIOS	Default (SeaBIOS)
KVM hardware virtualization	Yes
Freeze CPU at startup	No
Use local time for RTC	No
RTC start date	now
SMBIOS settings (type1)	uuid=8d2f6406-dd0f-487c-9c0c-fd511e2693b4
Qemu Agent	No
VM protection	No



Name	fuel-master
Start at boot	No
Start/Shutdown order	order=any
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)
Boot order	Disk 'virtio0', Disk 'virtio0', Network
Use tablet for pointer	Yes
Hotplug	Disk, Network, USB
ACPI support	Yes
SCSI Controller Type	Default (LSI 53C895A)
BIOS	Default (SeaBIOS)
KVM hardware virtualization	Yes
Freeze CPU at startup	No
Use local time for RTC	No
RTC start date	now
SMBIOS settings (type1)	uuid=8d2f6406-dd0f-487c-9c0c-fd511e2693b4
Qemu Agent	No
VM protection	No

PROXMOX

Proxmox Virtual Environment
Version: 4.1-1/2f9650d4

You are logged in as 'hero00@pve'
[Logout](#) [Create VM](#) [Create CT](#)

Server View

Datacenter

lab

101000 (fuel-master)

101001 (fuel-master)

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Virtual Machine 101000 ('fuel-master') on node lab

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[Start](#) [Shutdown](#) [Stop](#) [Reset](#) [Remove](#) [Migrate](#) [Console](#)

Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall

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Edit Revert

Name

fuel-master

Start at boot

No

Start/Shutdown order

order=any

OS Type

Linux 4.X/3.X/2.6 Kernel (l26)

Boot order

CD-ROM, Disk 'virtio0', Network

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Sep 14 20:12:41	Sep 14 20:12:46	lab	hero00@pve	VM 101000 - Stop	OK
Sep 14 20:12:35	Sep 14 20:12:56	lab	hero00@pve	VM/CT 101000 - Console	Error: command '/bin/nc6 -l -p 5900 ...
Sep 14 20:12:33	Sep 14 20:12:36	lab	hero00@pve	VM 101000 - Start	OK

Connected (encrypted) to: QEMU (fuel-master)



Package	Arch	Version	Repository	Size
=====				
Installing:				
docker	x86_64	1.10.3-44.el7.centos	nailgun	8.6 M
Installing for dependencies:				
audit-libs-python	x86_64	2.4.1-5.el7	nailgun	69 k
checkpolicy	x86_64	2.1.12-6.el7	nailgun	247 k
docker-common	x86_64	1.10.3-44.el7.centos	nailgun	59 k
docker-forward-journald	x86_64	1.10.3-44.el7.centos	nailgun	831 k
docker-selinux	x86_64	1.10.3-44.el7.centos	nailgun	77 k
libcgroup	x86_64	0.41-8.el7	nailgun	64 k
libseccomp	x86_64	2.2.1-1.el7	nailgun	49 k
libselinux-python	x86_64	2.2.2-6.el7	nailgun	247 k
libsemanage-python	x86_64	2.1.10-18.el7	nailgun	94 k
oci-register-machine	x86_64	1.10.3-44.el7.centos	nailgun	1.0 M
oci-systemd-hook	x86_64	1.10.3-44.el7.centos	nailgun	96 k
policycoreutils-python	x86_64	2.2.5-20.el7	nailgun	435 k
python-IPy	noarch	0.75-6.el7	nailgun	32 k
setools-libs	x86_64	3.3.7-46.el7	nailgun	485 k
yajl	x86_64	2.0.4-4.el7	nailgun	39 k

Transaction Summary

=====

Install 1 Package (+15 Dependent packages)

Total download size: 12 M

Installed size: 55 M

Downloading packages:

Total 53 MB/s | 12 MB 00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : audit-libs-python-2.4.1-5.el7.x86_64	1/16
Installing : oci-register-machine-1.10.3-44.el7.centos.x86_64	2/16
Installing : yajl-2.0.4-4.el7.x86_64	3/16
Installing : oci-systemd-hook-1.10.3-44.el7.centos.x86_64	4/16
Installing : libsemanage-python-2.1.10-18.el7.x86_64	5/16
Installing : libseccomp-2.2.1-1.el7.x86_64	6/16
Installing : docker-common-1.10.3-44.el7.centos.x86_64	7/16
Installing : checkpolicy-2.1.12-6.el7.x86_64	8/16
Installing : libcgroup-0.41-8.el7.x86_64	9/16
Installing : python-IPy-0.75-6.el7.noarch	10/16
Installing : libselinux-python-2.2.2-6.el7.x86_64	11/16
Installing : setools-libs-3.3.7-46.el7.x86_64	12/16
Installing : policycoreutils-python-2.2.5-20.el7.x86_64	13/16
Installing : docker-selinux-1.10.3-44.el7.centos.x86_64	14/16

Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.

Menu

< Fuel U
< Networ
< Securi
< PXE Se
< DNS &
< Bootst
< Root P
< Time S
< Featur
< Shell
< Restor
< Quit S

WARNING!

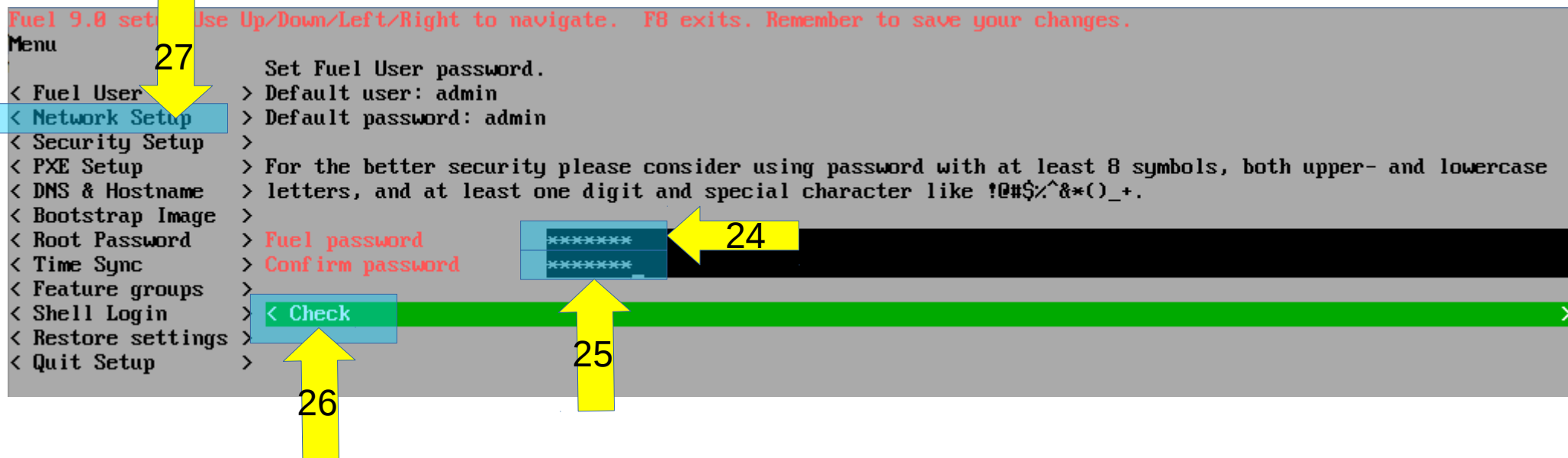
It is recommended to change default administrator password.

< Close

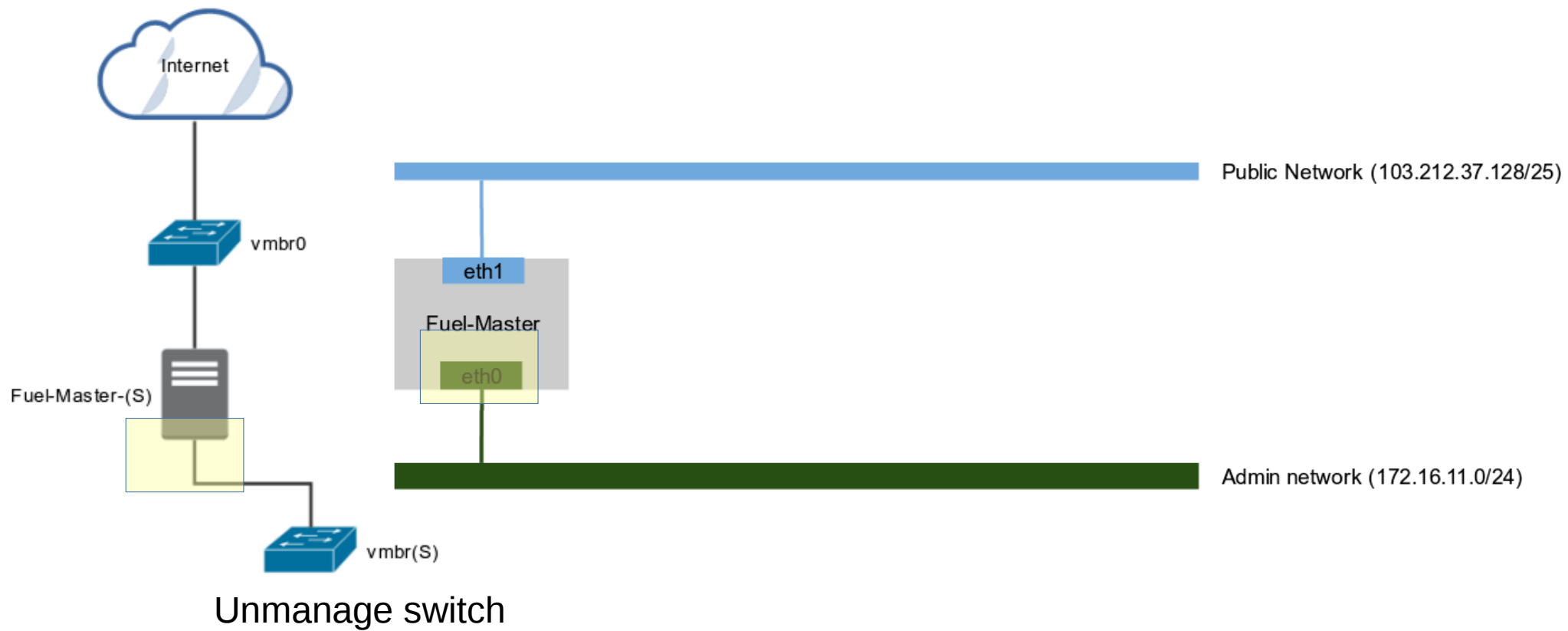
ord with
rs, and
^&*()_+.

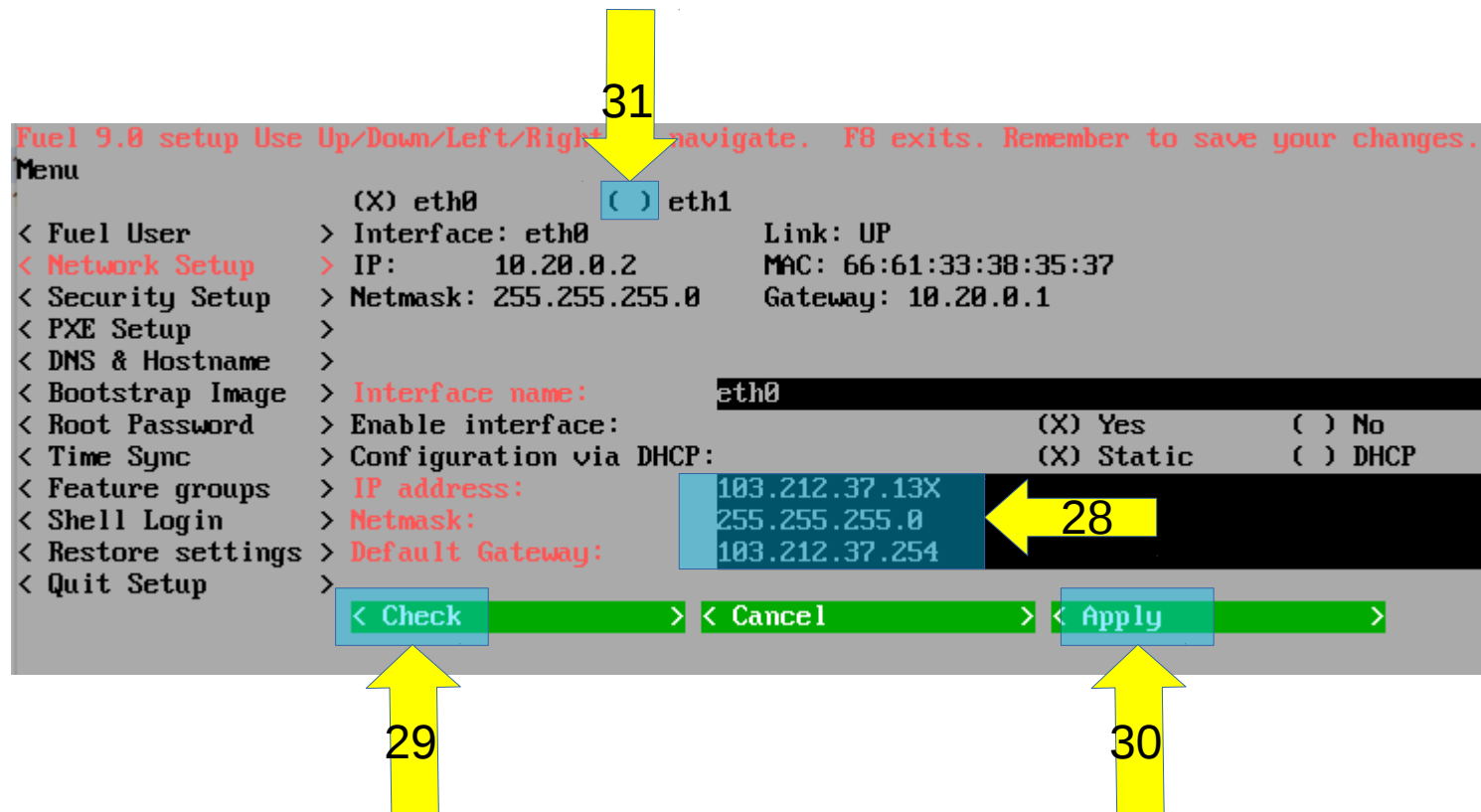
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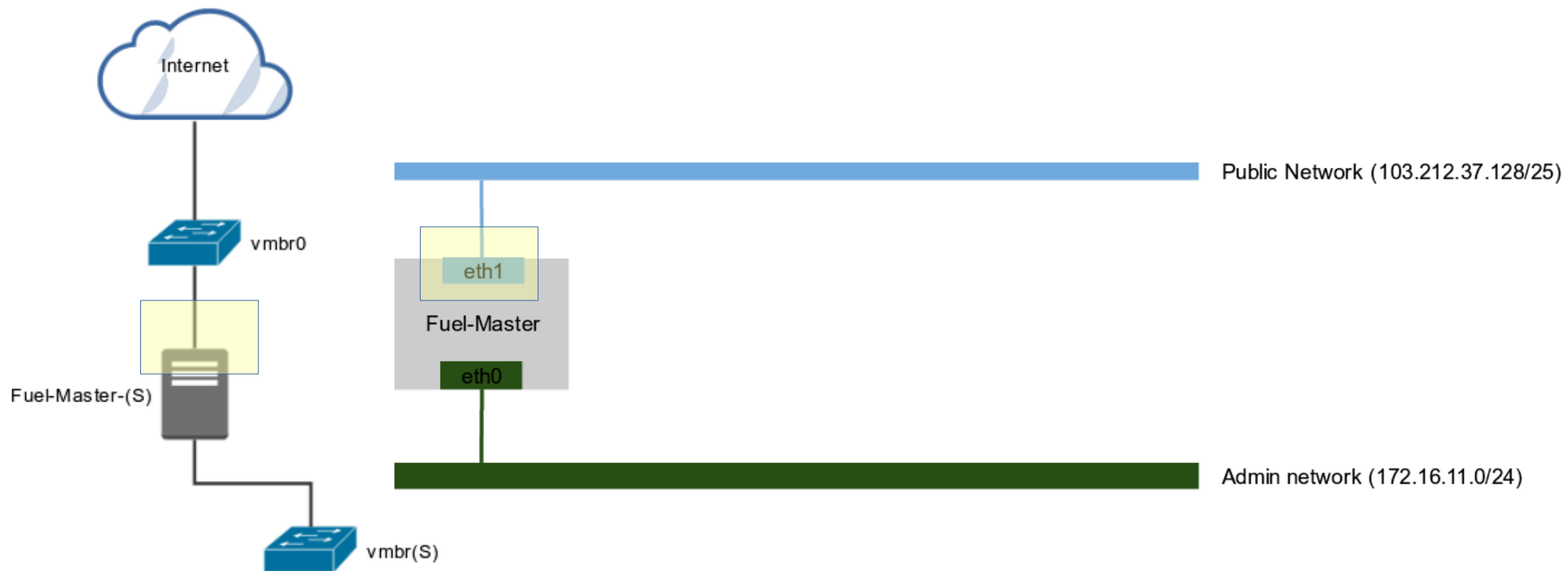
Status messages go here.



