



Red Hat Hyperconverged Infrastructure for Virtualization 1.8

Managing virtual machines using the Web Console

Perform common virtual machine management tasks in the Web Console

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Abstract

After Red Hat Hyperconverged Infrastructure for Virtualization has been deployed, you can perform many operational and management tasks for virtual machines using the Web Console. Read this book to understand how to manage virtual machines using the Web Console. This document explains how to perform maintenance tasks specific to Red Hat Hyperconverged Infrastructure for Virtualization.

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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

CHAPTER 1. UNDERSTANDING THE WEB CONSOLE

1.1. UNDERSTANDING THE OVIRT MACHINES TAB

The **oVirt Machines** tab provides an overview of the virtual machines running in the hyperconverged cluster.

To view this tab, browse to the Web Console interface for your server (for example, <http://server1.example.com:9090>), log in, and click the hostname and **oVirt Machines**.

The oVirt Machines tab

Name	Connection	State
HostedEngine	System	running
ovirt-metrics	System	running

This tab is divided into a number of subtabs.

Host

The **Host** subtab shows information about virtual machines that are available on this hyperconverged host. Clicking on each virtual machine shows a summary of that machine, as well as various management operations. See [Managing virtual machines using the Web Console](#) for more information about virtual machine operations.

Cluster

The **Cluster** subtab shows information about virtual machines that are available in the hyperconverged cluster. The **Host** column lets you easily navigate to the appropriate location for managing each virtual machine. The **Action** column shows any operations you can perform from this hyperconverged host.

The Cluster subtab

Name	Description	Cluster	Template	Memory	vCPUs	OS	HA	Stateless	Host	Action	State
HostedEngine	Hosted engine VM	Default	Blank	16.0 GiB	4	rhel_7x64	no	no	Host		running

Templates

The **Templates** subtab shows the template images that you can use to create new virtual machines.

The Templates subtab

Name	Version	Base Template	Description	Memory	vCPUs	OS	HA	Stateless	Action
Blank		Blank	Blank template	1 GiB	1	other	no	no	Create VM
centos7-template		centos7-template		1 GiB	1	other	no	no	Create VM
RHEL7.5_Template		RHEL7.5_Template		2 GiB	2	other_linux	yes	no	Create VM

VDSM

The **VDSM** subtab shows the current contents of the **vdsmd.conf** file and provides an easy way to edit the file's contents. See [VDSM and Hooks](#) in the Red Hat Virtualization 4.4 documentation for more information about VDSM.

The VDSM subtab

Host	Cluster	Templates	VDSM
------	---------	-----------	------

Edit the vdsmd.conf

VDSM Service Management Save Reload

```
[vars]
ssl = true

[addresses]
management_port = 54321
```

1.2. UNDERSTANDING THE VIRTUAL MACHINE SUMMARY

In the Web Console, the **Host** subtab on the **oVirt Machines** tab shows information about virtual machines that are available on this hyperconverged host.

Clicking on each virtual machine shows a summary of that machine, as well as various management operations. The summary is divided into a number of sections that display different types of information and operations.

Overview


This section shows basic information about the virtual machine's compute resources and capabilities.

The Overview section of the virtual machine summary

HostedEngine System running

Overview Usage Disks Console oVirt Restart Shut Down Suspend Delete

Memory: 16.0 GiB Emulated Machine: pc-i440fx-rhel7.5.0 Boot Order: disk Description: Hosted engine
 vCPUs: 4 CPU Type: custom (Haswell-noTSX) Autostart: disabled VM



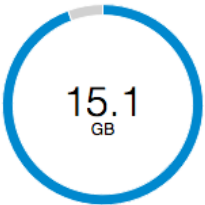
Usage

This section shows the memory and CPU usage of this virtual machine.

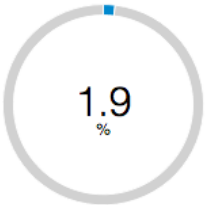
The Usage section of the virtual machine summary

HostedEngine System running

Overview Usage Disks Console oVirt Restart Shut Down Suspend Delete



used from 16.0 GiB memory



used from 4 vCPUs

Disks

This section shows details about the storage devices available to this virtual machine.

