

RHEV Implementation

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Basic prerequisite and Process

Prerequisite

- Get the Server Rack Mounted and Network Cabling done
- Update the Bios
- Get the Network Port connected as per the earlier configurations of 1 G *2 and 10 G *2
- Get the Network switches aligned with LACP configured for 1G and 10 G ports
- Get the Storage Connected via Switch to HBA cards and Project LUNS as per the design
- Get the ILO / DRAC Connected and Configured with IP and Accessibility .
- Get ISO downloaded from Redhat Portal for RHEV -H (Version needs to be checked from other Hosts)
- Physical Assistance of booting via RHEV-H .

Process

- Ensure all prerequisite in place including Network Cards , Switch LACP etc Configuration , Storage Projection and visibility , Network Reach-ability etc
- Build a New Data center on RHEV
- Build the compatible Cluster with cluster name
- Install RHEV -H On the Host with provided RHEV-H 4.0 ISO
- Test DRAC Connectivity and Fencing .

- Add installed host in the Newly build Cluster . (Do not add Power Fence while Adding , Should be configured once 2 hosts are added)
- Configure Power management with idrac7 as RHEV fence.
- Once Hosts are configured , Storage will be Visible in the cluster . Configure Storage as FC based Storage .
- Share the ISO Domain from old datacenter to this newly created datacenter
- Add Networks for DMZ and Data along with already created ovirtmgm
- Create Bonds for the Individual host and add to the right network .
- Now create test VM with pre-uploaded ISOs and test for Live Migration and Host failure .