password : nipalab



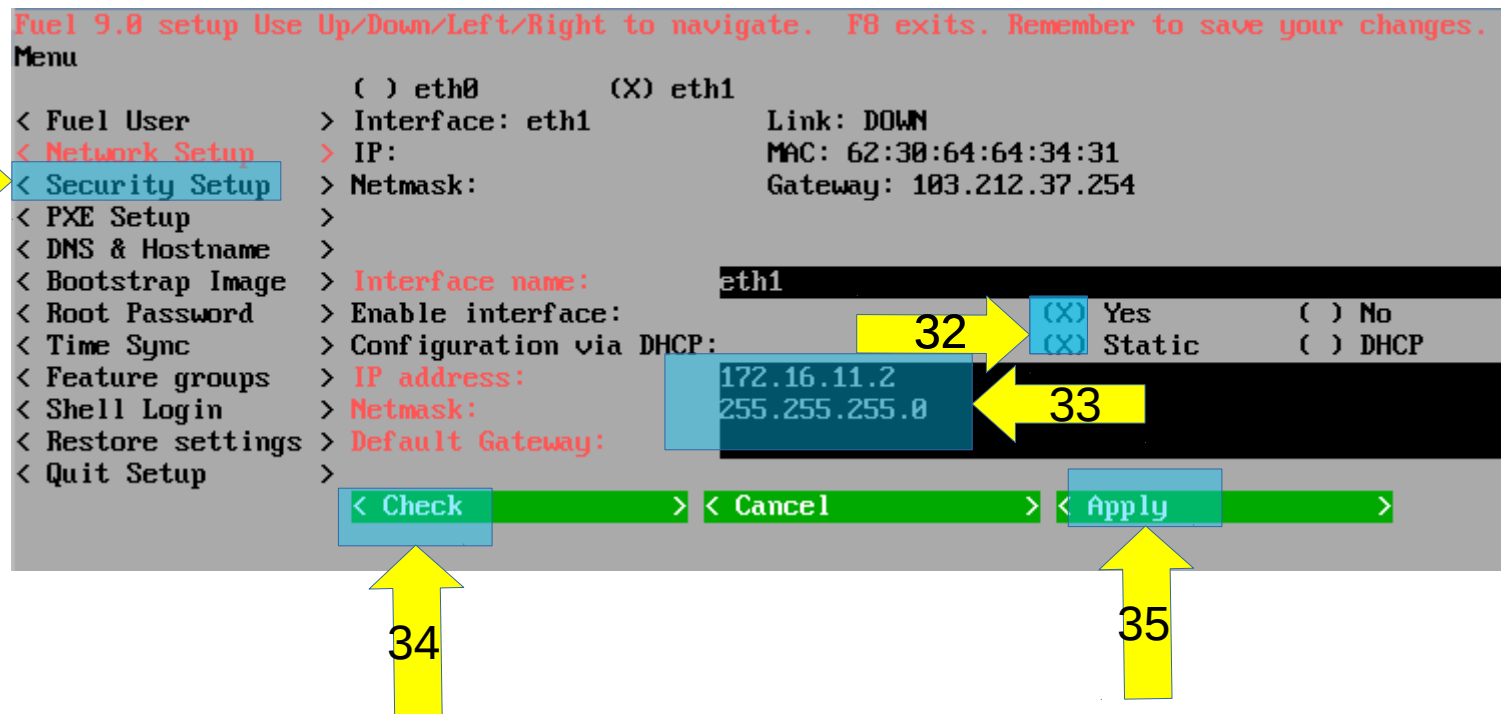




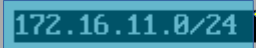
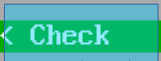
Fuel 9.0 setup Use Up/Down/Left/Right to navigate. FB exits. Remember to save your changes

Menu

	☐ eth0	☒ eth1	
< Fuel User	> Interface: eth1		Link: DOWN
< Network Setup	> IP:		MAC: 62:30:64:64:34:31
< Security Setup	> Netmask:		Gateway: 103.212.37.254
< PXE Setup	>		
< DNS & Hostname	>		
< Bootstrap Image	> Interface name:	eth1	
< Root Password	> Enable interface:	☐ Yes	☒ No
< Time Sync	> Configuration via DHCP:	☐ Static	☒ DHCP
< Feature groups	> IP address:		
< Shell Login	> Netmask:		
< Restore settings	> Default Gateway:		
< Quit Setup	>		
	< Check	> < Cancel	> < Apply



```
Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.
Menu
Security settings
< Fuel User >
< Network Setup >
< Security Setup > Restrict SSH access on network 172.16.11.0/24
PXE Setup
< DNS & Hostname > < Check
< Bootstrap Image >
< Root Password >
< Time Sync >
< Feature groups >
< Shell Login >
< Restore settings >
< Quit Setup >
```



Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.

Menu

Settings for PXE booting of slave nodes.

< Fuel User	> Select the interface where PXE will run:
< Network Setup	> (X) eth0 () eth1
< Security Setup	> Interface: eth0 Link: UP
< PXE Setup	> IP: 103.212.37.130 MAC: 66:61:33:38:35:37
< DNS & Hostname	> Netmask: 255.255.255.0 Gateway: 103.212.37.254
< Bootstrap Image	>
< Root Password	>
< Time Sync	> DHCP pool for node discovery:
< Feature groups	> DHCP Pool Start 103.212.37.2
< Shell Login	> DHCP Pool End 103.212.37.253
< Restore settings	> DHCP Gateway 103.212.37.130
< Quit Setup	>

< Check




```
Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.
Menu
    Settings for PXE booting of slave nodes.
    < Fuel User      > Select the interface where PXE will run:
    < Network Setup  > ( ) eth0          (X) eth1
    < Security Setup > Interface: eth1      Link: UP
    < PXE Setup      > IP:          172.16.11.2    MAC: 62:30:64:64:34:31
    < DNS & Hostname > Netmask: 255.255.255.0  Gateway: 103.212.37.254
    < Bootstrap Image >
    < Root Password  >
    < Time Sync       > DHCP pool for node discovery:
    < Feature groups  > DHCP Pool Start      172.16.11.3
    < Shell Login     > DHCP Pool End        172.16.11.254
    < Restore settings > DHCP Gateway          172.16.11.2
    < Quit Setup      >
    < Check
```

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```
Fuel 9.8 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.
Menu
DNS and hostname setup
< Fuel User > Note: Leave External DNS blank if you do not have Internet access.
< Network Setup >
< Security Setup >
< PXE Setup >
< DNS & Hostname >
< Bootstrap Image >
< Root Password >
< Time Sync >
< Feature groups >
< Shell Login >
< Restore settings >
< Quit Setup >
```

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```
> Hostname fuel
> Domain domain.tld
> Search Domain domain.tld
> External DNS 8.8.8.8,8.8.4.4
> Hostname to test DNS: www.google.com
```

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```
< Check > < Cancel > < Apply >
```

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45 ↑

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```
Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.
Menu
    Bootstrap image configuration
    < Fuel User >
    < Network Setup >
    < Security Setup > [ ] Skip building bootstrap image
    < PXE Setup >
    < DNS & Hostname > HTTP proxy
    < Bootstrap Image > HTTPS proxy
    < Root Password >
    < Time Sync > List of repositories
    < Feature groups > Name
    < Shell Login > Priority
    < Restore settings > Deb repo
    < Quit Setup >

    Name
    Priority
    Deb repo
    ubuntu
    deb http://archive.ubuntu.com/ubuntu trusty main universe multiverse

    Name
    Priority
    Deb repo
    ubuntu-updates
    deb http://archive.ubuntu.com/ubuntu trusty-updates main universe multiverse

    Name
    Priority
    Deb repo
    ubuntu-security
    deb http://archive.ubuntu.com/ubuntu trusty-security main universe multiverse

    Name
    Priority
    Deb repo
    mos
    1050
    deb http://127.0.0.1:8080/ubuntu/x86_64 mos9.0 main restricted

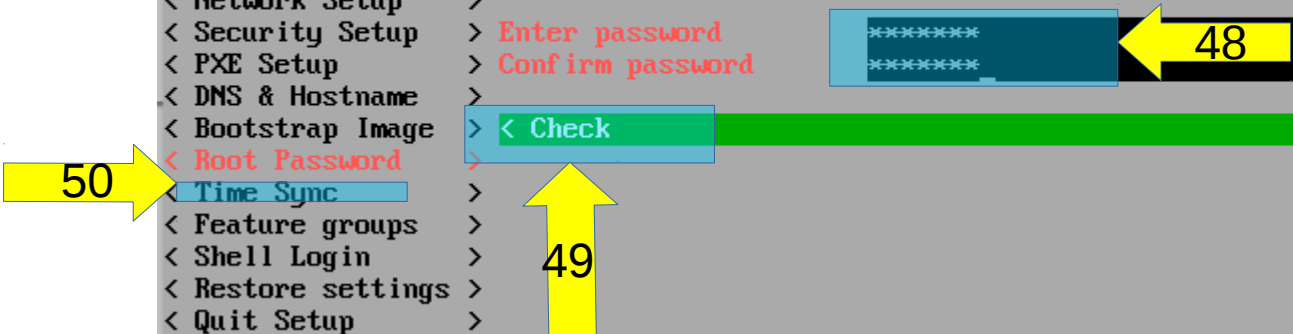
    Name
    Priority
    Deb repo
    mos-updates
    1050
    deb http://mirror.fuel-infra.org/mos-repos/ubuntu/9.0 mos9.0-updates main restricted

    Name
    Priority
    Deb repo
    mos-security
    1050
    deb http://mirror.fuel-infra.org/mos-repos/ubuntu/9.0 mos9.0-security main restricted

    Name
    Priority
    Deb repo
    mos-holdback
    1100
    deb http://mirror.fuel-infra.org/mos-repos/ubuntu/9.0 mos9.0-holdback main restricted

    < Add repository
    < Check
```

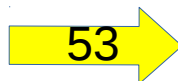
```
Fuel 9.0 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.
Menu
      Set root user password
< Fuel User      >
< Network Setup  >
< Security Setup > Enter password
< PXE Setup      > Confirm password
< DNS & Hostname >
< Bootstrap Image > < Check
< Root Password >
< Time Sync      >
< Feature groups >
< Shell Login    >
< Restore settings >
< Quit Setup     >
```



password : nipalab

Fuel 9.8 setup Use Up/Down/Left/Right to navigate. FB exits. Remember to save your changes

Menu	NTP Setup	
< Fuel User	> Note: If you continue without NTP, you may have issues with deployment	
< Network Setup	> These problems are exacerbated in virtualized environments.	
< Security Setup	>	
< PXE Setup	> Deployed nodes will use Fuel Master as time source if NTP is disabled	
< DNS & Hostname	>	
< Bootstrap Image	> Enable NTP:	() Yes (X) No
< Root Password	> NTP Server 1:	0.fuel.pool.ntp.org
< Time Sync	> NTP Server 2:	1.fuel.pool.ntp.org
< Feature groups	> NTP Server 3:	2.fuel.pool.ntp.org
< Shell Login	>	
< Restore settings	> < Check	
< Quit Setup	>	



Fuel 9.8 setup Use Up/Down/Left/Right to navigate. F8 exits. Remember to save your changes.

Menu

Feature groups

< Fuel User > Note: Depending on which feature groups are enabled, some options on UI

< Network Setup >

< Security Setup > [] Experimental features

< PXE Setup > [X] Advanced features

< DNS & Hostname >

< Bootstrap Image > < Check > < Cancel > < Apply >

< Root Password >

< Time Sync >

< Feature groups >

< Shell Login >

< Restore settings >

< Quit Setup >

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Fuel 9.8 setup Use Up/Down/Left/Right to navigate. F8 exit

Menu

Save configuration before quitting?

< Fuel User >
< Network Setup >
< Security Setup >
< PXE Setup >
< DNS & Hostname >
< Bootstrap Image >
< Root Password >
< Time Sync >
< Feature groups >
< Shell Login >
< Restore settings >
< Quit Setup >

< Save and Continue

< Save and Quit

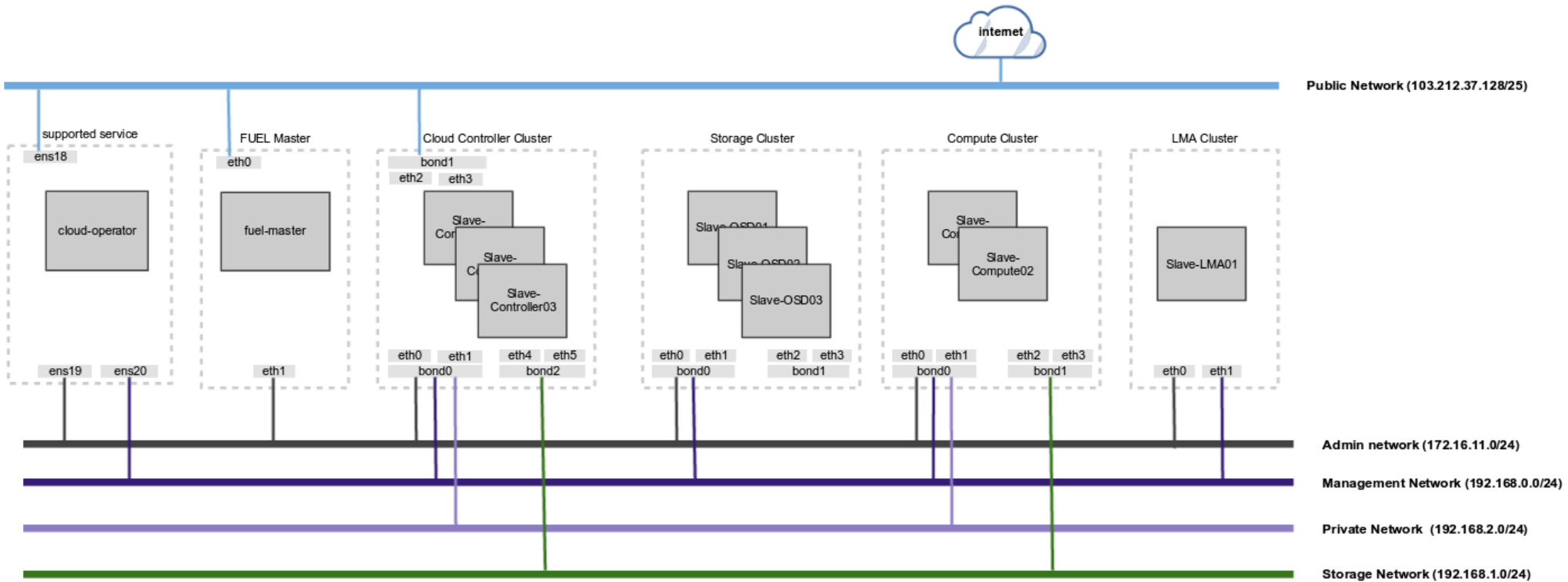
< Quit without saving

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```
#####  
#           Welcome to the Fuel server           #  
#####  
Server is running on x86_64 platform  
  
Fuel UI is available on:  
https://103.212.37.130:8443  
https://172.16.11.2:8443  
  