The Disks section of the virtual machine summary

HostedEngine System running

Overview Usage Disks Console oVirt Restart Shut Down Suspend Delete

Device	Target	Used	Capacity	Bus	Readonly	Source	Count: 2
cdrom	hdc	0.00 GB		ide	yes		
disk	vda	57.1 GB	58 GB	virtio	no	File: /var/run/vdsm/storage/cd6093ed-53d3-4fd4-b4e4-4672f33e2578/e9c2dcf9-58d0-42e0-ac3d-352b85ad1a6d/452fa5aa-1905-4b1d-bb63-603e34ffb595	

Console

This section shows options for connecting to the console of the virtual machine.

Graphics Console (VNC)

HostedEngine System running

Overview Usage Disks **Console** oVirt

Restart Shut Down Suspend Delete

Send shortcut: **Ctrl+Alt+Del** [Switch to Desktop Viewer](#)

```

Red Hat Enterprise Linux Server 7.5 (Maipo)
Kernel 3.10.0-862.2.3.el7.x86_64 on an x86_64

rghi-engine1 login: [ 38.799207] ip6_tables: (C) 2000-2006 Netfilter Core Team
[ 39.013121] Ebttables v2.0 registered
[ 40.037935] nf_conntrack version 0.5.0 (65536 buckets, 262144 max)
[ 40.191294] bridge: filtering via arp/ip/ip6tables is no longer available by default. Update your scripts to
r if you need this.
[ 40.803444] Netfilter messages via NETLINK v0.30.
[ 40.815974] ip_set: protocol 6
[ 41.388213] openvswitch: Open vSwitch switching datapath
[ 50.882166] cloud-init[1334]: Cloud-init v. 0.7.9 running 'modules:config' at Tue, 22 May 2018 07:30:23 +0000
ds.
[ 51.247846] cloud-init[3919]: Cloud-init v. 0.7.9 running 'modules:final' at Tue, 22 May 2018 07:30:23 +0000
s.
[ 51.839908] cloud-init[3919]: Cloud-init v. 0.7.9 finished at Tue, 22 May 2018 07:30:24 +0000. Datasource D
seed=/dev/sr0[[dsmode=net]. Up 51.83 seconds

```

Graphics Console in Desktop Viewer

HostedEngine System running

Overview Usage Disks **Console** oVirt

Restart Shut Down Suspend Delete

[Switch to In-Browser Viewer](#)

Connect with Remote Viewer

[Launch Remote Viewer](#)

[> More Information](#)

Manual Connection

Connect with any SPICE or VNC viewer application.

Address: 10.70.40.36

SPICE Port: 5900

SPICE TLS Port: 5901

VNC Port: 5902

oVirt

This section shows virtualization related information about the virtual machine and provides a way to migrate the virtual machine to another hyperconverged host. See [Migrating a virtual machine to a different hyperconverged host using the Web Console](#) for more details about migrating virtual machines.

The oVirt section of the virtual machine summary

The screenshot shows the 'oVirt' section of a virtual machine summary. At the top, there is a header bar with 'HostedEngine' on the left, 'System' in the center, and 'running' on the right. Below this is a navigation menu with 'Overview', 'Usage', 'Disks', 'Console', and 'oVirt' (which is highlighted with a blue underline). To the right of the navigation menu are four buttons: 'Restart' with a dropdown arrow, 'Shut Down' with a dropdown arrow, 'Suspend', and 'Delete' (in red). Below the navigation menu, there are several key-value pairs: 'Description: Hosted engine VM', 'HA: disabled', 'Base template: Blank', 'Stateless: no', 'OS Type: rhel_7x64', and 'Optimized for: server'. To the right of these pairs is a 'Migrate To:' button followed by a dropdown menu showing 'Automatically selected host'.

See [Managing virtual machines using the Web Console](#) for more information about any of the virtual machine operations mentioned in this section.