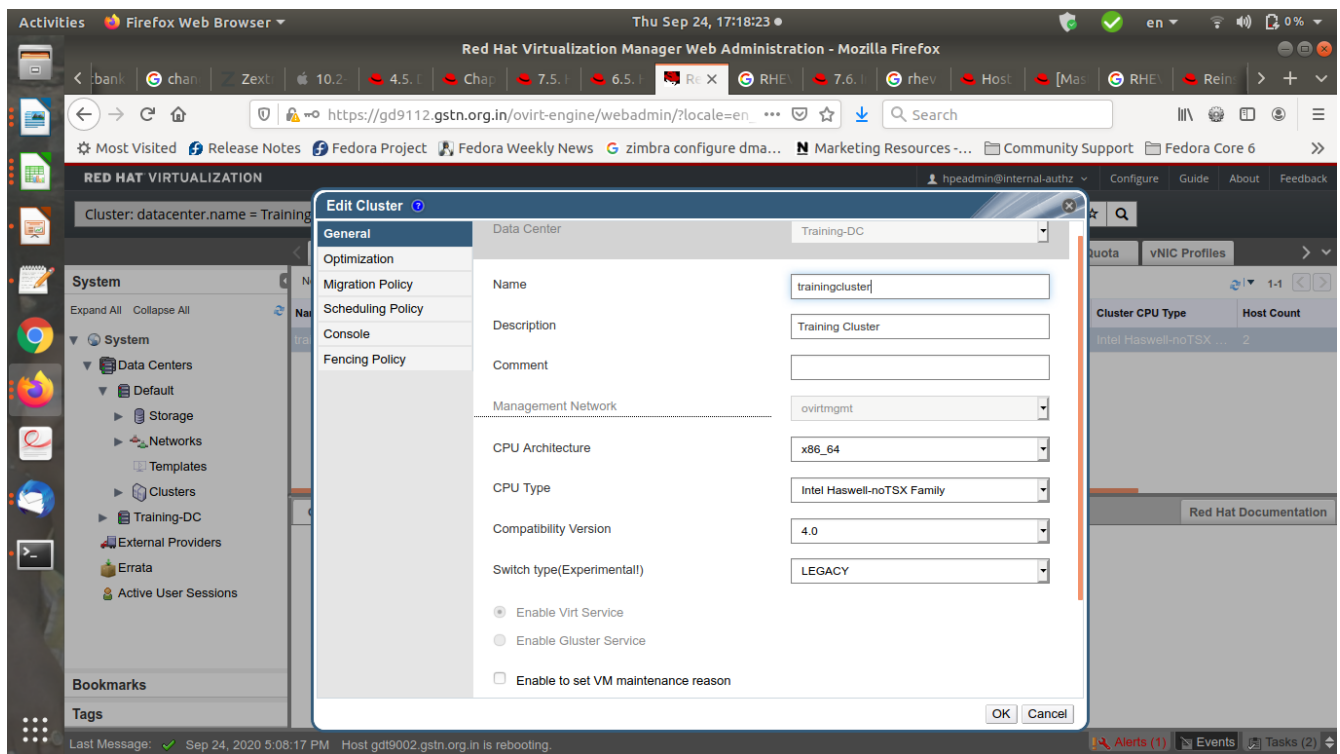
LLD

Server	Ports	Port Type	Connected to N/W Switch Port#	VLAN	Subnet	IP	Gateway	DNS
Server1			Server Farm	1/0/		172.18.103.0/		172.18.101.14,
	iDRAC	Ethernet	SW1 37	iLO	10324	172.18.103.27	172.18.103.1	15
			Server Farm	1/0/		172.18.102.0/		172.18.101.14,
	Port 3	Ethernet	SW1 6	Mgmt	102 24	172.18.102.27	172.18.102.1	15
			Data DMZ	1/0/ (DMZ		172.18.201.0/		172.18.101.14,
	Port 4	Ethernet	SW1 10	)	201 26	172.18.201.54	172.18.201.1	15
	Slot1/ port1	FC 10G	Core SW1 7	1/0/ Data (MZ)	101	172.18.101.0/ 24	172.18.101.60	172.18.101.1 15
	Slot2/ port1	FC 10G	Core SW2 7	2/0/ Data (MZ)				
	Slot3/ port1	FC 10G	SAN1 14	port N/ A	N/A	N/A	N/A	N/A
	Slot4/ port1	FC 10G	SAN2 14	port N/A	N/A	N/A	N/A	N/A
Server2			Server Farm	1/0/		172.18.103.0/		172.18.101.14,
	iDRAC	Ethernet	SW1 38	iLO	10324	172.18.103.28	172.18.103.1	15
	Port 3	Ethernet	Server Farm 8	1/0/ Mgmt	102 24	172.18.102.0/ 24	172.18.102.28	172.18.102.1 172.18.101.14, 15

