Red Hat Virtualization 4.3

Release Notes

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Abstract

The Release Notes provide high-level coverage of the improvements and additions that have been implemented in Red Hat Virtualization 4.3.

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CHAPTER 1. INTRODUCTION

1.1. INTRODUCTION TO RED HAT VIRTUALIZATION

Red Hat Virtualization is an enterprise-grade server and desktop virtualization platform built on Red Hat Enterprise Linux. See the Product Guide for more information.

1.2. SUBSCRIPTIONS

To install the Red Hat Virtualization Manager and hosts, your systems must be registered with the Content Delivery Network using Red Hat Subscription Management. This section outlines the subscriptions and repositories required to set up a Red Hat Virtualization environment.

1.2.1. Required Subscriptions and Repositories

The packages provided in the following repositories are required to install and configure a functioning Red Hat Virtualization environment. When one of these repositories is required to install a package, the steps required to enable the repository are provided in the appropriate location in the documentation.

Table 1.1. Red Hat Virtualization Manager

Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux Server	**Red Hat Enterprise Linux Server**	**rhel-7-server-rpms**	Provides the Red Hat Enterprise Linux 7 Server.
Red Hat Enterprise Linux Server	**RHEL Server Supplementary**	**rhel-7-server-supplementary-rpms**	Provides the virtio-win package, which provides the Windows VirtIO drivers for use in virtual machines.
Red Hat Virtualization	**Red Hat Virtualization**	**rhel-7-server-rhv-4.3-manager-rpms**	Provides the Red Hat Virtualization Manager.
Red Hat Virtualization	**Red Hat Virtualization Tools**	**rhel-7-server-rhv-4-manager-tools-rpms**	Provides dependencies for the the Red Hat Virtualization Manager that are common to all Red Hat Virtualization 4 releases.
Red Hat Ansible Engine	**Red Hat Ansible Engine**	**rhel-7-server-ansible-2.9-rpms**	Provides Red Hat Ansible Engine.
Red Hat Virtualization	**Red Hat JBoss Enterprise Application Platform**	**jb-eap-7.2-for-rhel-7-server-rpms**	Provides the supported release of Red Hat JBoss Enterprise Application Platform on which the Manager runs.

Table 1.2. Red Hat Virtualization Host

Subscription Pool	Repository Name	Repository Label	Details
Red Hat Virtualization	**Red Hat Virtualization Host**	**rhel-7-server-rhvh-4-rpms**	Provides the **rhev-hypervisor7-ng-image-update** package, which allows you to update the image installed on the host.

Table 1.3. Red Hat Enterprise Linux 7 Hosts

Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux Server	**Red Hat Enterprise Linux Server**	**rhel-7-server-rpms**	Provides the Red Hat Enterprise Linux 7 Server.
Red Hat Virtualization	**Red Hat Virtualization Management Agents (RPMs)**	**rhel-7-server-rhv-4-mgmt-agent-rpms**	Provides the QEMU and KVM packages required for using Red Hat Enterprise Linux 7 servers as virtualization hosts.
Red Hat Ansible Engine	**Red Hat Ansible Engine**	**rhel-7-server-ansible-2.9-rpms**	Provides Red Hat Ansible Engine.

1.2.2. Optional Subscriptions and Repositories

The packages provided in the following repositories are not required to install and configure a functioning Red Hat Virtualization environment. However, they are required to install packages that provide supporting functionality on virtual machines and client systems such as virtual machine resource monitoring. When one of these repositories is required to install a package, the steps required to enable the repository are provided in the appropriate location in the documentation.

Table 1.4. Optional Subscriptions and Repositories

Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux Server	**Red Hat Enterprise Linux 7 Server - RH Common (v.7 Server for x86_64)**	**rhel-7-server-rh-common-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 7, which allows you to monitor virtual machine resources on Red Hat Enterprise Linux 7 clients.

Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux Server	**Red Hat Enterprise Virt Agent (v.6 Server for x86_64)**	**rhel-6-server-rhv-4-agent-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 6, which allows you to monitor virtual machine resources on Red Hat Enterprise Linux 6 clients.
Red Hat Enterprise Linux Server	**Red Hat Enterprise Virt Agent (v.5 Server for x86_64)**	**rhel-5-server-rhv-4-agent-rpms**	Provides the **rhevm-guest-agent** package for Red Hat Enterprise Linux 5, which allows you to monitor virtual machine resources on Red Hat Enterprise Linux 5 clients.
Red Hat Virtualization	**Red Hat Virtualization Host Build**	**rhel-7-server-rhvh-4-build-rpms**	Provides packages used to build your own version of the Red Hat Virtualization Host image.

CHAPTER 2. RHV FOR IBM POWER

This release supports Red Hat Enterprise Linux 7 hosts on IBM POWER8, little endian hardware and Red Hat Enterprise Linux 7 virtual machines on emulated IBM POWER8 hardware. From Red Hat Virtualization 4.2.6 Red Hat Enterprise Linux hosts are supported on IBM POWER9, little endian hardware and Red Hat Enterprise Linux 7 virtual machines on emulated IBM POWER9 hardware.
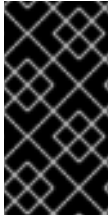
> **IMPORTANT**
>
> Previous releases of RHV for IBM Power required Red Hat Enterprise Linux hosts on POWER8 hardware to be installed from an ISO image. These hosts cannot be updated for use with this release. You must reinstall Red Hat Enterprise Linux 7 hosts using the repositories outlined below.

The packages provided in the following repositories are required to install and configure aspects of a Red Hat Virtualization environment on POWER8 hardware.

Table 2.1. Required Subscriptions and Repositories for IBM POWER8, little endian hardware

Component	Subscription Pool	Repository Name	Repository Label	Details
Red Hat Virtualization Manager	**Red Hat Virtualization for IBM Power**	**Red Hat Virtualization for IBM Power**	**rhel-7-server-rhv-4-power-rpms**	Provides the Red Hat Virtualization Manager for use with IBM POWER8 hosts. The Manager itself must be installed on x86_64 architecture.
Red Hat Enterprise Linux 7 hosts, little endian	**Red Hat Enterprise Linux for Power, little endian**	**RHV Management Agent for IBM Power, little endian**	**rhel-7-server-rhv-4-mgmt-agent-for-power-le-rpms**	Provides the QEMU and KVM packages required for using Red Hat Enterprise Linux 7 servers on IBM Power (little endian) hardware as virtualization hosts.
	Red Hat Enterprise Linux for Power, little endian	**Red Hat Enterprise Linux for IBM Power, little endian**	**rhel-7-for-power-le-rpms**	Provides additional packages required for using Red Hat Enterprise Linux 7 servers on IBM Power (little endian) hardware as virtualization hosts.

Component	Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux 7 virtual machines, big endian	**Red Hat Enterprise Linux for Power, big endian**	**RHV Tools for IBM Power**	**rhel-7-server-rhv-4-tools-for-power-le-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 7 virtual machines on emulated IBM Power (big endian) hardware. The guest agents allow you to monitor virtual machine resources on Red Hat Enterprise Linux 7 clients.
Red Hat Enterprise Linux 7 virtual machines, little endian	**Red Hat Enterprise Linux for Power, little endian**	**RHV Tools for IBM Power, little endian**	**rhel-7-server-rhv-4-tools-for-power-le-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 7 virtual machines on emulated IBM Power (little endian) hardware. The guest agents allow you to monitor virtual machine resources on Red Hat Enterprise Linux 7 clients.

Table 2.2. Required Subscriptions and Repositories for IBM POWER9, little endian hardware

Component	Subscription Pool	Repository Name	Repository Label	Details
Red Hat Virtualization Manager	**Red Hat Virtualization for IBM Power**	**Red Hat Virtualization for IBM Power**	**rhel-7-server-rhv-4-power-rpms**	Provides the Red Hat Virtualization Manager for use with IBM POWER9 hosts. The Manager itself must be installed on x86_64 architecture.