CHAPTER 2. MANAGING VIRTUAL MACHINES USING THE WEB CONSOLE

2.1. CREATING A VIRTUAL MACHINE FROM A TEMPLATE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Template**.
3. Click the **New VM** button beside the template that you want to use.
4. Specify a **Name** for your VM and click **Create**.
Your new virtual machine is created on one of the hosts in your hyperconverged cluster.

2.2. UPDATING A VIRTUAL MACHINE USING THE WEB CONSOLE

You cannot currently update virtual machines using the Web Console.

See [Upgrading Red Hat Hyperconverged Infrastructure for Virtualization](#) for information about updating the Hosted Engine virtual machine using the Administration Portal.

See [Updating Virtual Machine Guest Agents and Drivers](#) in the Red Hat Virtualization 4.4 documentation for instructions on updating virtualization related software on a virtual machine using the Administration Portal.

2.3. STARTING A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Cluster**.
3. Click **Run** beside the virtual machine you want to start.

2.4. PAUSING A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click the virtual machine to pause.
4. Click **Suspend**.

2.5. RESUMING A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click the virtual machine to resume.
4. Click **Resume**.

2.6. DELETING A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click the virtual machine to delete.
4. Click **Shut Down** to shut down the virtual machine before deletion.
5. Click **Delete**.
6. Confirm deletion.

2.7. SHUTTING DOWN A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console on the host that is running the virtual machine.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click on the virtual machine you want to shut down.
4. Click **Shut Down**. This shuts the virtual machine down gracefully.
If your virtual machine is not responding, click the dropdown arrow beside **Shut Down** and click **Force Shut Down** instead.

2.8. MIGRATING A VIRTUAL MACHINE TO A DIFFERENT HYPERCONVERGED HOST USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click the virtual machine to migrate.
4. Click the **oVirt** section.

The oVirt section of the virtual machine summary

HostedEngine System running

Overview Usage Disks Console **oVirt** Restart Shut Down Suspend Delete

Description: Hosted engine VM HA: disabled Migrate To: Automatically selected host

Base template: Blank Stateless: no

OS Type: rhel_7x64 Optimized for: server

5. Specify a host in the dropdown menu, or use the default value of **Automatically selected host**.
6. Click **Migrate to** and wait for the virtual machine to migrate.
7. Click the **Cluster** subtab and verify that the virtual machine is now running on a different host.