Default administrator login:    root  
Default administrator password: r00tme  
  
Default Fuel UI login: admin  
Default Fuel UI password: admin  
  
Please change root password on first login.  
fuel login:
```

LAB 1

LAB 1.1 Explore Class Environment



<https://45.121.60.129:8006>

Proxmox VE Login

User name:

Password:

Realm: Linux PAM standard authentication

Language: Linux PAM standard authentication

Proxmox VE authentication server

Login

1

2

Proxmox VE Login

User name:

Password:

Realm: Proxmox VE authentication server

Language: English

Login

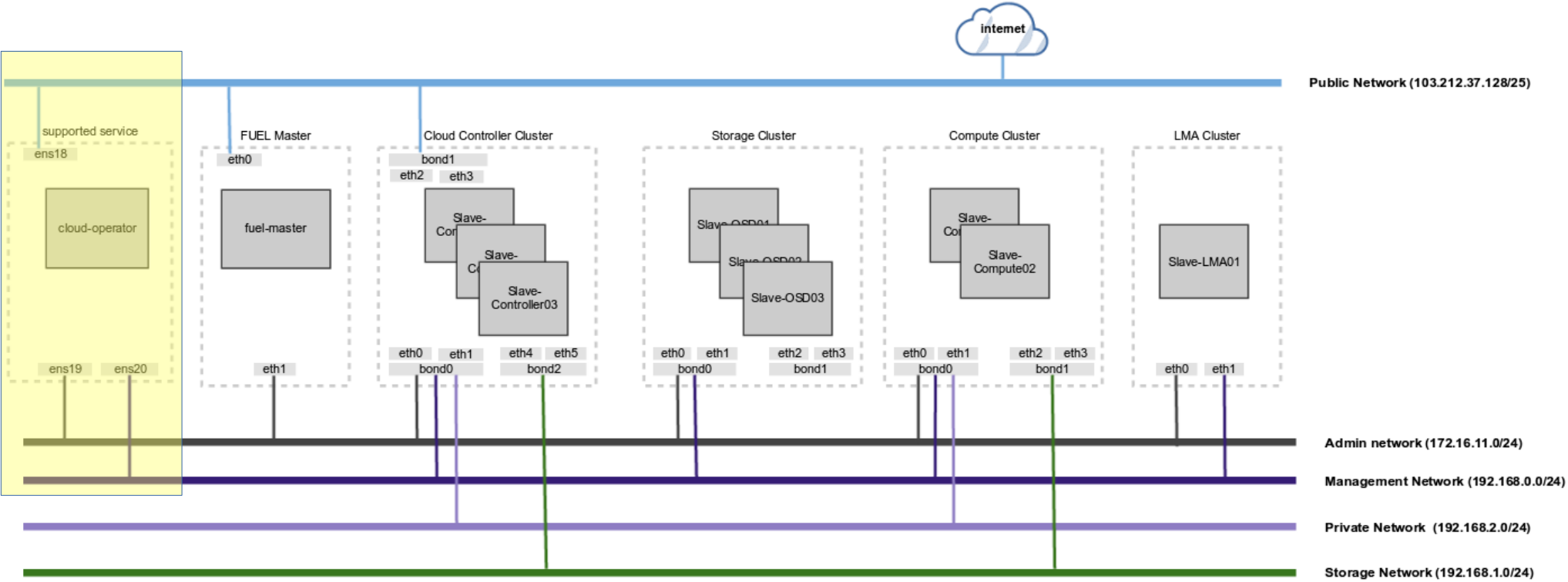
3

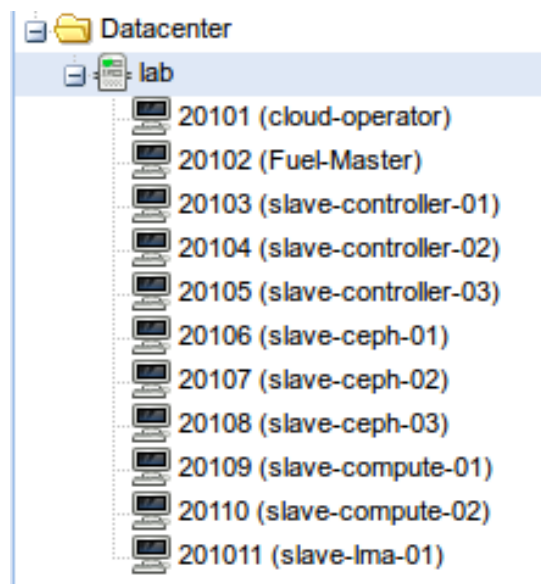
4

5

user Name : avenger0(H)
password : nipalab

cloud-operator

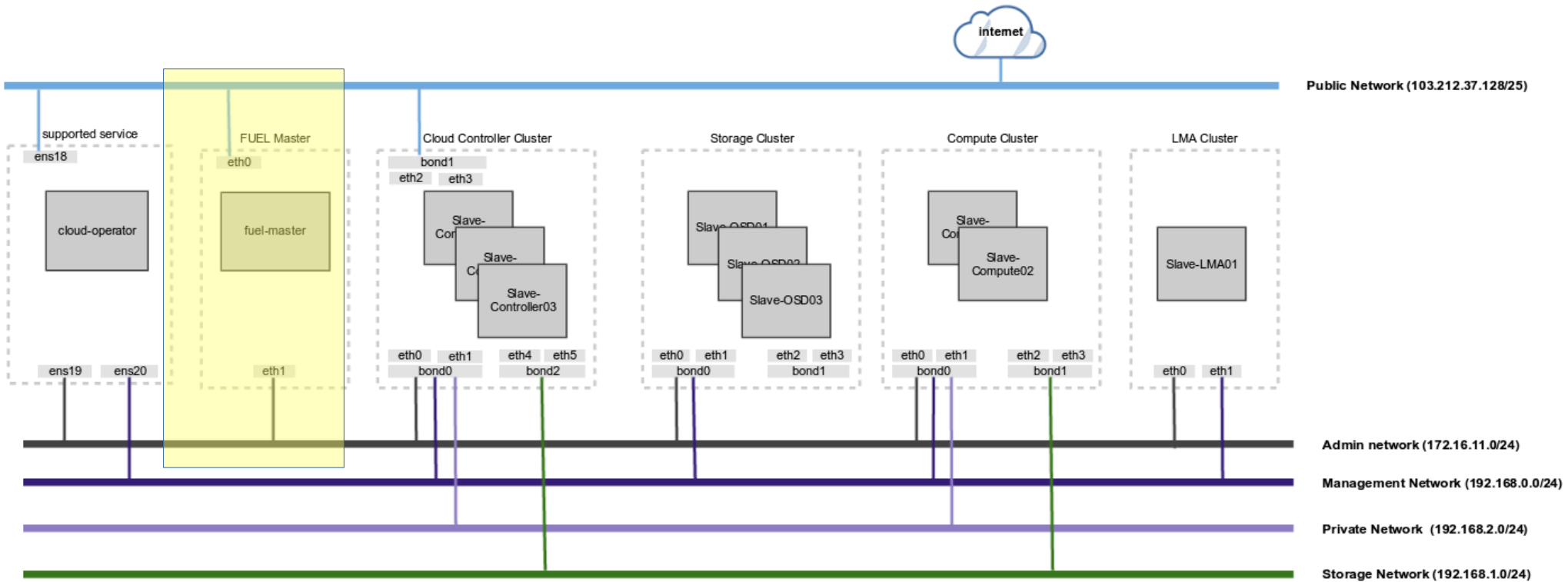


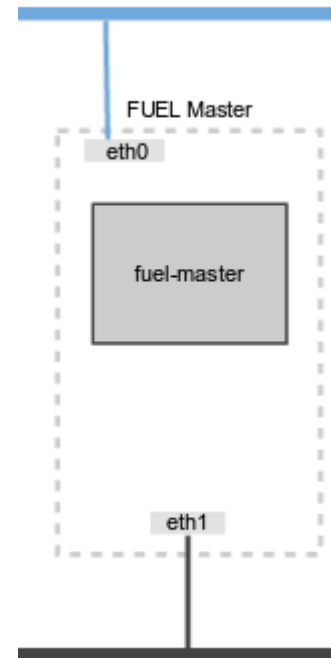


Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall		
Add Remove Edit Resize disk Move disk Disk Throttle CPU options Revert		
	Keyboard Layout	Default
	Memory	2.00GB
	Processors	2 (1 sockets, 2 cores) [numa=1]
	Display	Default
	Hard Disk (virtio0)	local:20101/vm-20101-disk-1.qcow2,size=500G
	Network Device (net0)	virtio=36:32:62:39:65:61,bridge=vmbr0
	Network Device (net1)	virtio=36:30:33:30:38:39,bridge=vmbr51
	Network Device (net2)	virtio=36:64:62:33:61:65,bridge=vmbr51,tag=101

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	cloud-operator							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Disk 'virtio0', CD-ROM							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=82c08c0e-30c7-499f-8448-3fc04433121e							
Qemu Agent	No							
VM protection	No							

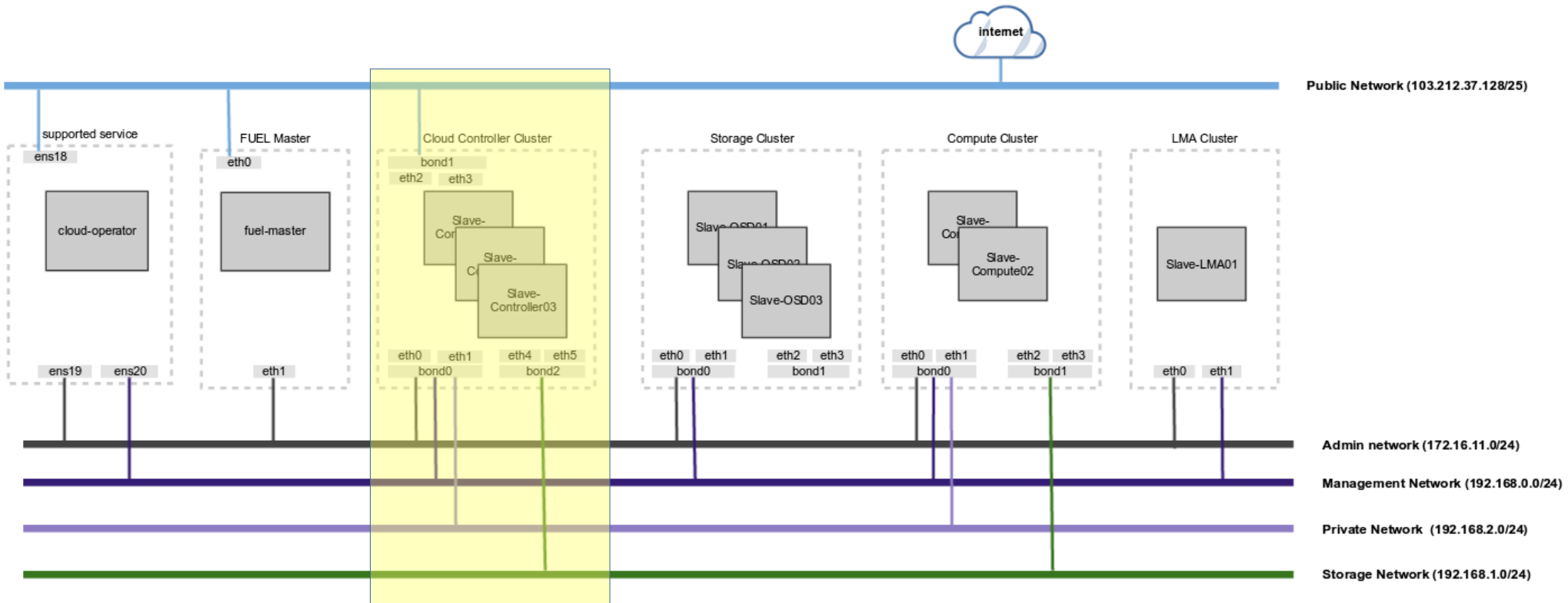
Fuel-Master

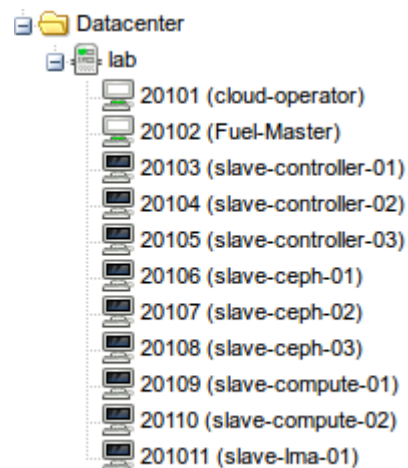




Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	Fuel-Master							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Disk 'virtio0', Disk 'virtio0', Network							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=0f4dcf3e-4711-46b2-ac8e-8a40d6d72790							

slave-controller-01





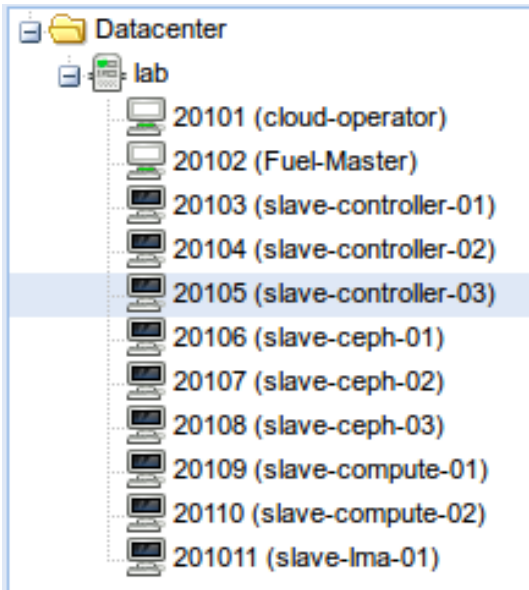
Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Add ▾ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert								
	Keyboard Layout	Default						
	Memory	4.00GB						
	Processors	4 (1 sockets, 4 cores)						
	Display	Default						
	Hard Disk (virtio0)	local:20103/vm-20103-disk-1.qcow2,size=250G						
	Network Device (net0)	virtio=62:65:38:32:39:62,bridge=vmbr51						
	Network Device (net1)	virtio=66:39:38:34:64:32,bridge=vmbr51						
	Network Device (net2)	virtio=36:32:39:33:62:30,bridge=vmbr0						
	Network Device (net3)	virtio=36:34:66:39:33:36,bridge=vmbr0						
	Network Device (net4)	virtio=62:64:35:30:33:36,bridge=vmbr52						
	Network Device (net5)	virtio=66:37:38:66:65:32,bridge=vmbr52						

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-controller-01							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=83ffdb3e-8fb9-429b-8d53-eb8a49403808							

slave-controller-02

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-controller-02							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=8941f324-671b-4f65-b141-c384b461f7ca							

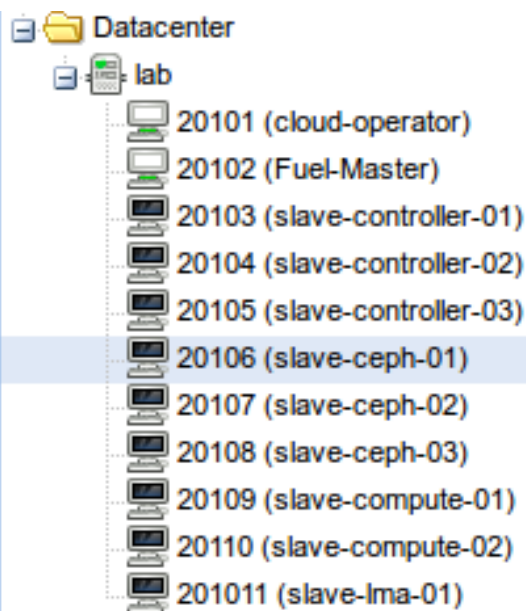
slave-controller-03



Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Add ▼ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert								
	Keyboard Layout	Default						
	Memory	4.00GB						
	Processors	4 (1 sockets, 4 cores)						
	Display	Default						
	Hard Disk (virtio0)	local:20105/vm-20105-disk-1.qcow2,size=250G						
	Network Device (net0)	virtio=36:30:61:36:39:36,bridge=vmbr51						
	Network Device (net1)	virtio=3A:37:64:37:39:35,bridge=vmbr51						
	Network Device (net2)	virtio=36:39:32:62:37:64,bridge=vmbr0						
	Network Device (net3)	virtio=66:33:32:31:64:62,bridge=vmbr0						
	Network Device (net4)	virtio=36:32:65:65:62:30,bridge=vmbr52						
	Network Device (net5)	virtio=3A:39:66:30:66:37,bridge=vmbr52						

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-controller-03							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=6ccc1fa9-b7e7-4456-942e-3094b2cc5d1c							

slave-ceph-01



Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Add ▾ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert								
	Keyboard Layout	Default						
	Memory	2.00GB						
	Processors	4 (1 sockets, 4 cores)						
	Display	Default						
	Hard Disk (virtio0)	local:20106/vm-20106-disk-4.qcow2,size=250G						
	Hard Disk (virtio1)	local:20106/vm-20106-disk-6.qcow2,size=50G						
	Hard Disk (virtio2)	local:20106/vm-20106-disk-1.qcow2,size=50G						
	Hard Disk (virtio3)	local:20106/vm-20106-disk-2.qcow2,size=50G						
	Hard Disk (virtio4)	local:20106/vm-20106-disk-3.qcow2,size=50G						
	Hard Disk (virtio5)	local:20106/vm-20106-disk-7.qcow2,size=50G						
	Hard Disk (virtio6)	local:20106/vm-20106-disk-5.qcow2,size=50G						
	Network Device (net0)	virtio=32:31:37:39:35:61,bridge=vmbr51						
	Network Device (net1)	virtio=36:30:62:31:35:62,bridge=vmbr51						
	Network Device (net2)	virtio=66:66:33:62:34:61,bridge=vmbr52						
	Network Device (net3)	virtio=62:65:61:61:38:32,bridge=vmbr52						

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-ceph-01							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=ee5b88fc-bc04-4e57-bd3f-ca9186df6513							

slave-ceph-02

Datacenter

lab

- 20101 (cloud-operator)
- 20102 (Fuel-Master)
- 20103 (slave-controller-01)
- 20104 (slave-controller-02)
- 20105 (slave-controller-03)
- 20106 (slave-ceph-01)
- 20107 (slave-ceph-02)
- 20108 (slave-ceph-03)
- 20109 (slave-compute-01)
- 20110 (slave-compute-02)
- 201011 (slave-lma-01)

Summary

Hardware

Options

Task History

Monitor

Backup

Snapshots

Console

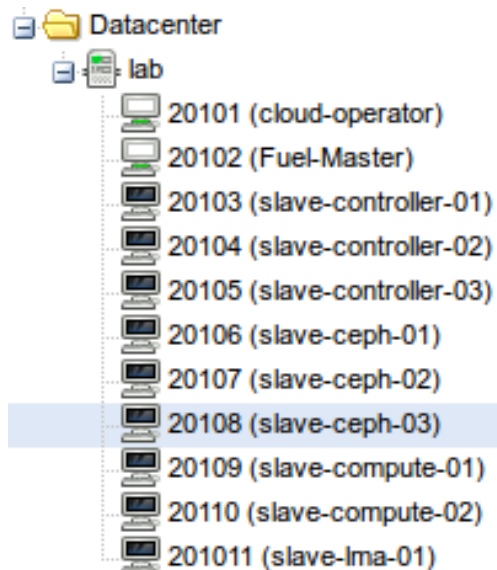
Firewall

Add ▼ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert

	Keyboard Layout	Default
	Memory	2.00GB
	Processors	4 (1 sockets, 4 cores)
	Display	Default
	Hard Disk (virtio0)	local:20107/vm-20107-disk-3.qcow2,size=250G
	Hard Disk (virtio1)	local:20107/vm-20107-disk-5.qcow2,size=50G
	Hard Disk (virtio2)	local:20107/vm-20107-disk-4.qcow2,size=50G
	Hard Disk (virtio3)	local:20107/vm-20107-disk-1.qcow2,size=50G
	Hard Disk (virtio4)	local:20107/vm-20107-disk-2.qcow2,size=50G
	Hard Disk (virtio5)	local:20107/vm-20107-disk-7.qcow2,size=50G