Data Center Creation and Configuration

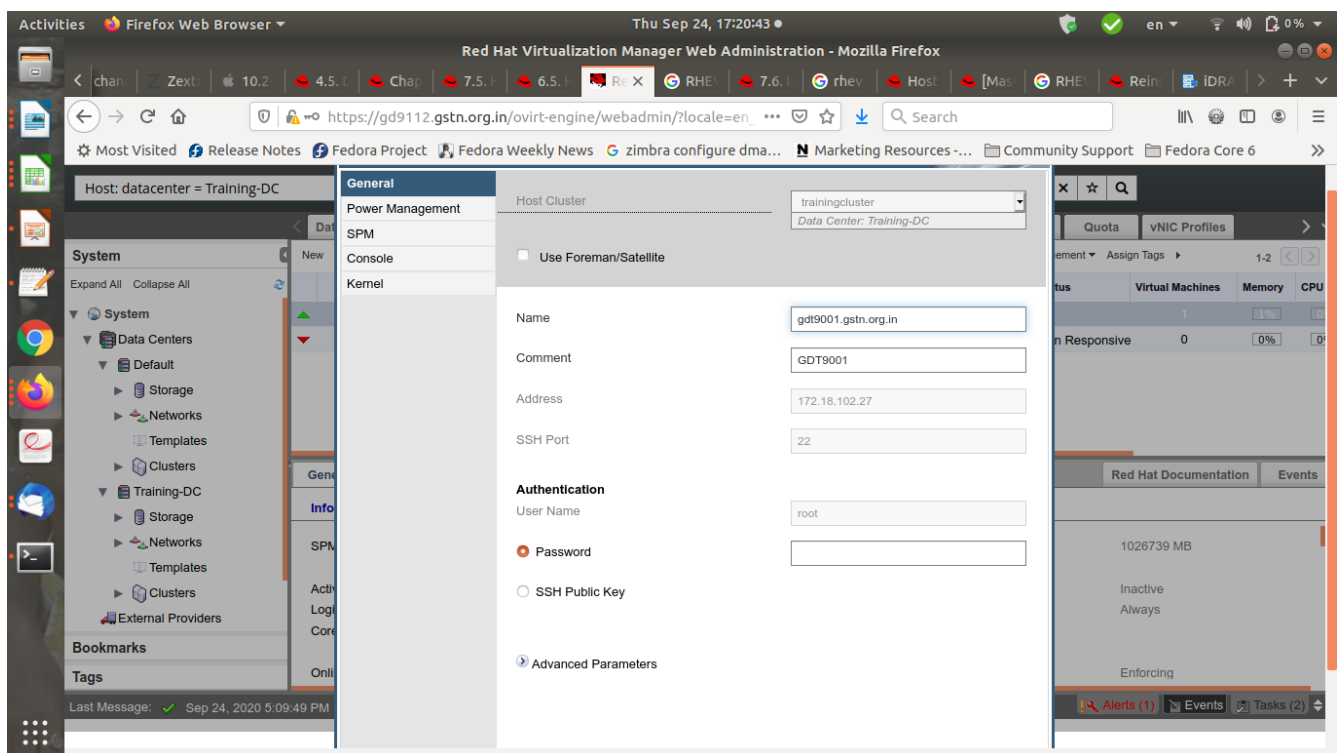
Cluster Configuration

Follow the “Guide me” option to create cluster



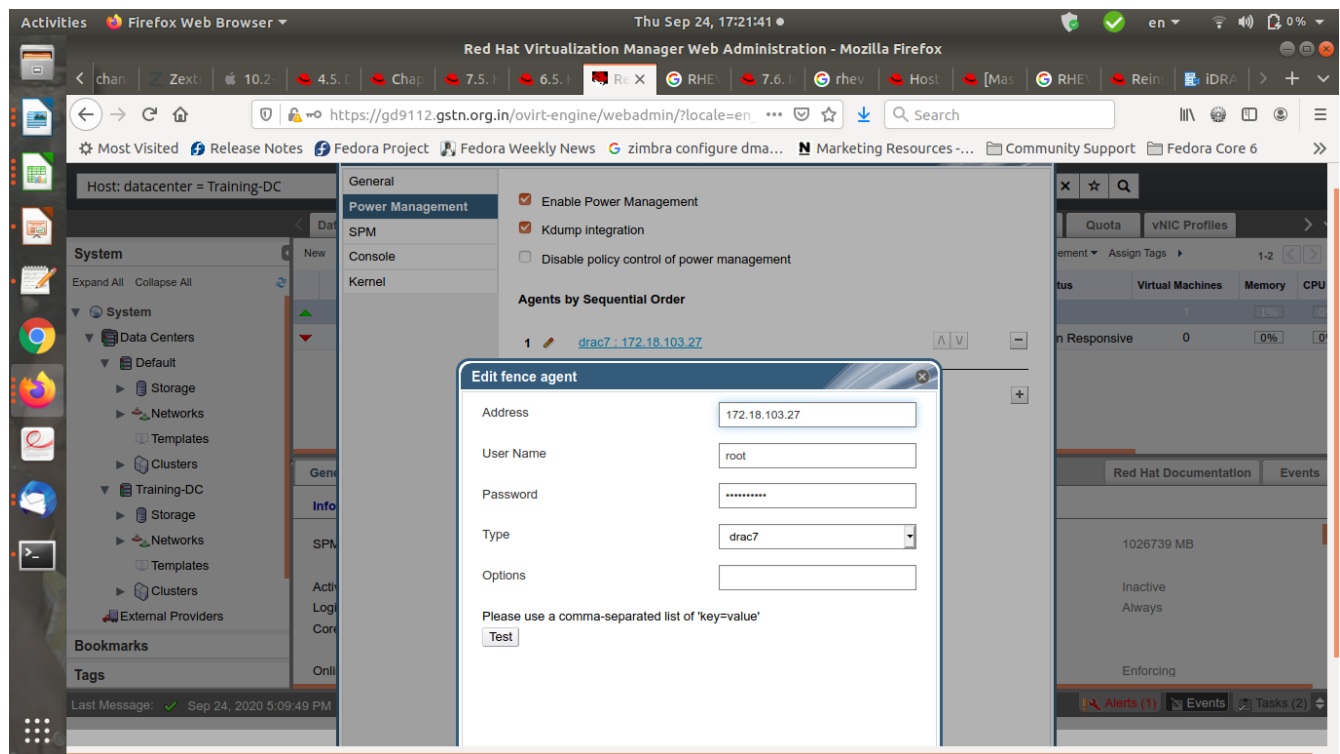
Host Configuration

Please have RHEV-H installed on the Host with one basic Network / IP configured .



Host Power Management Configuration

Once minimum 2 hosts are added then fencing can be configured



Storage Configuration

Once hosts are added , Storage is visible . So discovered FC type storage with all the projected LUN.