Component	Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux 7 hosts, little endian	**Red Hat Enterprise Linux for Power, little endian**	**RHV Management Agent for IBM Power, little endian**	**rhel-7-server-rhv-4-mgmt-agent-for-power-9-rpms**	Provides the QEMU and KVM packages required for using Red Hat Enterprise Linux 7 servers on IBM Power (little endian) hardware as virtualization hosts.
	Red Hat Enterprise Linux for Power, little endian	**Red Hat Enterprise Linux for IBM Power, little endian**	**rhel-7-for-power-9-rpms**	Provides additional packages required for using Red Hat Enterprise Linux 7 servers on IBM Power (little endian) hardware as virtualization hosts.
Red Hat Enterprise Linux 7 virtual machines, big endian	**Red Hat Enterprise Linux for Power, big endian**	**RHV Tools for IBM Power**	**rhel-7-server-rhv-4-tools-for-power-le-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 7 virtual machines on emulated IBM Power (big endian) hardware. The guest agents allow you to monitor virtual machine resources on Red Hat Enterprise Linux 7 clients.

Component	Subscription Pool	Repository Name	Repository Label	Details
Red Hat Enterprise Linux 7 virtual machines, little endian	**Red Hat Enterprise Linux for Power, little endian**	**RHV Tools for IBM Power, little endian**	**rhel-7-server-rhv-4-tools-for-power-le-rpms**	Provides the **ovirt-guest-agent-common** package for Red Hat Enterprise Linux 7 virtual machines on emulated IBM Power (little endian) hardware. The guest agents allow you to monitor virtual machine resources on Red Hat Enterprise Linux 7 clients.

Unsupported Features

The following Red Hat Virtualization features are not supported:

- SPICE display

- SmartCard

- Sound device

- Guest SSO

- Integration with OpenStack Networking (Neutron), OpenStack Image (Glance), and OpenStack Volume (Cinder)

- Self-hosted engine

- Red Hat Virtualization Host (RHVH)

- Disk Block Alignment

For a full list of bugs that affect the RHV for IBM Power release, see Red Hat Private BZ#1444027.

CHAPTER 3. TECHNOLOGY PREVIEW AND DEPRECATED FEATURES

3.1. TECHNOLOGY PREVIEW FEATURES
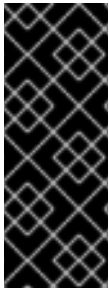
> **IMPORTANT**
>
> Technology Preview features are not supported with Red Hat production service-level agreements (SLAs) and might not be functionally complete, and Red Hat does not recommend using them for production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information see Red Hat Technology Preview Features Support Scope.

The following table describes features available as Technology Previews in Red Hat Virtualization.

Table 3.1. Technology Preview Features

Technology Preview Feature	Details
NoVNC console option	Option for opening a virtual machine console in the browser using HTML5.
Websocket proxy	Allows users to connect to virtual machines through a noVNC console.
VDSM hook for nested virtualization	Allows a virtual machine to serve as a host.
Import Debian and Ubuntu virtual machines from VMware and RHEL 5 Xen	Allows **virt-v2v** to convert Debian and Ubuntu virtual machines from VMware or RHEL 5 Xen to KVM. Known Issues: • **virt-v2v** cannot change the default kernel in the GRUB2 configuration. The kernel configured on the guest operating system is not changed during the conversion, even if a more optimal version is available. • After converting a Debian or Ubuntu virtual machine from VMware to KVM, the name of the virtual machine's network interface may change, and will need to be configured manually
Open vSwitch cluster type support	Adds Open vSwitch networking capabilities.
moVirt	Mobile Android app for Red Hat Virtualization.

Technology Preview Feature	Details
Shared and local storage in the same data center	Allows the creation of single-brick Gluster volumes to enable local storage to be used as a storage domain in shared data centers.
Cinderlib Integration	Leverage CinderLib library to use Cinder-supported storage drivers in Red Hat Virtualization without a Full Cinder-OpenStack deployment. Adds support for Ceph storage along with Fibre Channel and iSCSI storage. The Cinder volume has multipath support on the Red Hat Virtualization Host.
Intel Q35 Chipset	Adds support for the Q35 machine type. Q35 is PCIe-enabled and can use UEFI (OVMF) BIOS and legacy BIOS (SeaBIOS).
SSO with OpenID Connect	Adds support for external OpenID Connect authentication using Keycloak in both the user interface and with the REST API.
oVirt Engine Backup	Adds support to back up and restore Red Hat Virtualization Manager with the Ansible **ovirt-engine-backup** role.