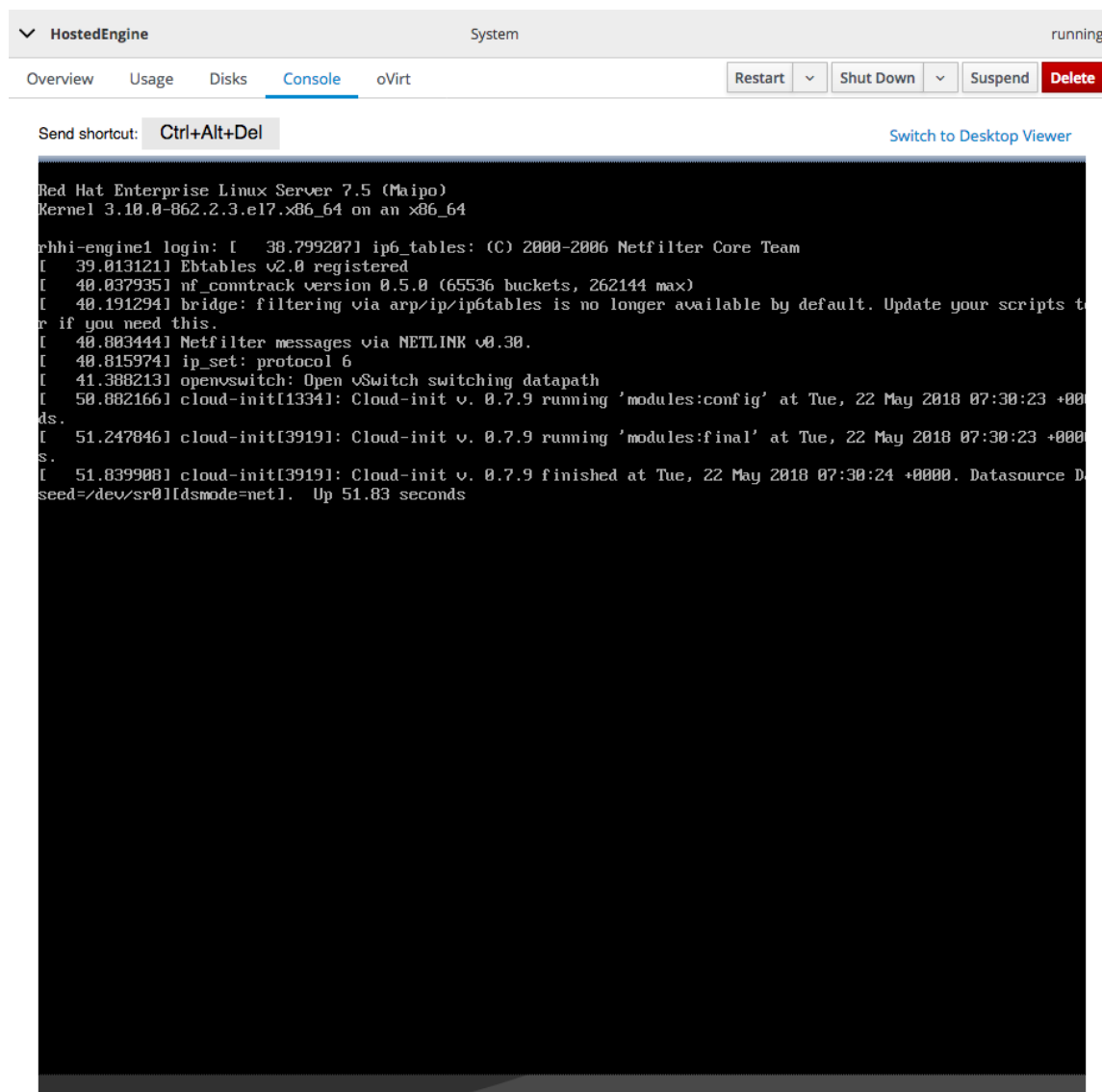
2.9. ACCESSING THE CONSOLE OF A VIRTUAL MACHINE USING THE WEB CONSOLE

1. Log in to the Web Console.
2. Click the hostname, then click **oVirt Machines** → **Host**.
3. Click the **Console** subtab.
4. Select a **Console Type**.

a. For the Hosted Engine virtual machine

The default console type for the Hosted Engine virtual machine is **Graphics Console (VNC)**. The console loads after several seconds.

Graphics Console (VNC)



Click anywhere in the console and log in to the Hosted Engine virtual machine to perform any administrative operations.

b. For any other virtual machine:

Graphics Console in Desktop Viewer

The screenshot displays the Red Hat Web Console interface for a virtual machine. At the top, a header bar shows 'HostedEngine' on the left, 'System' in the center, and 'running' on the right. Below this, a navigation menu includes 'Overview', 'Usage', 'Disks', 'Console' (which is highlighted with a blue underline), and 'oVirt'. To the right of the navigation menu are several action buttons: 'Restart' with a dropdown arrow, 'Shut Down' with a dropdown arrow, 'Suspend', and 'Delete' (which is red). Below the navigation menu, there is a link that says 'Switch to In-Browser Viewer'. The main content area is divided into two columns. The left column is titled 'Connect with Remote Viewer' and contains a button labeled 'Launch Remote Viewer' and a link '> More Information'. The right column is titled 'Manual Connection' and contains the text 'Connect with any SPICE or VNC viewer application.' followed by connection details: 'Address: 10.70.40.36', 'SPICE Port: 5900', 'SPICE TLS Port: 5901', and 'VNC Port: 5902'.

On Red Hat Enterprise Linux based systems, click **Launch Remote Viewer** to launch the **Remote Viewer** application.

Otherwise, use the information under **Manual Connection** to connect to the console with your preferred client.