Red Hat Virtualization Manager Web Administration - Mozilla Firefox

https://gd9112.gstn.org.in/ovirt-engine/webadmin/?locale=en

RED HAT VIRTUALIZATION

Storage: datacenter = Training-DC

System

Expand All Collapse All

System

Data Centers

Default

Storage

Networks

Templates

Clusters

Training-DC

Storage

Networks

Templates

Clusters

External Providers

Bookmarks

Tags

Last Message: Sep 24, 2020 5:13:34 PM

Advanced Parameters

Manage Domain

Data Center: Training-DC (V3)

Domain Function: Data (Master)

Storage Type: Fibre Channel

Use Host: gdt9001.gstn.org.in

Name: Storage_training

Description:

Comment:

☐	LUN ID	Dev. Size	Additional Size	#path	Vendor ID	Product ID	Serial
☒	360002ac0000000001	4096GB		8	3PARdata	VV	S3PARdataVV_7Cf
☒	360002ac0000000000	1024GB		8	3PARdata	VV	S3PARdataVV_7Cf

Quota

VNIC Profiles

Center Status

Total Space

5119 GB

Red Hat Documentation

Events

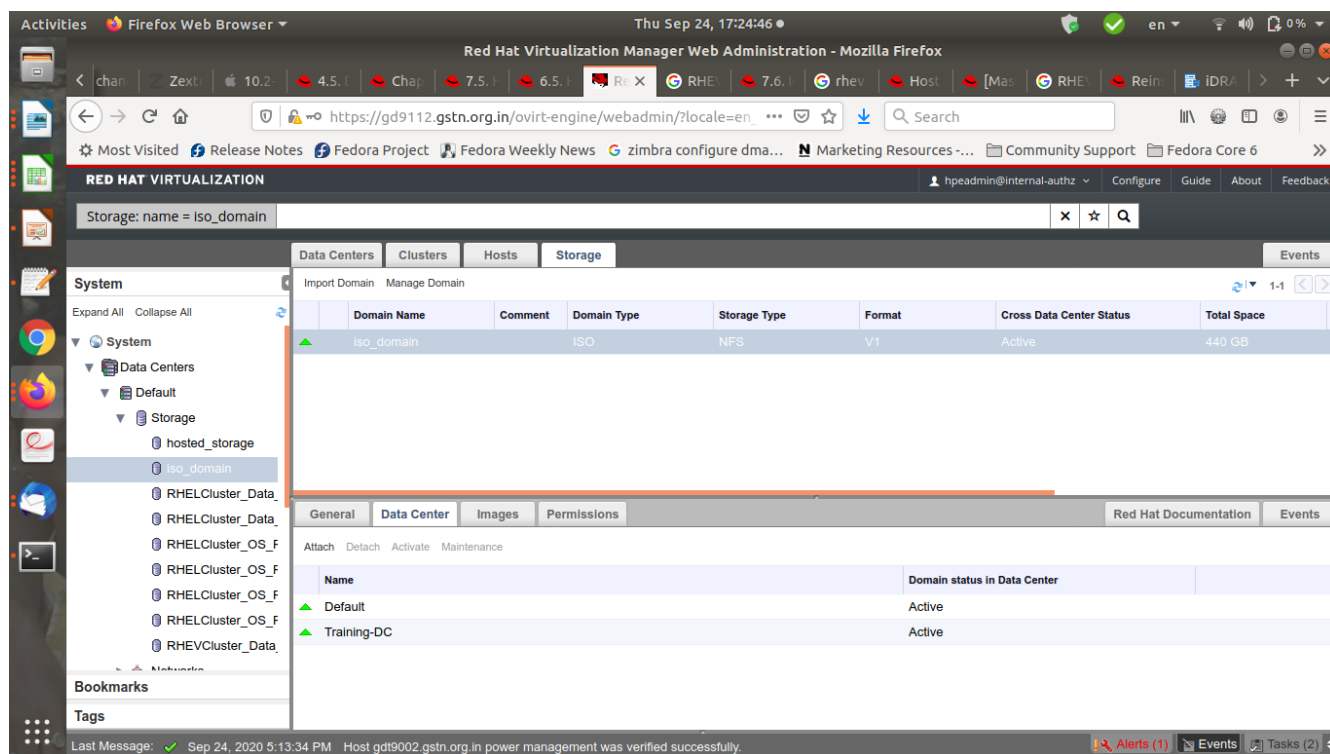
Alerts (1)

Events

Tasks (2)