3.2. DEPRECATED FEATURES

The following table describes deprecated features to be removed in a future version of Red Hat Virtualization.

Table 3.2. Deprecated Features

Deprecated Feature	Details
Version 3 REST API	Version 3 of the REST API is no longer supported. Use the version 4 REST API.
Version 3 SDKs	Version 3 of the SDKs for Java, Python, and Ruby are no longer supported. Use the version 4 SDK for Java, Python, or Ruby.
RHEVM Shell	Red Hat Virtualization's specialized command line interface is no longer supported. Use the version 4 SDK for Java, Python, or Ruby, or the version 4 REST API.

Deprecated Feature	Details
Export Domains	Use a data domain. Migrate data domains between data centers and import the virtual machines into the new data center. In Red Hat Virtualization 4.3, some tasks may still require the export domain.
ISO domains	Use a data domain. Upload images to data domains. In Red Hat Virtualization 4.3, some tasks may still require the ISO domain.
Iptables	Use the **firewalld** service.
Conroe, Penryn, Opteron G1, Opteron G2, and Opteron G3 CPU types	Use newer CPU types.
IBRS CPU types	Use newer fixes.
3.6 and 4.0 cluster compatibility versions	Use a newer cluster compatibility version. Upgrade the compatibility version of existing clusters.
ovirt-guest-agent	The **ovirt-guest-agent** project is no longer supported. Use **qemu-guest-agent** version 2.12.0 or later.
cockpit-machines-ovirt	The **cockpit-machines-ovirt** package is not included in Red Hat Enterprise Linux 8 and will not be supported in Red Hat Virtualization Host 4.4. Use the Administration Portal.
rhv-guest-tools-iso package	The rhv-guest-tools-iso package is deprecated and will be replaced in Red Hat Virtualization 4.4 by virtio-win-guest-tools iso image. For information, see How can I install RHV Windows guest tools in RHEV 4.4?.

CHAPTER 4. RELEASE INFORMATION

These release notes highlight technology preview items, recommended practices, known issues, and deprecated functionality to be taken into consideration when deploying this release of Red Hat Virtualization.

Notes for updates released during the support lifecycle of this Red Hat Virtualization release will appear in the advisory text associated with each update or the *Red Hat Virtualization Technical Notes*. This document is available from the following page:

https://access.redhat.com/documentation/en-us/red_hat_virtualization

4.1. RED HAT VIRTUALIZATION 4.3 GENERAL AVAILABILITY (OVIRT-4.3.3)

4.1.1. Bug Fix

The items listed in this section are bugs that were addressed in this release:

BZ#1403675

Previously, Red Hat Virtualization Manager did not handle hosts added to it over an IPV6-only network.

In the current release, you can use the Manager's Administration Portal and REST API to add and manage hosts over a statically configured IPV6-only network.

BZ#1441741

In the current release, the v4 API documentation shows how to retrieve the IP addresses of a virtual machine.

BZ#1496395

Previously, memory hot unplug did not work in virtual machines started from snapshots.

This has been fixed in the current release: Memory hot unplug works in virtual machines started from snapshots.

BZ#1507965

Previously, selecting File > Change CD in the Windows 10 version of virt-viewer did not work. The current release fixes this issue.

BZ#1520848

This release updates the VM video RAM settings to ensure enough RAM is present for any Linux guest operating system.

BZ#1536397

Previously, CloudInit passed the dns_search value incorrectly as the dns_namesever value. For example, after configuring a the Networks settings of a virtual machine and runinng it, the dns_search value showed up in the resolv.conf file as the dns_namesever value. The current release fixes this issue.

BZ#1539766

Previously, when accessing RHEL 6 virtual machines from a Windows 7 client using virt-viewer, copy/paste sporadically failed. The current release fixes this issue.

BZ#1548846

Previously a "Removed device not found in conf" warning appeared in the vdsm.log after performing a successful hot unplug. In this release, after performing a successful hot unplug, this warning message will no longer appear in vdsm.log.