	Hard Disk (virtio6)	local:20107/vm-20107-disk-6.qcow2,size=50G
	Network Device (net0)	virtio=62:30:63:62:39:34,bridge=vmbr51
	Network Device (net1)	virtio=36:66:65:38:34:66,bridge=vmbr51
	Network Device (net2)	virtio=36:34:30:37:63:33,bridge=vmbr52
	Network Device (net3)	virtio=36:65:65:38:38:34,bridge=vmbr52

Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall	
Edit Revert	
Name	slave-ceph-02
Start at boot	No
Start/Shutdown order	order=any
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)
Boot order	Network, Disk 'virtio0'
Use tablet for pointer	Yes
Hotplug	Disk, Network, USB
ACPI support	Yes
SCSI Controller Type	Default (LSI 53C895A)
BIOS	Default (SeaBIOS)
KVM hardware virtualization	Yes
Freeze CPU at startup	No
Use local time for RTC	No
RTC start date	now
SMBIOS settings (type1)	uuid=171fc440-6cd6-4d05-83f3-8ca00d6b5c29

Slave-ceph-03



Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Add ▼ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert								
	Keyboard Layout	Default						
	Memory	2.00GB						
	Processors	4 (1 sockets, 4 cores)						
	Display	Default						
	Hard Disk (virtio0)	local:20108/vm-20108-disk-3.qcow2,size=250G						
	Hard Disk (virtio1)	local:20108/vm-20108-disk-6.qcow2,size=50G						
	Hard Disk (virtio2)	local:20108/vm-20108-disk-2.qcow2,size=50G						
	Hard Disk (virtio3)	local:20108/vm-20108-disk-4.qcow2,size=50G						
	Hard Disk (virtio4)	local:20108/vm-20108-disk-5.qcow2,size=50G						
	Hard Disk (virtio5)	local:20108/vm-20108-disk-1.qcow2,size=50G						
	Hard Disk (virtio6)	local:20108/vm-20108-disk-7.qcow2,size=50G						
	Network Device (net0)	virtio=66:32:32:31:37:64,bridge=vmbr51						
	Network Device (net1)	virtio=3A:39:35:39:66:37,bridge=vmbr51						
	Network Device (net2)	virtio=3A:34:66:31:35:39,bridge=vmbr52						
	Network Device (net3)	virtio=36:66:62:63:61:65,bridge=vmbr52						

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-ceph-03							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=de523f46-c878-442d-bb8b-f0c2b80df25a							

slave-compute-01

 **Datacenter**

 **lab**

-  20101 (cloud-operator)
-  20102 (Fuel-Master)
-  20103 (slave-controller-01)
-  20104 (slave-controller-02)
-  20105 (slave-controller-03)
-  20106 (slave-ceph-01)
-  20107 (slave-ceph-02)
-  20108 (slave-ceph-03)
-  20109 (slave-compute-01)
-  20110 (slave-compute-02)
-  20111 (slave-lma-01)

Summary			Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Add ▾ Remove Edit Resize disk Move disk Disk Throttle CPU options Revert										
	Keyboard Layout	Default								
	Memory	4.00GB								
	Processors	8 (1 sockets, 8 cores) [host] [numa=1]								
	Display	Default								
	Hard Disk (virtio0)	local:20109/vm-20109-disk-1.qcow2,size=500G								
	Network Device (net0)	virtio=66:34:65:64:64:65,bridge=vmbr51								
	Network Device (net1)	virtio=32:63:66:39:36:33,bridge=vmbr51								
	Network Device (net2)	virtio=36:37:38:63:61:39,bridge=vmbr52								
	Network Device (net3)	virtio=36:62:64:64:33:34,bridge=vmbr52								

Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall	
Edit Revert	
Name	slave-compute-01
Start at boot	No
Start/Shutdown order	order=any
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)
Boot order	Network, Disk 'virtio0'
Use tablet for pointer	Yes
Hotplug	Disk, Network, USB
ACPI support	Yes
SCSI Controller Type	Default (LSI 53C895A)
BIOS	Default (SeaBIOS)
KVM hardware virtualization	Yes
Freeze CPU at startup	No
Use local time for RTC	No
RTC start date	now
SMBIOS settings (type1)	uuid=8bfb4138-0f28-468e-8228-638bd2d6cf49

slave-compute-02

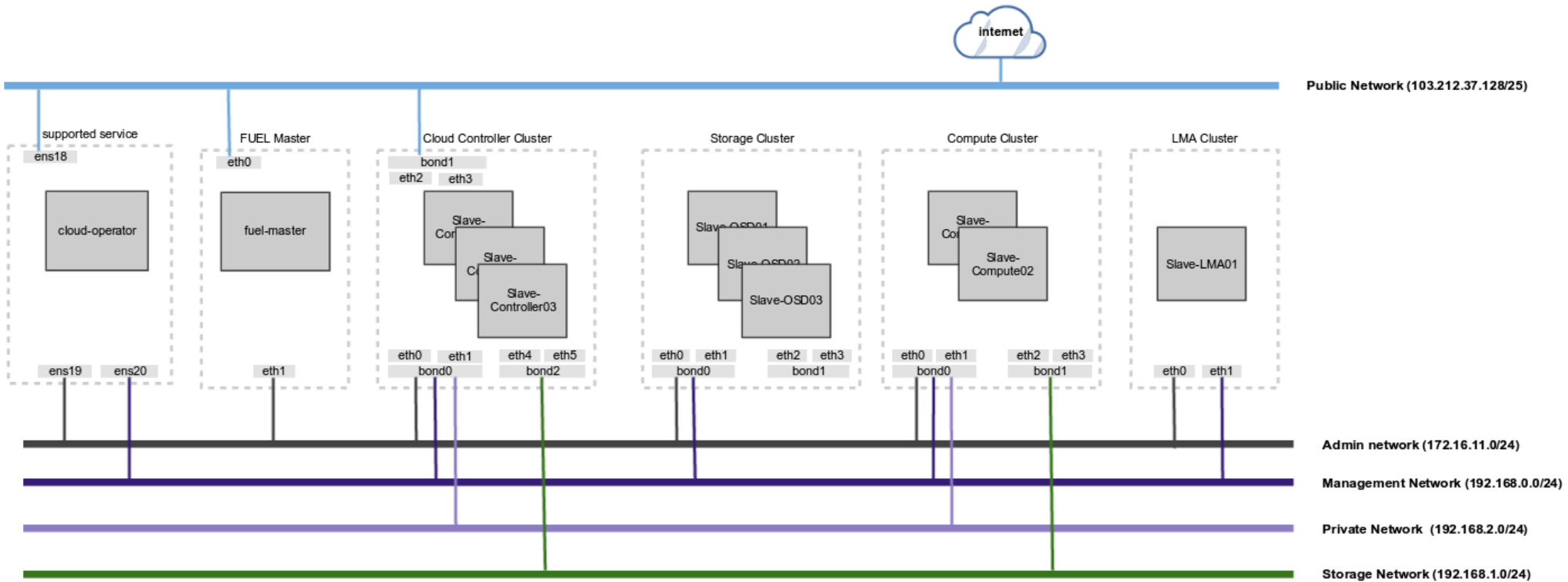
slave-lma-01

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-compute-02							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=8208b57c-81f2-4db4-bdd1-77f0606c19de							

Summary	Hardware	Options	Task History	Monitor	Backup	Snapshots	Console	Firewall
Edit Revert								
Name	slave-lma-01							
Start at boot	No							
Start/Shutdown order	order=any							
OS Type	Linux 4.X/3.X/2.6 Kernel (l26)							
Boot order	Network, Disk 'virtio0'							
Use tablet for pointer	Yes							
Hotplug	Disk, Network, USB							
ACPI support	Yes							
SCSI Controller Type	Default (LSI 53C895A)							
BIOS	Default (SeaBIOS)							
KVM hardware virtualization	Yes							
Freeze CPU at startup	No							
Use local time for RTC	No							
RTC start date	now							
SMBIOS settings (type1)	uuid=4f2560d5-a431-47c5-8593-269467c840f9							

LAB 1

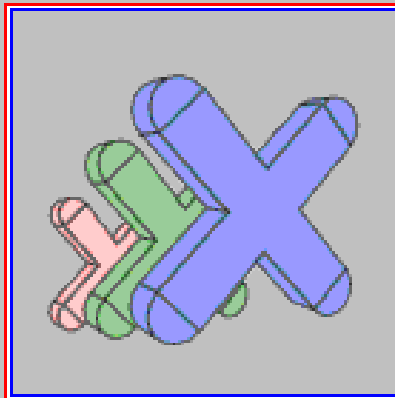
LAB 1.2 Review Reference Architecture



 Connect |  New |    | 

RDP ▼ Connect !

Login to xrdp



Module

username

password

OK

Cancel

Help



cloud-operator's
Home



MATE Terminal

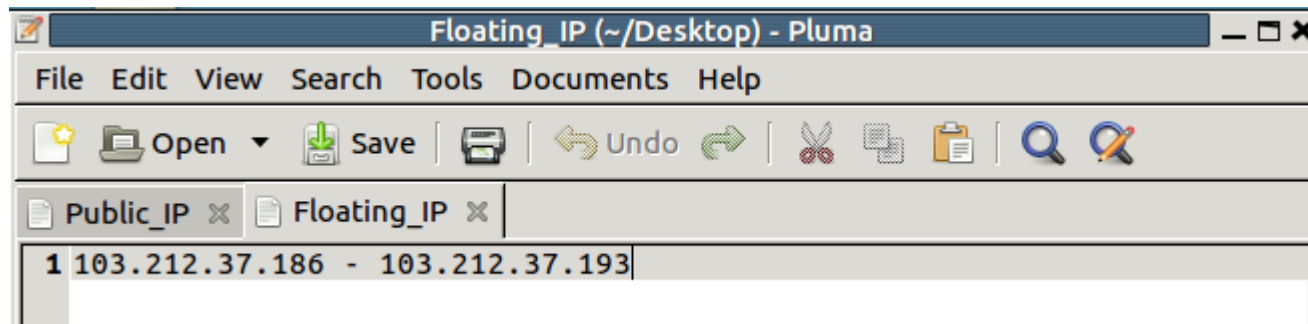
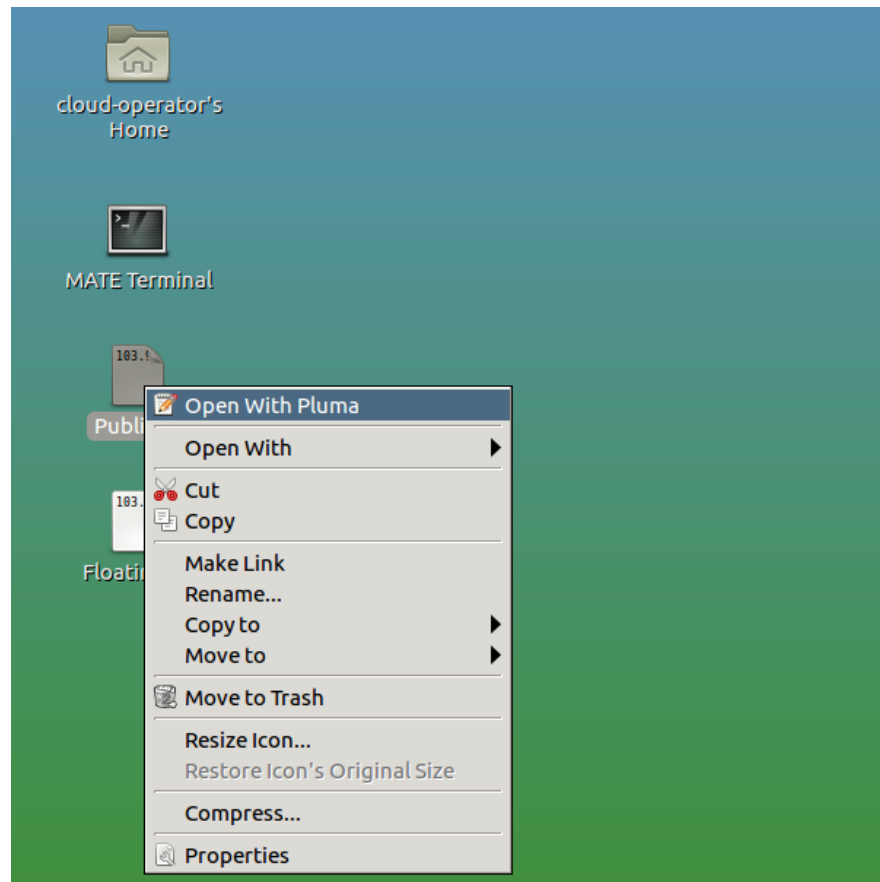


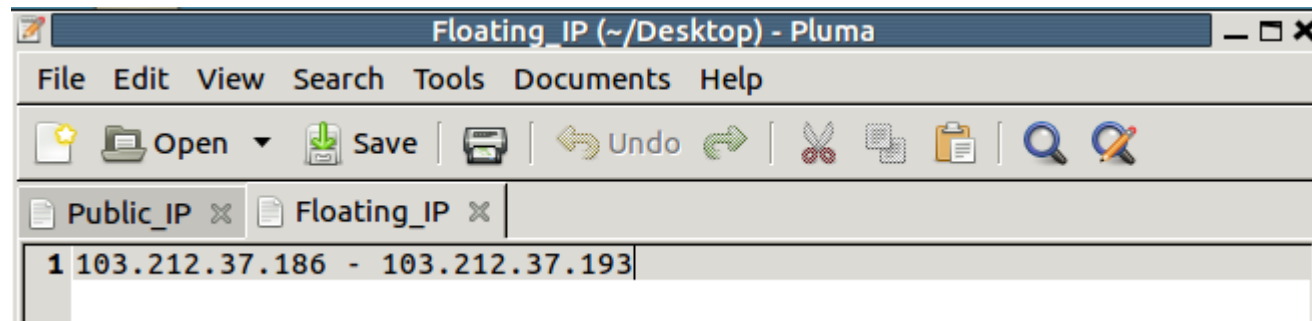
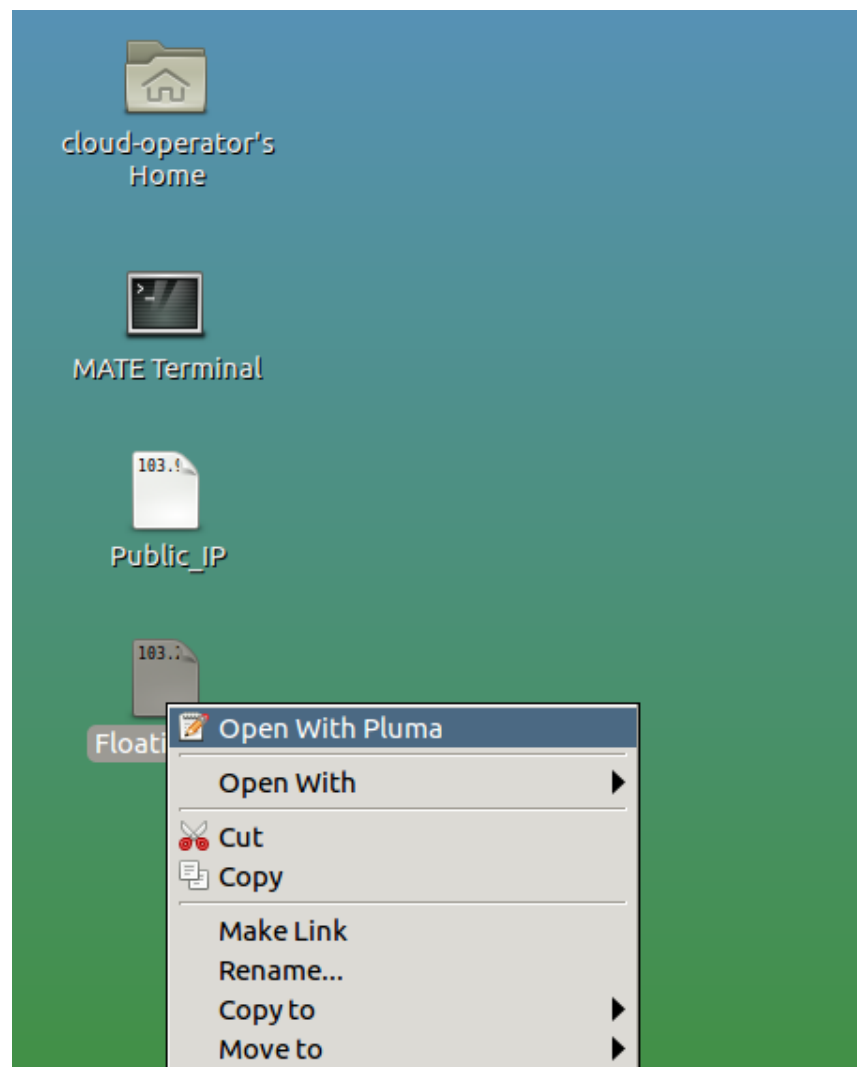
Public_IP

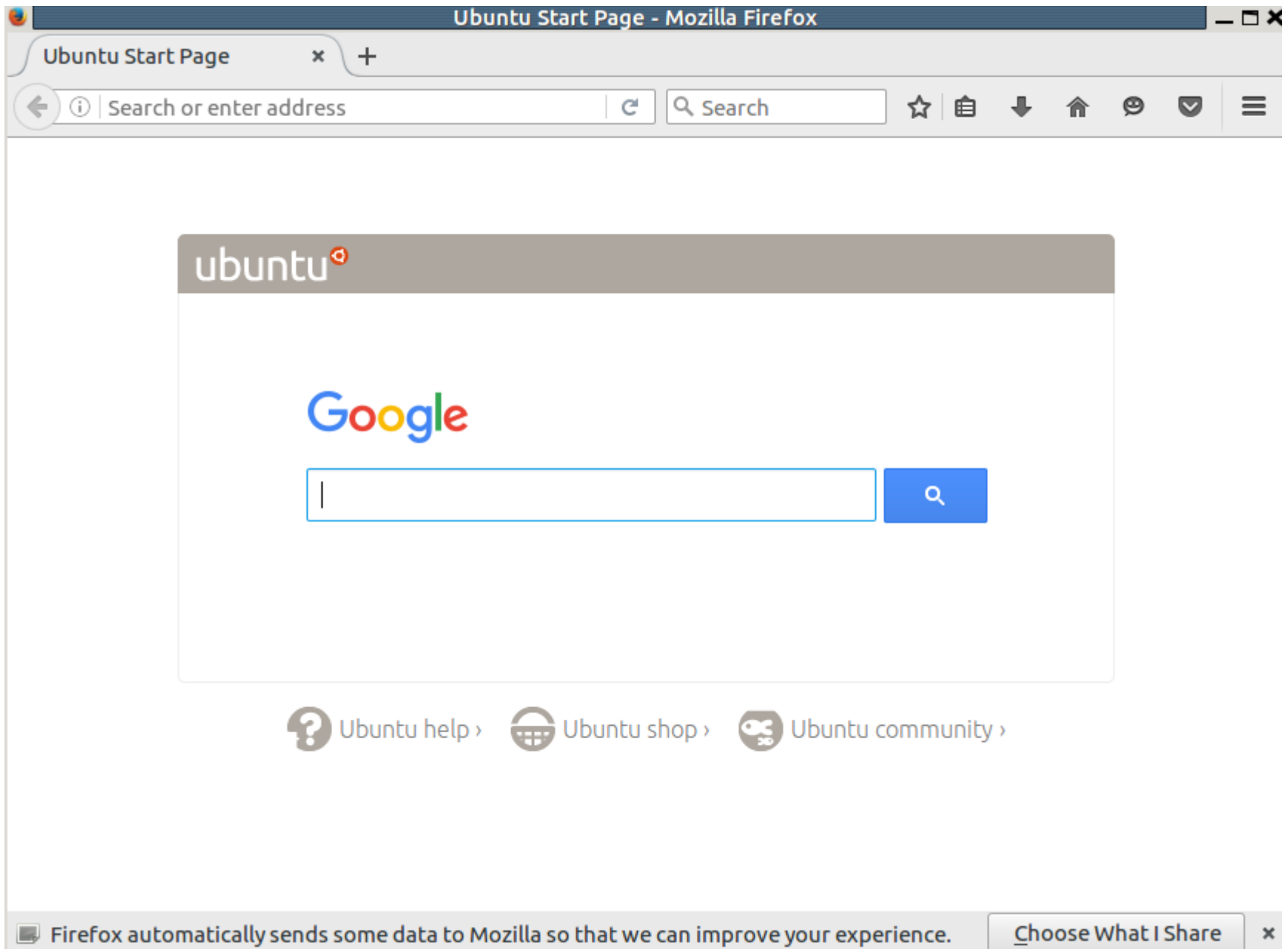


Floating_IP











Your connection is not secure

The owner of 10.20.0.2 has configured their website improperly. To protect your information from being stolen, Firefox has not connected to this website.

[Learn more...](#)

Go Back

Advanced

☐

Report errors like this to help Mozilla identify and block malicious sites

10.20.0.2:8443 uses an invalid security certificate.

The certificate is not trusted because it is self-signed.
The certificate is only valid for the following names:
10.20.0.2, 103.212.37.176

Error code: [SEC_ERROR_UNKNOWN_ISSUER](#)

Add Exception...



You are about to override how Firefox identifies this site.

Legitimate banks, stores, and other public sites will not ask you to do this.

Server

Location:

[Get Certificate](#)

Certificate Status

This site attempts to identify itself with invalid information.

[View...](#)

Wrong Site

The certificate belongs to a different site, which could mean that someone is trying to impersonate this site.

Unknown Identity

The certificate is not trusted because it hasn't been verified as issued by a trusted authority using a secure signature.

☒ [P](#)ermanently store this exception

[C](#)onfirm Security Exception

[X](#) Cancel



FUEL
for OpenStack®





Welcome to Fuel and OpenStack!