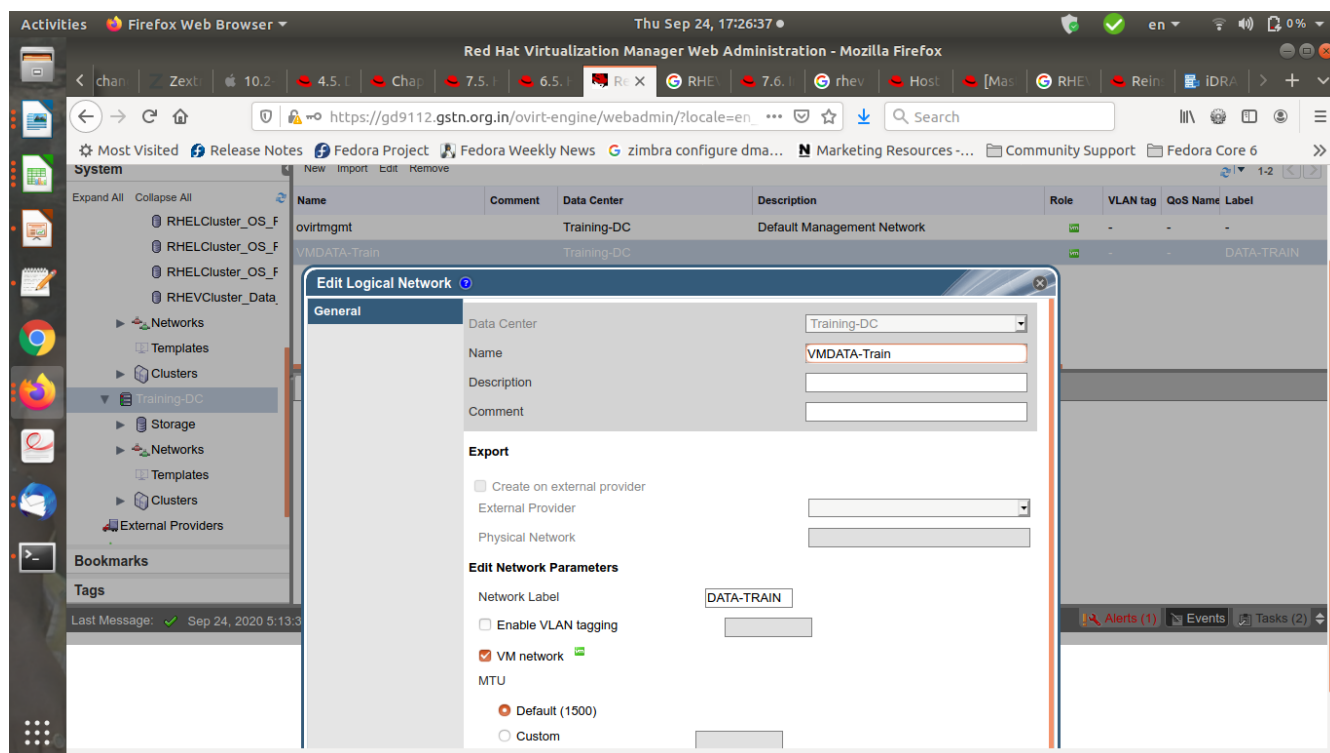
Attaching the ISO Domain

For New VM configuration you need to have ISO domain . This Domain is already configured for old data center (default) . This ISO domain can be shared and attached with New data center named Training-DC .