BZ#1552533

This release renames the 'MaxBlockDiskSize' option to 'MaxBlockDiskSizeInGibiBytes'.

BZ#1559041

Previously, guest virtual machines with USB support enabled became unresponsive after migration to a different host. The current release fixes this issue and guests work as expected after migration.

BZ#1560460

Previously, VDSM used stat() to implement islink() checks when using ioprocess to run commands. As a result, if a user or storage system created a recursive symbolic link inside the ISO storage domain, VDSM failed to report file information. In the current release, VDSM uses lstat() to implement islink() so it can report file information from recursive symbolic links.

BZ#1561964

The serial console was missing in a self-hosted engine VM created with node zero deployment. In this release, the serial console is defined correctly.

BZ#1565178

Previously, you could manage snapshots through the Administration Portal, but not in the VM Portal. In the current release, you can manage snapshots through the VM portal.

BZ#1567936

Previously, the ovirt-cockpit-sso configuration file, cockpit.conf, triggered security and integrity alerts during the verification process. In the current release, the ovirt-cockpit-sso configuration file is marked as a configuration file and is excluded from the verification process, which helps prevent false security and integrity alerts.

BZ#1570851

Previously, on a Windows client machine, if a non-English locale was selected, the spice client (remote-viewer) displayed some translated UI elements in English, not the locale language. The current release fixes this and presents those translated UI elements in the locale language.

BZ#1575777

Previously, a floppy drive in a virtual machine could prevent the virtual machine from being imported. In the current release, floppy drives are ignored during import.

BZ#1583038

A VDSM yum plugin named 'vdsm.py' was added. Consequently, the Self-Hosted Engine setup imported the wrong vdsm module, causing it to fail. The name of the plugin was changed and now the Self-Hosted Engine setup completes successfully.

BZ#1583968

The self-hosted engine VM was selected for balancing although the BalanceVM command was not enabled for the self-hosted engine. In this release, balancing is no longer blocked.

BZ#1589612

When a virtual machine starts, VDSM uses the domain metadata section to store data which is required to configure a virtual machine but which is not adequately represented by the standard libvirt domain. Previously, VDSM stored drive IO tune settings in this metadata that were redundant because they already had proper representation in the libvirt domain. Furthermore, if IO tune settings were enabled, a bug in storing the IO tune settings prevented the virtual machine from starting. The current release removes the redundant information from the domain metadata and fixes the bug that prevented virtual machines from starting.

BZ#1591693

Do not use a VNC-based connection to deploy Red Hat Virtualization Manager as a self-hosted engine. The VNC protocol does not support password auth in FIPS mode. As a result, the self-hosted engine will fail to deploy.

Instead, deploy the Manager as a self-hosted engine, use a SPICE-based connection.

BZ#1593568

Previously, if a CD-ROM was ejected from a virtual machine and VDSM was fenced or restarted, the virtual machine became unresponsive and/or the Manager reported its status as "Unknown." In the current release, a virtual machine with an ejected CD-ROM recovers after restarting VDSM.

BZ#1594615

The release improves upon the fix in BZ#1518253 to allow for a faster abort process and a more easily understood error message.

BZ#1595285

There was a bug in the REST API for non-administrator users related to VNIC Profiles. Consequently, an error message appeared saying "GET_ALL_VNIC_PROFILES failed query execution failed due to insufficient permissions." The code was fixed and the error no longer occurs.

BZ#1595489

This release ensures that VMs existing in Red Hat Virtualization Manager version 4.2.3 or earlier do not lose their CD-ROM device if the VMs are restarted in 4.2.3 or later versions.

BZ#1608093

Previously, with some error conditions, the VM Portal displayed a completely white screen with no error message or debugging information. The current release fixes this issue: All error conditions display an error message and stack trace in the browser console.

BZ#1614430

Vdsm-gluster tries to run heal operations on all volumes. Previously, if the gluster commands got stuck, VDSM started waiting indefinitely for them, exhausting threads, until it timed-out. Then it stopped communicating with the Manager and went offline. The current release adds a timeout to the gluster heal info command so the command terminates within a set timeout and threads do not become exhausted. On timeout, the system issues a GlusterCommandTimeoutException, which causes the command to exit and notifies the Manager. As a result, VDSM threads are not stuck, and VDSM does not go offline.