Help us to improve your experience by sending information about the settings, features, and deployment actions when you use Fuel and OpenStack.

[Learn what's collected](#)

☒ **Send usage statistics**

Web UI for collected statistics is under development and will be available at
<https://stats.fuel-infra.org/>

Thanks for helping to improve Fuel and OpenStack!

Home / Environments

My OpenStack Environments



New OpenStack Environment

Create a new OpenStack environment



Name and Release

Name

Compute

OpenStack Release

Mitaka on Ubuntu 14.04

Networking Setup

Storage Backends

Additional Services

Finish

By default, Fuel uploads the software packages for the Fuel Slave nodes from the external repositories. Please verify the Fuel Master node has the Internet connection. If the Fuel Master node does not have access to the Internet, you must create a local mirror with all required software packages and configure Fuel to use the mirror before you deploy an OpenStack environment.

This option will install the OpenStack Mitaka packages using Ubuntu as a base operating system. With high availability features built in, you are getting a robust, enterprise-grade OpenStack deployment.

Cancel

← Prev

Next →

Create a new OpenStack environment



Name and Release

Compute

Networking Setup

Storage Backends

Additional Services

Finish



QEMU-KVM

Select this option if you want to use QEMU as a hypervisor with capability of KVM acceleration.



vCenter ⚠

Select this option if you run OpenStack on VMware vCenter.

Plugin for DVS/NSX is required to create an environment with vCenter and Neutron.
Please visit [Fuel plugins page](#) for details.

Cancel

← Prev

Next →

Create a new OpenStack environment



Name and Release

Compute

Networking Setup

Storage Backends

Additional Services

Finish

☒ **Neutron with ML2 plugin** ✓

Framework that enables simultaneous utilization of the layer 2 networking technologies through drivers.

☐ **Neutron with VLAN segmentation** ⚠

Your network hardware must be configured for VLAN segmentation. This option supports up to 4095 networks.

☒ **Neutron with tunneling segmentation** ✓

By default VXLAN tunnels will be used. This option supports millions of tenant data networks.

Cancel

← Prev

Next →

Create a new OpenStack environment



Name and Release

Compute

Networking Setup

Storage Backends

Additional Services

Finish

Block Storage:

☐

LVM

Use default storage providers

☒

Ceph

Use Ceph as backend for Cinder volumes

Image Storage:

☒

Ceph

Use Ceph as backend for Glance images

Object Storage:

☐

Ceph

Use Ceph as backend for Swift objects

Ephemeral Storage:

☒

Ceph

Use Ceph as backend for Nova

Cancel

← Prev

Next →

Create a new OpenStack environment



Name and Release

Compute

Networking Setup

Storage Backends

Additional Services

Finish

☐

Install Sahara ✓

Sahara enables on-demand provisioning of Hadoop clusters to be deployed on OpenStack utilizing a variety of vendor distributions.

☐

Install Murano ✓

Murano is an application catalog, which allows application developers and cloud administrators to publish various cloud-ready applications in a browsable categorized catalog, which may be used by the cloud users (including the inexperienced ones) to pick-up the needed applications and services and composes the reliable environments out of them in a "push-the-button" manner. Additional features may be enabled by installing the newest version of the Murano plugin.

☐

Install Ceilometer and Aodh ✓

Ceilometer provides metering and monitoring of an OpenStack cloud. Aodh is an alarming service which uses the data collected by Ceilometer.

☐

Install Ironic ⚠

Ironic enables baremetal provisioning.

Cancel

← Prev

Next →

Create a new OpenStack environment



Name and Release

Compute

Networking Setup

Storage Backends

Additional Services

Finish

Your environment is now ready for deployment! After clicking the Create button, you can **Deploy Changes** or modify additional configuration changes in the Fuel **Environments** console.

Cancel

← Prev

Create

Welcome to the New OpenStack Environment!

You must add at least one node to your environment in order to deploy.

[+ Add Nodes](#)

Summary

Name	Avenger 
Status	New
OpenStack Release	Mitaka on Ubuntu 14.04
Compute	QEMU
Network	Neutron with tunneling segmentation
Storage Backends	Ceph RBD for volumes (Cinder) Ceph RBD for ephemeral volumes (Nova) Ceph RBD for Images (Glance)

[Delete Environment](#)



[Reset Environment](#)



Capacity

CPU (Cores)	0 (0)	RAM	0 bytes	HDD	0 bytes
-------------	-------	-----	---------	-----	---------

Node Statistics

No nodes found in this environment. Please add nodes in the Nodes tab and try again.

Dashboard

Nodes

Networks

Settings

Logs

Health Check

Cancel

Apply Changes

Assign Roles

Place the mouse cursor over a role to view description.

Base	Controller		
Compute	Compute	Virtual	⚠️ Ironic
Storage	⚠️ Cinder	⚠️ Cinder Block Device	Ceph OSD
Other	⚠️ Telemetry - MongoDB	Operating System	

A pool of one or more unallocated nodes is needed for this operation. To add nodes to the pool, configure the node to boot from the network (a.k.a. PXE booting). Fuel will automatically provision and discover the nodes.

<https://45.121.60.129:8006>

Proxmox VE Login

User name:

Password:

Realm: Linux PAM standard authentication

Language: Linux PAM standard authentication

Proxmox VE authentication server

Login

1

2

Proxmox VE Login

User name:

Password:

Realm: Proxmox VE authentication server

Language: English

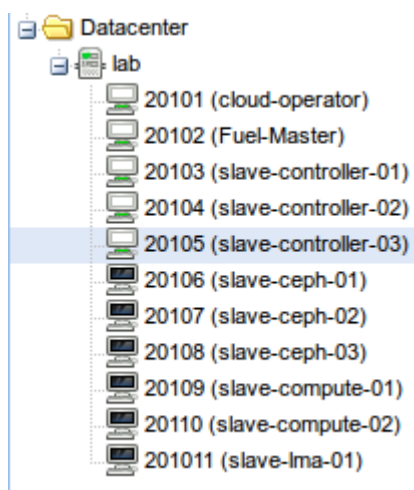
Login

3

4

5

user Name : avenger0(H)
password : nipalab



Server View

Datacenter

lab

20101 (cloud-operator)

20102 (Fuel-Master)

20103 (slave-controller-01)

20104 (slave-controller-02)

20105 (slave-controller-03)

20106 (slave-ceph-01)

20107 (slave-ceph-02)

20108 (slave-ceph-03)

20109 (slave-compute-01)

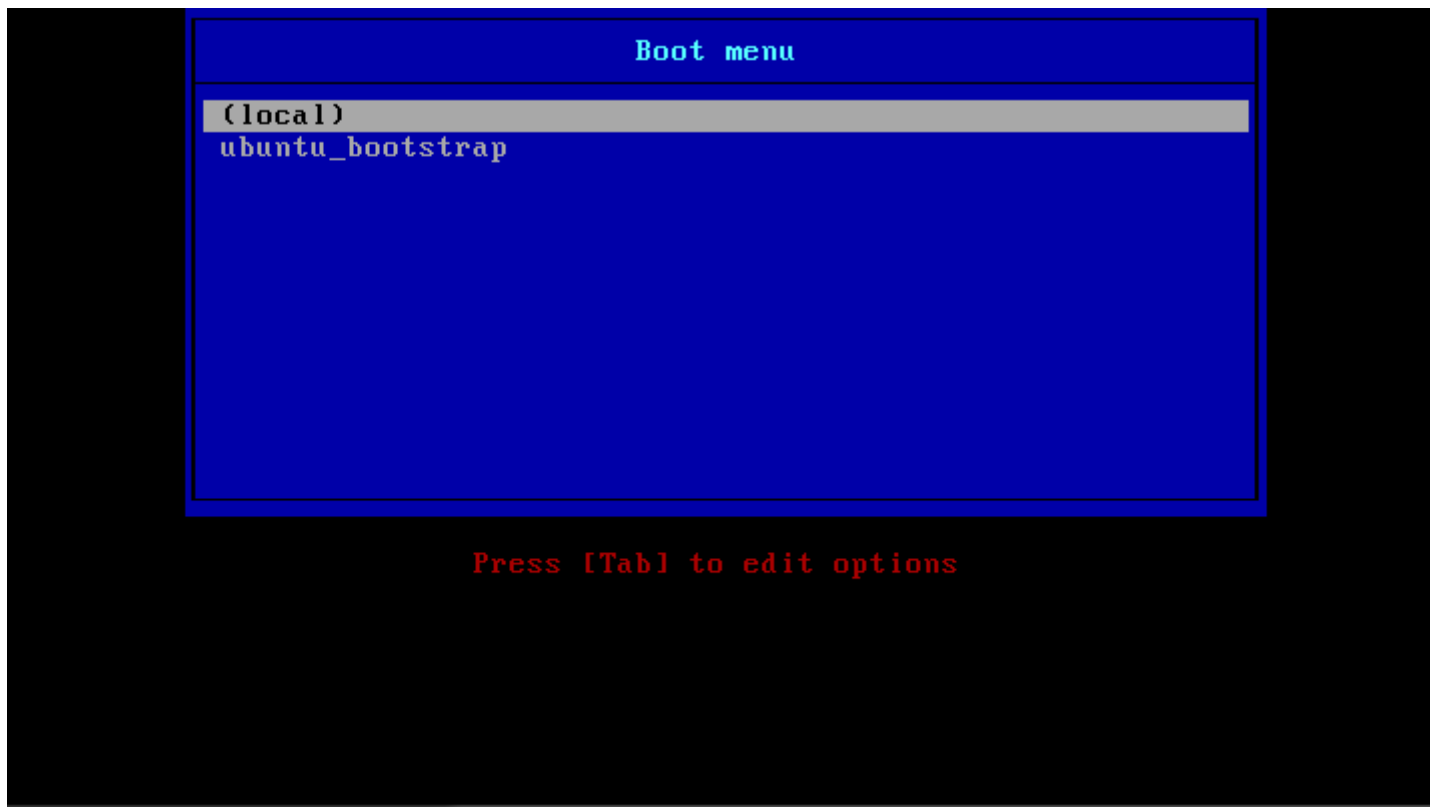
Virtual Machine 20103 ('slave-controller-01') on node 'lab'

Start Shutdown Stop Reset Remove Migrate Console

Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall

Take Snapshot Rollback Remove Edit

Name	RAM	Date/Status	Description
before_lab	No	2016-09-21 09:50:09	
NOW			You are here!