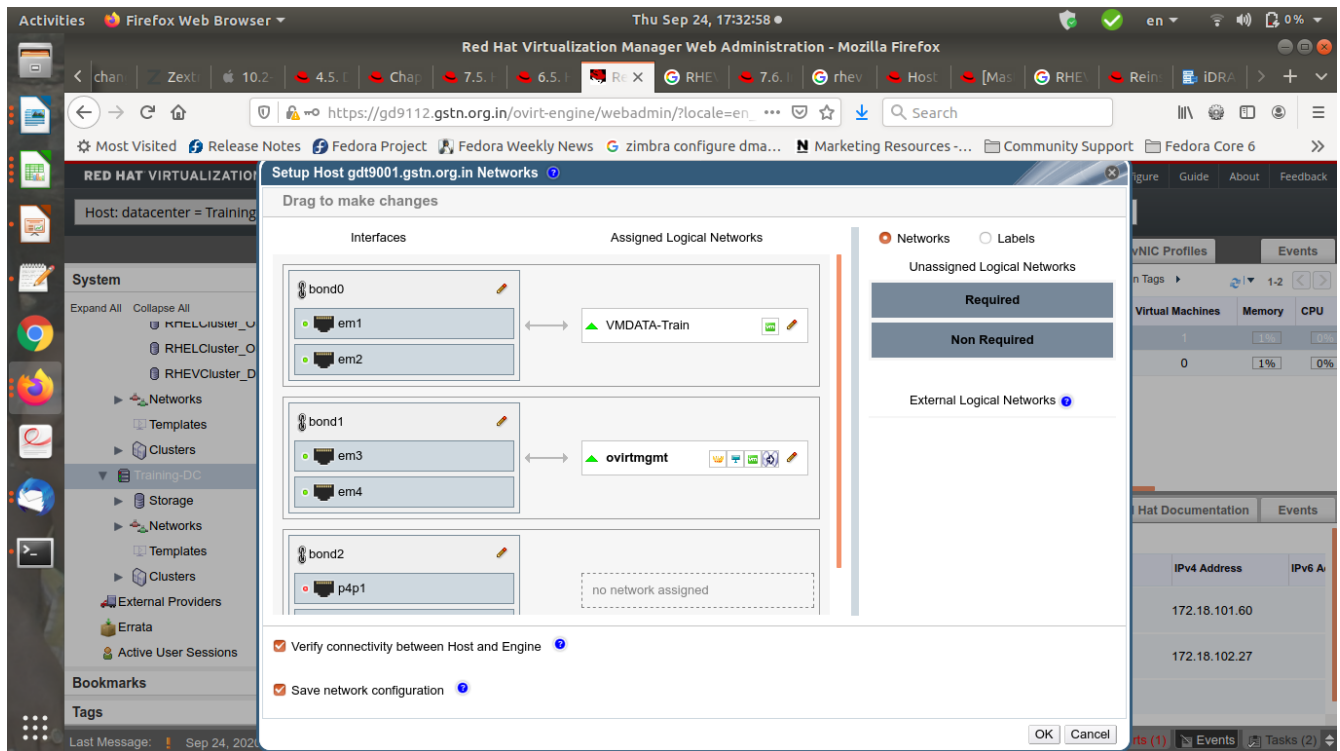
Creation of Networks and configuration

As there are 3 Networks Available , Management , Data and DMZ , Need to be named and created .



Host Network setup with bond and VLAN

As initial Host network configuration was simple and bond was not configured , Now Bonds , VLAN and Network can be configured for the Hosts .



Testing with Virtual M/c Creation

You can create any VM , Windows or Linux vis the ISO already available in ISO domain . Once VM is created , testing can be done for Live Migration and Host Failure .

Activities Firefox Web Browser Thu Sep 24, 17:37:07

Red Hat Virtualization Manager Web Administration - Mozilla Firefox

https://gd9112.gstn.org.in/ovirt-engine/webadmin/?locale=en...

RED HAT VIRTUALIZATION

Vms: datacenter = Training-DC

System

Expand All Collapse All

- RHELCluster_OS_r
- RHELCluster_OS_f
- RHEVCluster_Data
- Networks
- Templates
- Clusters
- Training-DC
 - Storage
 - Networks
 - Templates
 - Clusters
- External Providers
- Errata
- Active User Sessions

Bookmarks

Tags

Data Centers Clusters Hosts Networks Storage Disks Virtual Machines Pools Templates Quota vNIC Profiles Events

New VM Import Edit Remove Clone VM Run Once Migrate Cancel Migration Cancel Conversion Make Template Export Create Snapshot

Name	Comment	Host	IP Address	FQDN	Cluster	Data Center	Memory	CPU	Network
test-RHEL		gd9001.gstn.or...			trainingcluster	Training-DC	0%	0%	

General Network Interfaces Disks Snapshots Applications Containers Host Devices Vm Devices Affinity Groups Guest Info Errata

Name: test-RHEL Defined Memory: 4096 MB Origin: oVirt

Description: testing RHEL Server Physical Memory: 4096 MB Run On: Any Host in Cluster

Template: Blank Guaranteed: Not Configured Custom Properties: Not Configured

Operating System: Red Hat Enterprise Linux 7.x x64 Guest OS Memory: Not Configured Free/Cached/Buffered: Not Configured

Graphics protocol: SPICE Number of CPU Cores: 2 (2:1:1) Cluster Compatibility Version: 4.0

Guest CPU Count: N/A VM ID: 3b4b1ffc-e86e-48b7-9da9-11b94

Last Message: Sep 24, 2020 5:27:46 PM Host GD9003 has time-drift of 512 seconds while maximum configured value is 300 seconds. Alerts (1) Events Tasks (2)