```
Ubuntu 14.04.5 LTS bootstrap tty1
bootstrap login: _
[
_
```

Base

Controller

Compute

Compute

Virtual

 **Ironic**

Storage

 **Cinder**

 **Cinder Block Device**

Ceph OSD

Other

 **Telemetry - MongoDB**

Operating System

Discovered (3) ☐ Select All

☐	Qemu <u>slave-controller-01</u>	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu <u>slave-controller-02</u>	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu <u>slave-controller-03</u>	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 

Base

✓ Controller

Compute

⚠ Compute

⚠ Virtual

⚠ Ironic

Storage

⚠ Cinder

⚠ Cinder Block Device

Ceph OSD

Other

⚠ Telemetry - MongoDB

Operating System

Discovered (3)

☒ Select All

☒	Qemu	slave-controller-01 CONTROLLER	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☒	Qemu	slave-controller-02 CONTROLLER	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☒	Qemu	slave-controller-03 CONTROLLER	DISCOVERED	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB

Cancel

Apply Changes

Sort By

Status↓

Assign Roles

Place the mouse cursor over a role to view description.

Base	✓ Controller		
Compute	⚠ Compute	⚠ Virtual	⚠ Ironic
Storage	⚠ Cinder	⚠ Cinder Block Device	Ceph OSD
Other	⚠ Telemetry - MongoDB	Operating System	

Configure Disks

Configure Interfaces

+ Add Nodes

Sort By

Roles ↓

Controller (3)

☐ Select All

☐	Qemu	slave-controller-01 CONTROLLER	 	PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu	slave-controller-02 CONTROLLER	 	PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu	slave-controller-03 CONTROLLER	 	PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 

Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles↓

Controller (3)					☒ Select All	
☒	Qemu	slave-controller-01 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-02 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-03 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	

Dashboard

Nodes

Networks

Settings

Logs

Health Check

Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

☐ eth0



Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

Offloading Modes: [Default](#) MTU: [Default](#)



☐ eth1



Speed: N/A

Public

Offloading Modes: [Default](#) MTU: [Default](#)



 Dashboard

 Nodes

 Networks

 Settings

 Logs

 Health Check

Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

☐ eth0



Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

Offloading Modes: [Default](#)

MTU: [Default](#)



☐ eth1



Speed: N/A

Public

Offloading Modes: [Default](#)

MTU: [Default](#)



Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☒ eth0

Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

Offloading

Modes: [Default](#)MTU: [Default](#)

▼

☒ eth1

Speed: N/A

Public

☒ eth2



Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth3



Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☐ bond1

Mode balance-rr



Name: **eth2**
Speed: N/A



Name: **eth3**
Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth4



Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth5



Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

☐ bond2

Mode balance-rr



Name: **eth4**
Speed: N/A

You can drag and drop logical networks between the interfaces



Name: **eth5**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ **bond0**

Mode

balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)

▼

☐ **bond1**

Mode

balance-rr



Name: **eth2**
Speed: N/A

You can drag and drop logical networks between the interfaces



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

▼

☐ bond0

Mode

balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond1

Mode

balance-rr



Name: **eth2**
Speed: N/A

Public



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ **bond1**

Mode **balance-rr**



Name: **eth2**
Speed: N/A

Public



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ **bond2**

Mode **balance-rr**



Name: **eth4**
Speed: N/A

Storage
VLAN ID:102



Name: **eth5**
Speed: N/A

☐ bond1

Mode

balance-rr

balance-rr

Active Backup

802.3ad(LACP)

 Name: eth2
Speed: N/A

Public

 Name: eth3
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond2

Mode

balance-rr

 Name: eth4
Speed: N/A

Storage
VLAN ID:102

 Name: eth5
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond1

LACP Rate Slow

Xmit Hash Policy

layer2

Mode

802.3ad(LACP)



Name: eth2
Speed: N/A

Public



Name: eth3
Speed: N/A

layer2
layer2+3
layer3+4
encap2+3
encap3+4

Offloading Modes: [Default](#)

MTU: [Default](#)

☐ bond2

Mode

balance-rr



Name: eth4
Speed: N/A

Storage
VLAN ID:102



Name: eth5
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)

☐ **bond1** LACP Rate Slow Xmit Hash Policy layer2+3 Mode 802.3ad(LACP)



Name: **eth2**
Speed: N/A

Public



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ **bond2** Mode balance-rr



Name: **eth4**
Speed: N/A

Storage
VLAN ID:102



Name: **eth5**
Speed: N/A

- balance-rr
- Active Backup
- 802.3ad(LACP)**

Offloading Modes: [Default](#) MTU: [Default](#)



☐ bond1

LACP Rate

Slow

Xmit Hash Policy

layer2+3

Mode

802.3ad(LACP)



Name: eth2
Speed: N/A

Public



Name: eth3
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond2

LACP Rate

Slow

Xmit Hash Policy

layer2

layer2

layer2+3

layer3+4

encap2+3

encap3+4

Mode

802.3ad(LACP)



Name: eth4
Speed: N/A

Storage
VLAN ID:102



Name: eth5
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



bond1

LACP Rate

Slow

Xmit Hash Policy

layer2+3

Mode

802.3ad(LACP)



Name: **eth2**
Speed: N/A

Public



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)



bond2

LACP Rate

Slow

Xmit Hash Policy

layer2+3

Mode

802.3ad(LACP)



Name: **eth4**
Speed: N/A

Storage
VLAN ID:102



Name: **eth5**
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)



[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

☐ bond0

Mode balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ bond1

LACP Rate Slow

Xmit Hash Policy layer2+3

Mode 802.3ad(LACP)



Name: **eth2**
Speed: N/A

Public



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)





bond2

LACP Rate

Slow



Xmit Hash Policy

layer2+3



Mode

802.3ad(LACP)



Name: **eth4**
Speed: N/A

Storage

VLAN ID:102



Name: **eth5**
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)



Back To Node List

Load Defaults

Cancel Changes

Apply

Dashboard

Nodes

Networks

Settings

Logs

Health Check

Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles

Controller (3)

Select All

☒	Qemu	slave-controller-01			PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-02			PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-03			PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	

Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles↓

Controller (3)						☒ Select All
☒	Qemu	slave-controller-01 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-02 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	
☒	Qemu	slave-controller-03 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB	

Configure disks on 3 nodes

vda (vda) Total Space : 249.3 GB

Boot from this disk ☒

Base System 54.0 GB	Logs 10.0	Mysql 20.0 GB	Horizon 11.0	Unallocated 154.3 GB
------------------------	--------------	------------------	-----------------	-------------------------

Back To Node List

Load Defaults

Cancel Changes

Apply

Configure disks on 3 nodes

vda (vda) Total Space : 249.3 GB

Boot from this disk ☒

Base System 54.0 GB	Logs 10.0	Mysql 20.0 GB	Horizon 11.0	Unallocated 154.3 GB
Disk Information		Volume Groups		
Name	vda	Base System	<input type="range"/>	55296 MB Minimum allowed size reached.
Model		Logs	<input type="range"/>	10240 MB Minimum allowed size reached.
Size	250.0 GB	Mysql Database	<input type="range"/>	20480 MB Minimum allowed size reached.
Paths		Horizon Temp Storage	<input type="range"/>	11264 MB Minimum allowed size reached.
Extra				
Removable	0			
Disk	vda			

Back To Node List

Load Defaults

Cancel Changes

Apply

Configure disks on 3 nodes

vda (vda) Total Space : 249.3 GB

Boot from this disk ☒

Base System 60.3 GB		Logs 72.9 GB		Mysql Database 85.7 GB		Horizon Temp 30.3 GB	
------------------------	--	-----------------	--	---------------------------	--	-------------------------	--

Disk Information

Name vda

Model

Size 250.0 GB

Paths

Extra

Removable 0

Disk vda

Volume Groups

Base System

Logs

Mysql Database

Horizon Temp Storage

61763

74687

87734

31060

MB

MB

MB

MB

Back To Node List

Load Defaults

Cancel Changes

Apply

Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles

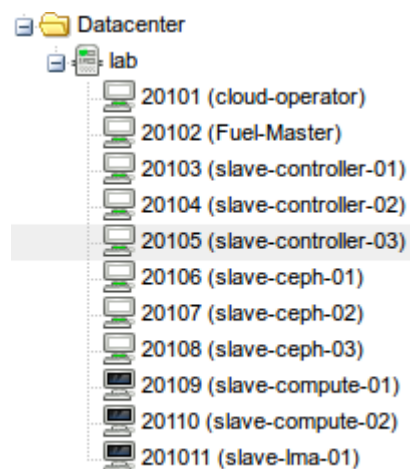
Controller (3)					☒ Select All
☒	Qemu	slave-controller-01 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☒	Qemu	slave-controller-02 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☒	Qemu	slave-controller-03 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB

Server View

Datacenter
lab
20101 (cloud-operator)
20102 (Fuel-Master)
20103 (slave-controller-01)
20104 (slave-controller-02)
20105 (slave-controller-03)
20106 (slave-ceph-01)
20107 (slave-ceph-02)
20108 (slave-ceph-03)
20109 (slave-compute-01)
20110 (slave-compute-02)
201011 (slave-lma-01)

Virtual Machine 20106 ('slave-ceph-01') on node 'lab'
Start Shutdown Stop Reset Remove Migrate Console
Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall
Take Snapshot Rollback Remove Edit

Name	RAM	Date/Status	Description
before_lab	No	2016-09-21 11:53:22	
NOW			You are here!



Assign Roles Place the mouse cursor over a role to view description.

Base

Controller

Compute

Compute

Virtual

 **Ironic**

Storage

 **Cinder**

 **Cinder Block Device**

 **Ceph OSD**

Other

 **Telemetry - MongoDB**

Operating System

Discovered (3)

☒ Select All

☒	Qemu	slave-ceph-01 CEPH-OSD	DISCOVERED	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-02 CEPH-OSD	DISCOVERED	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-03 CEPH-OSD	DISCOVERED	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 

Ceph OSD (3)

☒ Select All

☒	Qemu	slave-ceph-01 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-02 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-03 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 





Cancel Apply Changes

Sort By Status↓

Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

☐ eth0



Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

Offloading Modes: [Default](#) MTU: [Default](#)



☐ eth1



Speed: N/A

Public

Offloading Modes: [Default](#) MTU: [Default](#)



Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☒ eth0



Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth1



Speed: N/A

Public

Offloading Modes: [Default](#) MTU: [Default](#)



Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☐ bond0

Mode balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103

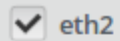


Name: **eth1**
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)





eth2

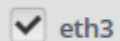


Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#)

MTU: [Default](#)



eth3



Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#)

MTU: [Default](#)



Configure interfaces on 3 nodes

Bond Interfaces

Unbond Interfaces

☐ bond0

Mode balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)



☐ bond1

Mode balance-rr



Name: **eth2**
Speed: N/A

You can drag and drop logical networks between the interfaces



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)





bond0

Mode

balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)



bond1

LACP Rate

Slow

Xmit Hash Policy

layer2+3

Mode

802.3ad(LACP)



Name: **eth2**
Speed: N/A

Public

Storage
VLAN ID:102



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#)

MTU: [Default](#)



[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

☐ bond0

Mode balance-rr ▾



Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



☐ bond1

Mode balance-rr ▾



Name: **eth2**
Speed: N/A

Public

Storage
VLAN ID:102



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)



[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

☐ bond0

Mode balance-rr



Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond1

Mode balance-rr



Name: **eth2**
Speed: N/A

Public

Storage
VLAN ID:102



Name: **eth3**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

balance-rr
Active Backup
802.3ad/802.3ad (ACP)

[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

☐ bond0

Mode balance-rr

 Name: **eth0**
Speed: N/A

Admin (PXE)

Management
VLAN ID:101

Private
VLAN ID:103

 Name: **eth1**
Speed: N/A

Offloading Modes: [Default](#) MTU: [Default](#)

☐ bond1

LACP Rate Slow

Xmit Hash Policy layer2

Mode 802.3ad(LACP)

 Name: **eth2**
Speed: N/A

Public

Storage
VLAN ID:102

 Name: **eth3**
Speed: N/A

- layer2
- layer2+3
- layer3+4
- encap2+3
- encap3+4

Offloading Modes: [Default](#) MTU: [Default](#)

[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

Ceph OSD (3)

☒ Select All

☒	Qemu	slave-ceph-01 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-02 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☒	Qemu	slave-ceph-03 CEPH-OSD	 	PENDING ADDITION	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 



Configure Disks

Configure Interfaces

 Delete

 Edit Roles

 Add Nodes

Sort By

Roles ↓

☐ Select All

Configure disks on 3 nodes

vda (vda)

Total Space : 249.4 GB

Boot from this disk ☒

Base System

54.0 GB

Unallocated

195.4 GB

vdb (vdb)

Total Space : 49.4 GB

Boot from this disk ☐

Ceph

49.4 GB

×

vdc (vdc)

Total Space : 49.4 GB

Boot from this disk ☐

Ceph

49.4 GB

×

vdd (vdd)

Total Space : 49.4 GB

Boot from this disk ☐

Ceph

49.4 GB

×

Configure disks on 3 nodes

vda (vda) Total Space : 249.4 GB

Boot from this disk ☒

Base System 54.0 GB		Unallocated 195.4 GB	
Disk Information		Volume Groups	
Name	vda	Base System	55296 MB
Model			Minimum allowed size reached.
Size	250.0 GB	Ceph Journal	0 MB
Paths		Ceph	0 MB
Extra			
Removable	0		
Disk	vda		

Configure disks on 3 nodes

vda (vda) Total Space : 249.4 GB

Boot from this disk ☒

Base System

249.4 GB

Disk Information

Name

vda

Model

Size

250.0 GB

Paths

Extra

Removable

0

Disk

vda

Volume Groups

Base System

255436

MB

Ceph Journal

0

MB

Ceph

0

MB

vdf (vdf) Total Space : 49.4 GB

Boot from this disk ☐

Ceph

49.4 GB

x

vdg (vdg) Total Space : 49.4 GB

Boot from this disk ☐

Ceph

49.4 GB

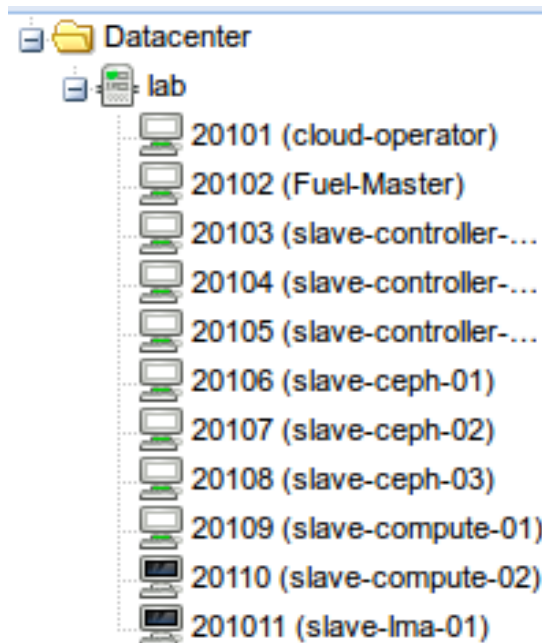
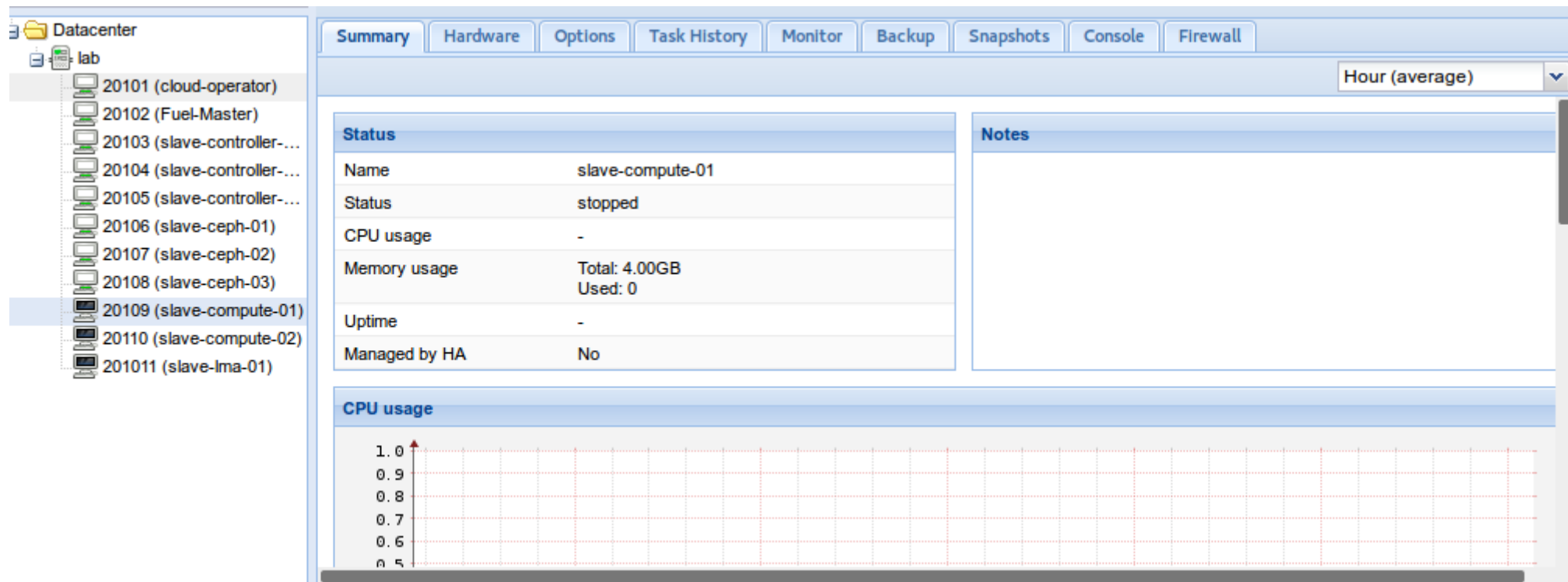
x

Back To Node List

Load Defaults

Cancel Changes

Apply



Configure Disks

Configure Interfaces

+ Add Nodes

Sort By

Roles↓

☐ Select All

Controller (3)

☐ Select All

☐	Qemu	slave-controller-01 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☐	Qemu	slave-controller-02 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB
☐	Qemu	slave-controller-03 CONTROLLER		PENDING ADDITION	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB



Cancel Apply Changes

Sort By Status↓

Assign Roles

Place the mouse cursor over a role to view description.

Base

⚠ Controller

Compute

✓ Compute

Virtual

⚠ Ironic

Storage

⚠ Cinder

⚠ Cinder Block Device

Ceph OSD

Other

⚠ Telemetry - MongoDB

Operating System

Discovered (1)

☒ Select All



Qemu

slave-compute-01
COMPUTE

DISCOVERED

CPU: 1 (8) RAM: 4.0 GB HDD: 500.0 GB



Configure Disks

Configure Interfaces

Delete

Edit Roles

+ Add Nodes

Sort By

Roles↓

☐

Select All

Controller (3)

☐

Select All

Compute (1)

☒

Select All

Configure interfaces on slave-compute-01

Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☐ bond0

Mode balance-rr



Name: **eth0**
MAC: 66:34:65:64:64:65
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
MAC: 32:63:66:39:36:33
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)



☐ eth2



MAC: 36:37:38:63:61:39
Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



☐ bond0

Mode balance-rr



Name: **eth0**
MAC: 66:34:65:64:64:65
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
MAC: 32:63:66:39:36:33
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth2



MAC: 36:37:38:63:61:39
Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



☒ eth3



MAC: 36:62:64:64:33:34
Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)



Bond Interfaces

Unbond Interfaces

Bonding network interfaces with different network performance parameters is not recommended.

☐ bond0

Mode balance-rr



Name: **eth0**
MAC: 66:34:65:64:64:65
Speed: N/A

Admin (PXE)

Public

Storage
VLAN ID:102

Management
VLAN ID:101

Private
VLAN ID:103



Name: **eth1**
MAC: 32:63:66:39:36:33
Speed: N/A

Untagged networks cannot be assigned to the same interface.

Offloading Modes: [Default](#) MTU: [Default](#)

☒ eth2



MAC: 36:37:38:63:61:39
Speed: N/A

You can drag and drop logical networks between the interfaces

Offloading Modes: [Default](#) MTU: [Default](#)

☒ eth3



MAC: 36:62:64:64:33:34
Speed: N/A

You can drag and drop logical networks between the interfaces



Dashboard



Nodes



Networks



Settings



Logs



Health Check

Network Settings (Neutron with tunneling segmentation)

[Add New Node Network Group](#)

Node Network Groups

default

default

This node network group uses a shared admin network and cannot be deleted

Settings

Neutron L2

Neutron L3

Other

Public

The Public network allows inbound connections to VMs (Controllers and Tenant VMs) from external networks (e.g., the Internet) as well as outbound connections from VMs to the external networks.

Network Verification

Connectivity
Check

CIDR

103.212.37.128/25

☐

Use the whole CIDR

Start

End

IP Range

103.212.37.181

103.212.37.185



Gateway

103.212.37.254

Use VLAN tagging

☐

Storage ?

The Storage network is used to provide storage services such as replication traffic from Ceph. The Management network is used for Ceph Public traffic.

CIDR	192.168.1.0/24	☒ Use the whole CIDR
IP Range	Start 192.168.1.1	End 192.168.1.254 
Use VLAN tagging	☒	102

Management ?

The Management network is primarily used for OpenStack Cloud Management. It is used to access OpenStack services (nova-api, OpenStack dashboard, etc).

CIDR	192.168.0.0/24	☐ Use the whole CIDR
IP Range	Start 192.168.0.10	End 192.168.0.254 
Use VLAN tagging	☒	101

Network Settings (Neutron with tunneling segmentation)

 Add New Node Network Group

Node Network Groups

default

Settings

Neutron L2

Neutron L3

Other

Network Verification

Connectivity
Check

Floating Network Parameters ?

This network is used to assign Floating IPs to tenant VMs.

	Start	End
Floating IP range	103.212.37.186	103.212.37.193
Floating network name	admin_floating_net	

Admin Tenant Network Parameters ?

This Admin Tenant network provides internal network access for instances. It can be used only by the Admin tenant.

Admin Tenant network CIDR	192.168.111.0/24
Admin Tenant network gateway	192.168.111.1
Admin Tenant network name	admin_internal_net

Settings

Neutron L2

Neutron L3

Other

Network Verification

Connectivity
Check

Neutron Advanced Configuration

- ☐ Neutron L2 population
Enable L2 population mechanism in Neutron
- ☐ Neutron DVR ⚠
Enable Distributed Virtual Routers in Neutron
- ☒ Neutron L3 HA
Enable High Availability features for Virtual Routers in Neutron
Requires at least 2 Controller nodes to function properly
- ☐ Neutron QoS
Enable Neutron QoS advanced service plug-in

Host OS DNS Servers

DNS list

8.8.8.8

+

−

List of upstream DNS servers

8.8.4.4

+

−

Host OS NTP Servers

NTP server list

10.20.0.2

+

List of upstream NTP servers

Cancel Changes

Save Settings



Network Settings (Neutron with tunneling segmentation)

[+ Add New Node Network Group](#)

Dashboard

Nodes

Networks

Settings

Logs

Health Check

OpenStack Settings

General

Security

Compute

Storage

Logging

OpenStack Services

OpenStack Access

Username	admin	Username for Administrator
Password		Password for Administrator
Tenant	admin	Tenant (project) name for Administrator
Email	admin@localhost	Email address for Administrator

OpenStack Settings

General

Security

Compute

Storage

Logging

OpenStack
Services

Common

Hypervisor type



KVM

Choose this type of hypervisor if you run OpenStack on hardware



QEMU

Choose this type of hypervisor if you run OpenStack on virtual hosts.



Nova quotas

Quotas are used to limit CPU and memory usage for tenants. Enabling quotas will increase load on the Nova database.



Resume guests state on host boot

Whether to resume previous guests state when the host reboots. If enabled, this option causes guests assigned to the host to resume their previous state. If the guest was running a restart will be attempted when nova-compute starts. If the guest was not running previously, a restart will not be attempted.

Load Defaults

Cancel Changes

Save Settings



Dashboard



Nodes



Networks



Settings



Logs



Health Check

✱ Added 7 nodes

 Deploy Changes

TLS is not enabled. It is highly recommended to enable and configure TLS.

Please verify your network settings before deployment. For more information please visit the [Networks tab](#).

Deployment Mode: [Provisioning + Deployment](#) ▼

Deploy Changes

 Before proceeding with deployment please verify that the nodes have disk partitioning and network interfaces configured properly. You will not be able to change these via UI after the cloud is deployed.

 Packages and updates are fetched from the repositories defined in the Settings tab. If your environment uses the default external repositories, verify that the Fuel Master node can access the Internet. If the Fuel Master node is not connected to the Internet, you must set up a local mirror and configure Fuel to upload packages from the local mirror. Fuel must have network access to the local mirror. You may also configure alternate repositories for installation.

Click Deploy to start the deployment or Cancel to make changes.

Cancel

Deploy

 Dashboard

 Nodes

 Networks

 Settings

 Logs

 Health Check

Current task: Deploying...

0%

Stop

Controller (3)

☐ Select All

☐	Qemu slave-controller-01 CONTROLLER		INSTALLING UBUNTU: 0%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu slave-controller-02 CONTROLLER		INSTALLING UBUNTU: 0%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu slave-controller-03 CONTROLLER		INSTALLING UBUNTU: 0%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 

Compute (1)

☐ Select All

☐	Qemu slave-compute-01 COMPUTE		INSTALLING UBUNTU: 0%	CPU: 1 (8) RAM: 4.0 GB HDD: 500.0 GB 
--------------------------	---	---	----------------------------------	--

Controller (3)

☐ Select All

☐	Qemu slave-controller-01 CONTROLLER		INSTALLING OPENSTACK: 16%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu slave-controller-02 CONTROLLER		INSTALLING OPENSTACK: 21%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu slave-controller-03 CONTROLLER		INSTALLING OPENSTACK: 21%	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 

Compute (1)

☐ Select All

☐	Qemu slave-compute-01 COMPUTE		INSTALLING OPENSTACK: 47%	CPU: 1 (8) RAM: 4.0 GB HDD: 500.0 GB 
--------------------------	---	--	---	--

Ceph OSD (3)

☐ Select All

☐	Qemu slave-ceph-01 CEPH-OSD		INSTALLING OPENSTACK: 62%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu slave-ceph-02 CEPH-OSD		INSTALLING OPENSTACK: 62%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu slave-ceph-03 CEPH-OSD		INSTALLING OPENSTACK: 62%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 

Controller (3)

☐ Select All

☐	Qemu	slave-controller-01 CONTROLLER		READY	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu	slave-controller-02 CONTROLLER		READY	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 
☐	Qemu	slave-controller-03 CONTROLLER		READY	CPU: 1 (4) RAM: 4.0 GB HDD: 250.0 GB 

Compute (1)

☐ Select All

☐	Qemu	slave-compute-01 COMPUTE		READY	CPU: 1 (8) RAM: 4.0 GB HDD: 500.0 GB 
--------------------------	------	------------------------------------	--	-------	--

Ceph OSD (3)

☐ Select All

☐	Qemu	slave-ceph-01 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu	slave-ceph-02 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu	slave-ceph-03 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 

Avenger (7 nodes)



Dashboard



Nodes



Networks



Settings



Logs



Health Check

Success

Provision of environment 'Avenger' is done.
Deployment is done. No changes.



[Horizon](#)

The OpenStack dashboard Horizon is now available.



OpenStack

DASHBOARD

User Name

Password

Project

Admin

Identity

Domains

Projects

Users

Groups

Roles

Projects

Filter

+ Create Project

Delete Projects

☐	NAME	DESCRIPTION	PROJECT ID	DOMAIN NAME	ENABLED	ACTIONS
☐	admin	admin tenant	593d1b53e1124939b3a658ba7222b682	Default	Yes	Manage Members
☐	services	Tenant for the openstack services	b522e08f1f88457685aa8eb033a28a92	Default	Yes	Manage Members

Displaying 2 items

LAB 2.0

<https://www.mirantis.com/validated-solution-integrations/fuel-plugins/>

Filter:

MOS 9.0

Select Category

1

6WIND Virtual Accelerator Fuel Plugin

UNLOCKED PARTNER: 6WIND

Virtual Accelerator is virtualized infrastructure that accelerates network packet processing by offloading vSwitching to the network stack.

MOS VERSION:

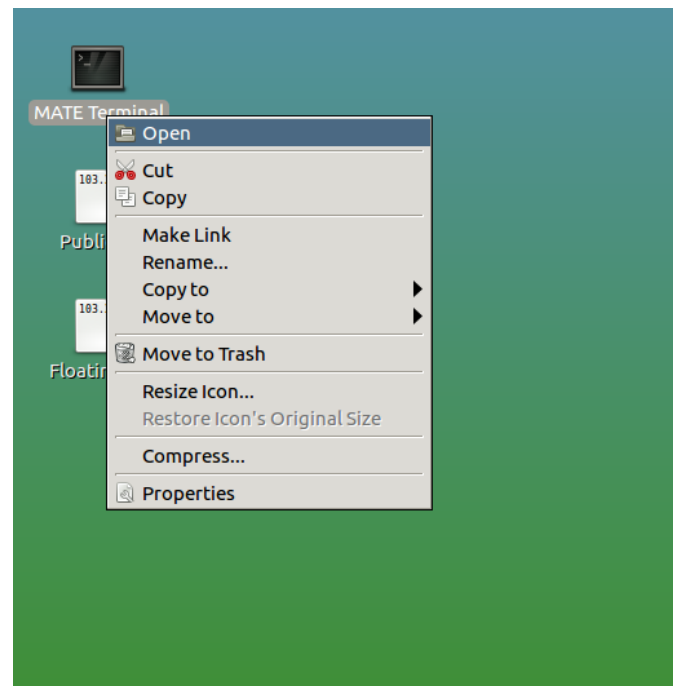
MOS 9.0

6WIND VIRTUAL ACCELERATOR FUEL PLUGIN - VERSION 3.0-3.0.0-1

This Fuel Plugin automates deployment of 6WIND Virtual Accelerator with Mirantis OpenStack.

 **MIRANTIS**
UNLOCKED | Validated

DOWNLOADS: [6WIND Virtual Accelerator Fuel Plugin - Version 3.0-3.0.0-1 \(.rpm\) // CHECKSUM](#)**DOCUMENTATION:** [Guide to the 6WIND Virtual Accelerator Fuel Plugin - Version 3.0-3.0.0-1](#)



```
File Edit View Search Terminal Help
cloud-operator@operator-avenger:~$ sudo su -
```

```
cloud-operator@operator-avenger:~$ sudo su -
root@operator-avenger:~# ssh 10.20.0.2
Last login: Wed Sep 21 01:34:09 2016 from 10.20.0.1
[root@fuel ~]#
```

StackLight - LMA Collector Fuel Plugin

UNLOCKED PARTNER: **MIRANTIS**

Part of the StackLight Logging, Monitoring and Alerting (LMA) toolchain, when installed this module collects logs, metrics and notifications from system and OpenStack service databases such as ElasticSearch and InfluxDB.

MOS VERSION:

MOS 8.0/9.0

STACKLIGHT - LMA COLLECTOR FUEL PLUGIN - VERSION 0.10-0.10.1

Part of the StackLight Logging, Monitoring and Alerting (LMA) toolchain, when installed this module collects logs, metrics and notifications from system and OpenStack services and forwards that information to external backend data stores such as ElasticSearch and InfluxDB.

DOWNLOADS:

[StackLight - LMA Collector Fuel Plugin - Version 0.10-0.10.1-1 \(.rpm\)](#) // C

DOCUMENTATION:

[Guide to the StackLight - LMA Collector Fuel Plugin - Version 0.10-0.10.1](#)

StackLight - LMA Infrastructure

UNLOCKED PARTNER: **MIRANTIS**

Part of the StackLight Logging, Monitoring and Alerting (LMA) toolchain, when installed this module collects logs, metrics and notifications from system and OpenStack service databases such as ElasticSearch and InfluxDB.

- Open Link in New Tab
- Open Link in New Window
- Open Link in New Private Window
- Bookmark This Link
- Save Link As...
- Save Link to Pocket
- Copy Link Location

```
cloud-operator@operator-avenger:~$ sudo su -
root@operator-avenger:~# ssh 10.20.0.2
Last login: Wed Sep 21 01:34:09 2016 from 10.20.0.1
[root@fuel ~]# wget https://3a98d2877cb62a6e6b14-93babe93196056fe375611ed4c1716d
d.ssl.cf5.rackcdn.com/sl0.10-0.10.1-1/lma_collector-0.10-0.10.1-1.noarch.rpm
```

StackLight - InfluxDB/Grafana Fuel Plugin

UNLOCKED PARTNER: **MIRANTIS**

Part of the StackLight Logging, Monitoring and Alerting (LMA) tool, the InfluxDB server and the Grafana web interface. These components are used primarily for databasing and analysis of metrics (metric time-series).

MOS VERSION:
MOS 8.0/9.0

STACKLIGHT - INFLUXDB/GRAFANA FUEL PL
Part of the StackLight Logging, Monitoring and Alerting (LMA) tool, the InfluxDB server and the Grafana web interface. These components are used primarily for databasing and analysis of metrics (metric time-series).

uxDB server
of metrics

 **MIRANTIS**
UNLOCKED | Validated

- Open Link in New Tab
- Open Link in New Window
- Open Link in New Private Window
- Bookmark This Link
- Save Link As...
- Save Link to Pocket
- Copy Link Location
- Search Google for "StackLight - In..."
- Inspect Element (Q)

DOWNLOADS: [StackLight - InfluxDB/Grafana Fuel Plugin - Version 0.10-0.10.1-1](#) (.rpm) // **CHECKSUM**

DOCUMENTATION: [Guide to the StackLight - InfluxDB/Grafana Fuel Plugin - Version 0.10-0.10.1-1](#)

```
[root@fuel ~]# wget https://3a98d2877cb62a6e6b14-93babe93196056fe375611ed4c1716d.d.ssl.cf5.rackcdn.com/sl0.10-0.10.1-1/influxdb_grafana-0.10-0.10.1-1.noarch.rpm
```

StackLight - ElasticSearch/Kibana Fuel Plugin

UNLOCKED PARTNER: **MIRANTIS**

Part of the StackLight Logging, Monitoring and Alerting (LMA) stack, this plugin deploys ElasticSearch server and the Kibana web interface, used primarily for filtering and analyzing deep system logs and

MOS VERSION: MOS 8.0/9.0	STACKLIGHT - ELASTICSEARCH/KIBANA FUEL PLUGIN 0.10-0.10.1-1 Part of the StackLight LMA stack, this plugin deploys ElasticSearch server and the Kibana web interface, used primarily for filtering and analyzing deep system logs and notifications.	 MIRANTIS UNLOCKED Validated
---	---	--

DOWNLOADS: [StackLight - ElasticSearch/Kibana Fuel Plugin - Version 0.10-0.10.1-1](#) (.rpm) // **CHECKSUM**

DOCUMENTATION: [Guide to the StackLight - ElasticSearch/Kibana Fuel Plugin - Version 0.10-0.10.1-1](#)

```
[root@fuel ~]# wget https://3a98d2877cb62a6e6b14-93babe93196056fe375611ed4c1716d
d.ssl.cf5.rackcdn.com/sl0.10-0.10.1-1/elasticsearch_kibana-0.10-0.10.1-1.noarch.
rpm
```

```
[root@fuel ~]# ls
anaconda.cmdline.vars
anaconda-ks.cfg
anaconda-parse-cmdline.log
anaconda-post-before-chroot.log
anaconda-post-configure-autologon.log
anaconda-post-configure-repos.log
anaconda-post-configure-sysconfig.log
anaconda-post-install-extrapackages.log
anaconda-post-interface-settings.log
anaconda-post-partition.log
elasticsearch_kibana-0.10-0.10.1-1.noarch.rpm
influxdb_grafana-0.10-0.10.1-1.noarch.rpm
lma_collector-0.10-0.10.1-1.noarch.rpm
[root@fuel ~]# █
```

```
[root@fuel ~]# fuel plugins --install lma_collector-0.10-0.10.1-1.noarch.rpm
```

```
[root@fuel ~]# fuel plugins --install elasticsearch_kibana-0.10-0.10.1-1.noarch.
rpm
```

```
[root@fuel ~]# fuel plugins --install influxdb_grafana-0.10-0.10.1-1.noarch.rpm
```

[ENVIRONMENTS](#)[EQUIPMENT](#)[RELEASES](#)[PLUGINS](#)[SUPPORT](#)[Home / Plugins](#)

Installed Plugins

The StackLight Collector Plugin

Plugin version: 0.10.1

Description: The StackLight Collector is the advanced monitoring agent of the so called Logging, Monitoring and Alerting (LMA) Toolchain of Mirantis OpenStack.

Authors: Mirantis Inc.

Licenses: Apache License Version 2.0

Releases: Ubuntu: liberty-8.0, liberty-9.0, mitaka-9.0

The StackLight Elasticsearch-Kibana Server Plugin

Plugin version: 0.10.1

Description: Deploy Elasticsearch and the Kibana web interface.

Authors: Mirantis Inc.

Licenses: Apache License Version 2.0

Releases: Ubuntu: liberty-8.0, liberty-9.0, mitaka-9.0

[Dashboard](#)[Nodes](#)[Networks](#)[Settings](#)[Logs](#)[Health Check](#)

Success

Provision of environment 'Avenger' is done.
Deployment is done. No changes.



[Horizon](#)

The OpenStack dashboard Horizon is now available.

Dashboard

Nodes

Networks

Settings

Logs

Health Check

OpenStack Settings

General

Security

Compute

Storage

Logging

OpenStack Services

Other

☐ The StackLight Elasticsearch-Kibana Server Plugin

Versions

☒ 0.10.1

Retention period

30

The number of days after which data is automatically deleted within the Elasticsearch system (0 to never delete data).

JVM heap size

1

in GB (between 1 and 32). The amount of memory reserved for the JVM.

User name

lma

The username to access Kibana.

User password

.....



The password to access Kibana.

☐ Advanced settings

The plugin determines the best settings if not set

☐ Enable TLS for Kibana

☐ Use LDAP for Kibana authentication

☒ The StackLight Elasticsearch-Kibana Server Plugin

Versions ☒ 0.10.1

Retention period

The number of days after which data is automatically deleted within the Elasticsearch system (0 to never delete data).

JVM heap size

in GB (between 1 and 32). The amount of memory reserved for the JVM.

User name

The username to access Kibana.

User password



The password to access Kibana.

☐

Advanced settings

The plugin determines the best settings if not set

☐

Enable TLS for Kibana

☐

Use LDAP for Kibana authentication

☒ The StackLight Collector Plugin

Versions ☒ 0.10.1

Environment label

Optional string to tag the data. If empty, it will default to "env-<environment id>".

Events analytics (logs and notifications)

☒ Local node (if deployed)

☐ Remote server

Elasticsearch address

IP address or fully qualified domain name of the Elasticsearch server.

Metrics analytics

☒ Local node (if deployed)

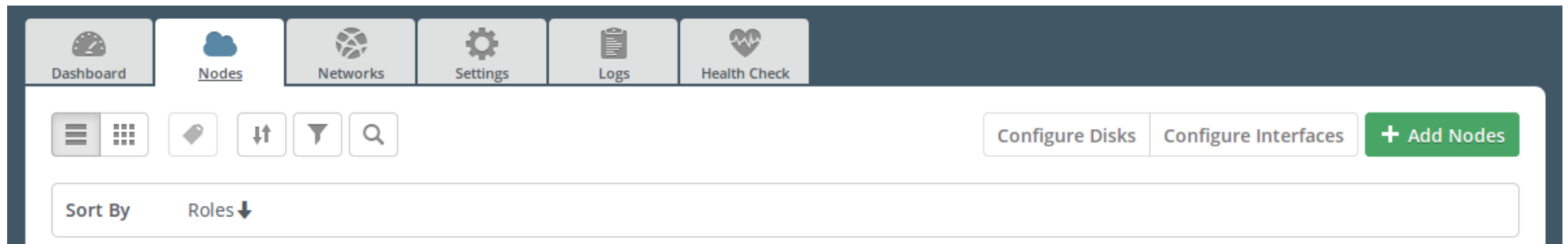
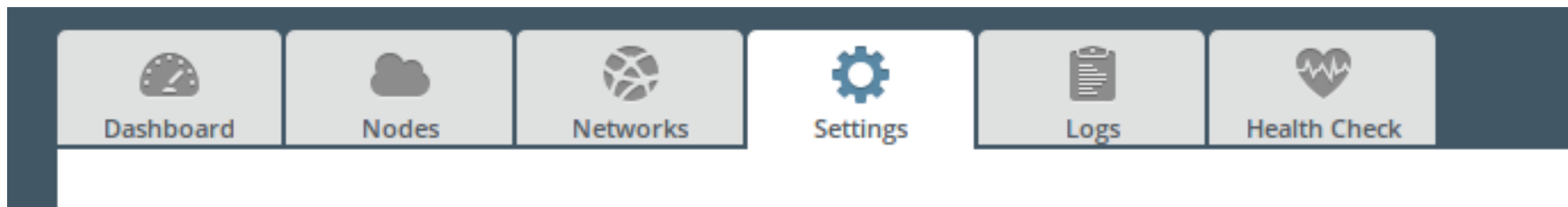
☐ Remote server

Load Defaults

Load Deployed Settings

Cancel Changes

Save Settings



Server View

Virtual Machine 201011 ('slave-lma-01') on node 'lab'

Start Shutdown Stop Reset Remove Migrate Console

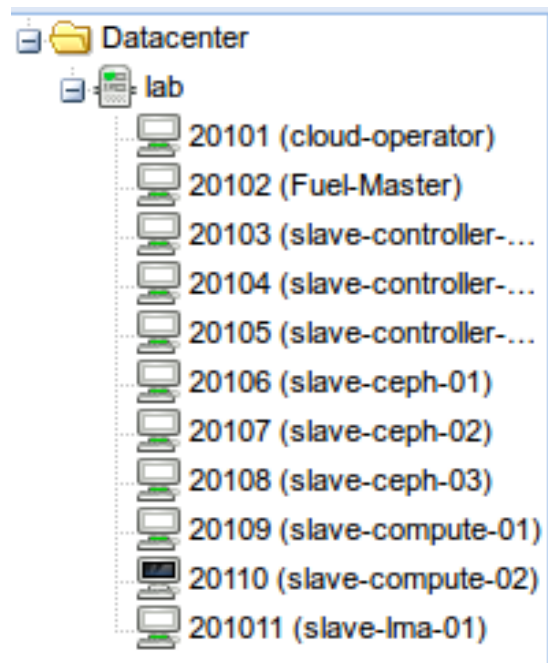
Summary Hardware Options Task History Monitor Backup Snapshots Console Firewall

Add Remove Edit Resize disk Move disk Disk Throttle CPU options Revert

Keyboard Layout	Default
Memory	8.00GB
Processors	4 (2 sockets, 2 cores)
Display	Default
Hard Disk (virtio0)	local:201011/vm-201011-disk-1.qcow2,size=500G
Network Device (net0)	virtio=62:62:61:61:64:30,bridge=vibr51
Network Device (net1)	virtio=62:30:33:63:36:38,bridge=vibr51

Datacenter

- lab
 - 20101 (cloud-operator)
 - 20102 (Fuel-Master)
 - 20103 (slave-controller-...)
 - 20104 (slave-controller-...)
 - 20105 (slave-controller-...)
 - 20106 (slave-ceph-01)
 - 20107 (slave-ceph-02)
 - 20108 (slave-ceph-03)
 - 20109 (slave-compute-01)
 - 20110 (slave-compute-02)
 - 201011 (slave-lma-01)



Assign Roles Place the mouse cursor over a role to view description.

Base

⚠ Controller

Compute

⚠ Compute

Virtual

⚠ Ironic

Storage

⚠ Cinder

⚠ Cinder Block Device

⚠ Ceph OSD

Other

⚠ Telemetry - MongoDB

Operating System

✓ Elasticsearch Kibana

✓ InfluxDB Grafana

Discovered (1)

☒ Select All

☒	Qemu slave-lma-01 ELASTICSEARCH_KIBANA · INFLUXDB_GRAFANA	DISCOVERED	CPU: 2 (4) RAM: 8.0 GB HDD: 500.0 GB
-------------------------------------	--	------------	--------------------------------------

≡

⌵

Cancel

Apply Changes

Sort By Status ↓

Elasticsearch Kibana, InfluxDB Grafana (1)

☒ Select All



Qemu

slave-lma-01

ELASTICSEARCH_KIBANA · INFLUXDB_GRAFANA



PENDING ADDITION

CPU: 2 (4) RAM: 8.0 GB HDD: 500.0 GB



Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles ↓

☐ eth0

MAC: 62:62:61:61:64:30
Speed: N/A

Admin (PXE)

Storage
VLAN ID:102

Private
VLAN ID:103

Offloading Modes: [Default](#) MTU: [Default](#)

☐ eth1

MAC: 62:30:33:63:36:38
Speed: N/A

Public

Management
VLAN ID:101

Offloading Modes: [Default](#) MTU: [Default](#)

Back To Node List

Load Defaults

Cancel Changes

Apply



Configure Disks

Configure Interfaces

Delete

Edit Roles

Add Nodes

Sort By

Roles

Configure disks on slave-lma-01

vda (vda) Total Space : 499.3 GB

Boot from this disk ☒

Base System 58.0 GB	Lc 10	Elasticsearch database 215.6 GB	InfluxDB database 215.6 GB
------------------------	----------	------------------------------------	-------------------------------

[Back To Node List](#)

[Load Defaults](#)

[Cancel Changes](#)

[Apply](#)

Success

Provision of environment 'Avenger' is done.
Deployment is done. No changes.



 Added 1 node

 [Deploy Changes](#)

TLS is not enabled. It is highly recommended to enable and configure TLS.

It is recommended to have at least 3 of Elasticsearch Kibana nodes (1 selected currently).

Please verify your network settings before deployment. For more information please visit the [Networks tab](#).

Deployment Mode: [Provisioning + Deployment](#) 

Deploy Changes



 Before proceeding with deployment please verify that the nodes have disk partitioning and network interfaces configured properly. You will not be able to change these via UI after the cloud is deployed.

 Packages and updates are fetched from the repositories defined in the Settings tab. If your environment uses the default external repositories, verify that the Fuel Master node can access the Internet. If the Fuel Master node is not connected to the Internet, you must set up a local mirror and configure Fuel to upload packages from the local mirror. Fuel must have network access to the local mirror. You may also configure alternate repositories for installation.

Click Deploy to start the deployment or Cancel to make changes.

Cancel

Deploy

Elasticsearch Kibana, InfluxDB Grafana (1)

☒ Select All



Qemu

slave-lma-01

ELASTICSEARCH_KIBANA · INFLUXDB_GRAFANA



INSTALLING UBUNTU: 82%

CPU: 2 (4) RAM: 8.0 GB HDD: 500.0 GB



Ceph OSD (3)

☐ Select All

☐	Qemu slave-ceph-01 CEPH-OSD		INSTALLING OPENSTACK: 52%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu slave-ceph-02 CEPH-OSD		INSTALLING OPENSTACK: 52%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu slave-ceph-03 CEPH-OSD		INSTALLING OPENSTACK: 52%	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 

Elasticsearch Kibana, InfluxDB Grafana (1)

☒ Select All

☒	Qemu slave-lma-01 ELASTICSEARCH_KIBANA · INFLUXDB_GRAFANA		INSTALLING OPENSTACK: 24%	CPU: 2 (4) RAM: 8.0 GB HDD: 500.0 GB 
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Ceph OSD (3)

☐ Select All

☐	Qemu	slave-ceph-01 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu	slave-ceph-02 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 
☐	Qemu	slave-ceph-03 CEPH-OSD		READY	CPU: 1 (4) RAM: 2.0 GB HDD: 550.0 GB 

Elasticsearch Kibana, InfluxDB Grafana (1)

☐ Select All

☐	Qemu	slave-lma-01 ELASTICSEARCH_KIBANA · INFLUXDB_GRAFANA		READY	CPU: 2 (4) RAM: 8.0 GB HDD: 500.0 GB 
--------------------------	------	--	--	-------	--

[Horizon](#)

The OpenStack dashboard Horizon is now available.

[Grafana](#)

Dashboard for visualizing metrics

[Kibana](#)

Dashboard for visualizing logs and notifications

User name

lma

The name of the Grafana admin

User password

alecSeGOMuoOTm1ScMjDNjMb



The password of the Grafana admin



Grafana

Log in

Sign up

User

lma

Password

.....|

Log in

Forgot your password?

Find dashboards by name

▼ starred | tags

- Heat ☆
- Hypervisor ☆
- InfluxDB ☆
- Keystone ☆
- LMA self-monitoring ☆
- Main ☆
- Memcached ☆
- MySQL ☆
- Neutron ☆
- Nova ☆
- RabbitMQ ☆
- System ☆

+ New

📄 Import

environment: env-1 ▾

controller: node-1 ▾

OPENSTACK SERVICES

Cinder [↗](#)

Keystone [↗](#)

Glance [↗](#)

Heat [↗](#)

Neutron [↗](#)

Nova [↗](#)

RabbitMQ [↗](#)

MySQL [↗](#)

Apache [↗](#)

haproxy [↗](#)

memcached [↗](#)

OKAY

OKAY

OKAY

OKAY

OKAY

OKAY

OKAY

OKAY

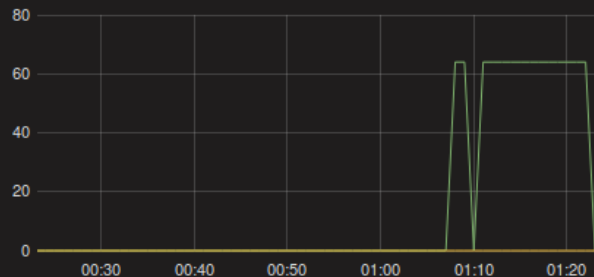
OKAY

OKAY

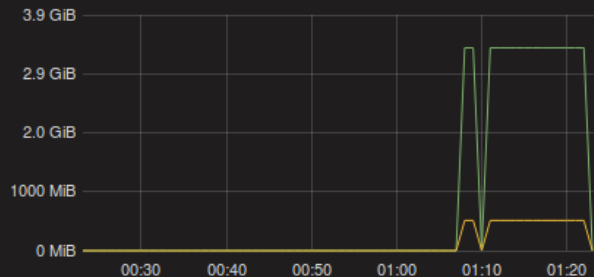
OKAY

VIRTUAL COMPUTE RESOURCES

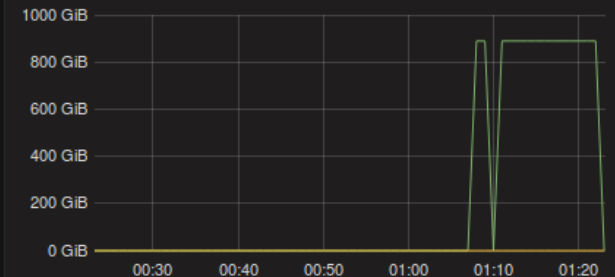
Number of VCPUs



RAM



Disk



☒ The StackLight Elasticsearch-Kibana Server Plugin ⚠

Versions ☒ 0.10.1

Retention period	30	The number of days after which data is automatically deleted within the Elasticsearch system (0 to never delete data).
JVM heap size	1	in GB (between 1 and 32). The amount of memory reserved for the JVM.
User name	lma	The username to access Kibana.
User password	9cokwcGlr76EVt1eGOexSGYG 	The password to access Kibana.

☐ Advanced settings
The plugin determines the best settings if not set

☐ Enable TLS for Kibana

☐ Use LDAP for Kibana authentication

[Horizon](#)

The OpenStack dashboard Horizon is now available.

[Grafana](#)

Dashboard for visualizing metrics

[Kibana](#)

Dashboard for visualizing logs and notifications

 A username and password are being requested by http://192.168.0.22. The site says: "Kibana Access"

User Name:

Password:

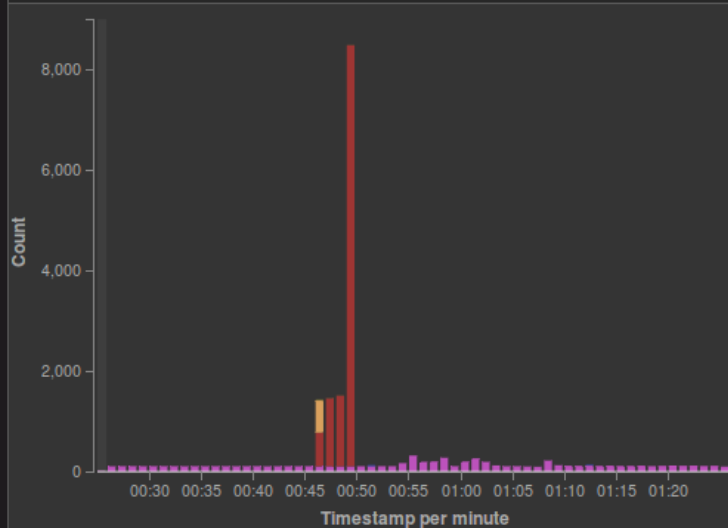
 Cancel

 OK

Logs

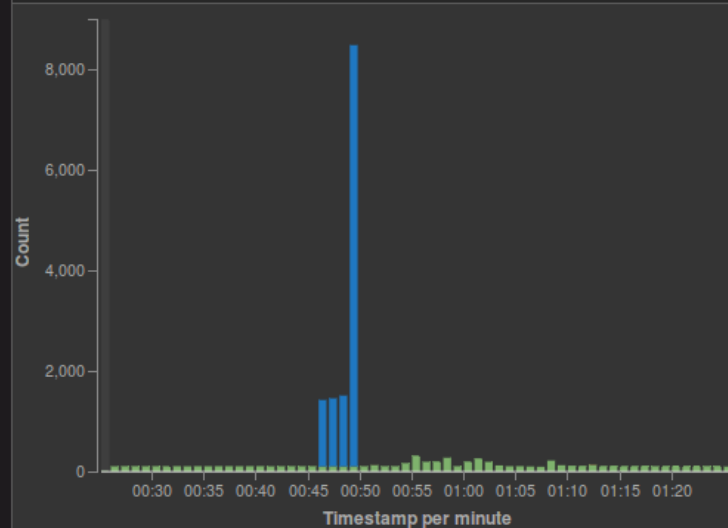


LOG MESSAGES OVER TIME PER SOURCE



- openstack.keystone
- system.syslog
- system.kern
- system.auth
- ovs

LOG MESSAGES OVER TIME PER SEVERITY



- INFO
- DEBUG
- WARNING