BZ#1617745

Previously, when a migrating virtual machine was not properly set up on the destination host, it could still start there under certain circumstances, then run unnoticed and without VDSM supervision. This

situation sometimes resulted in split-brain. Now migration is always prevented from starting if the virtual machine set up fails on the destination host.

BZ#1619154

Previously, while a datacenter was enforcing a quota, using the VM Portal to create a virtual machine from a blank template generated an error. The current release fixes this issue.

BZ#1619474

This release ensures that if a request occurs to disable I/O threads of a running VM, the I/O threads disable when the VM goes down.

BZ#1619866

This release ensures that if a request occurs to disable I/O threads of a running VM, the I/O threads setting remains disabled when changing unrelated properties of a running VM.

BZ#1622068

Previously, after importing a guest from an ova file, the Import Virtual Machine dialog displayed the network type as "Dual-mode rt8319, VirtIO", when it should have been only "VirtIO". The current release fixes this issue.

BZ#1626907

This release prevents VM snapshot creation when the VM is in a non-responding state to preclude database corruption due to an inconsistent image structure.

BZ#1628836

This fix allows the self-hosted engine virtual machine to run on the host.

BZ#1631360

The previous release changed the system manufacturer of virtual machines from "Red Hat" to "oVirt". This was inconsistent with preceding versions. Some users depended on this field to determine the underlying hypervisor. The current release fixes this issue by setting the SMBIOS manufacturer according to the product being used, which is indicated by the 'OriginType' configuration value. As a result, the manufacturer is set to 'oVirt' when oVirt is being used, and 'Red Hat' when Red Hat Virtualization is being used.

BZ#1631392

Previously, in the Administration Portal, the "New Pool" window uses the "Prestarted" label while the "Edit Pool" window uses the "Prestarted VMs" label. Both of these labels refer to the number of VMs prestarted in the pool. The current release fixes this issue.

BZ#1632055

This release updates the Red Hat Virtualization Manager power saving policy to allow VM migration from over-utilized hosts to under-utilized hosts to ensure proper balancing.

BZ#1633975

RHVH was missing a package named pam_pkcs11. Consequently, the rule for pam_pkcs11 in PAM is added, but the module does not exist, so users cannot login. The missing pam_pkcs11 package was added, and now users can login to RHVH if the correct security profile is applied.

BZ#1634239

oscap-anaconda-addon was changed to read the datastream file based on the OS name and version. Consequently, the addon looks for a datastream file named "ssg-rhvh4-ds.xml," which does not exist, so no OSCAP profiles are shown. The relevant OSCAP profiles for RHVH reside in ssg-rhel7-ds.xml, so a symlink was added named ssg-rhvh4-ds.xml that references ssg-rhel7-ds.xml.

BZ#1635304

This release allows users in Red Hat Virtualization Manager to view the full path of the host group in the host group drop-down list to facilitate host group configuration.

BZ#1635405

This release adds a log entry at the WARN level if an attempt is made to move a disk with a damaged ancestor. A workaround solution is to leverage the REST API to move the disk between storage domains.

BZ#1635845

This release ensures the clearing of the VM uptime during a guest operating system reboot, and the uptime that does display corresponds to the guest operating system.

BZ#1635942

Previously, while cloning a virtual machine with a Direct LUN attached, the Administration Portal showed the clone task as red (failed). The current release fixes this issue and displays the clone task as running until it is complete.

BZ#1636028

Previously, Red Hat Virtualization Host entered emergency mode when it was updated to the latest version and rebooted twice. This was due to the presence of a local disk WWID in /etc/multipath/wwids. In the current release, /etc/multipath/wwids has been removed. During upgrades, imgbased now calls "vdsm-tool configure --force" in the new layer, using the SYSTEMD_IGNORE_CHROOT environment variable.

BZ#1636331

Previously, trying to update a disk attribute using the /api/disks/{disk_id} API failed without an error. The current release fixes this issue.

BZ#1637765

Previously, when deploying the Self-Hosted Engine from the Cockpit, an error message appeared together with an explanation that ping issues were encountered. However, under certain conditions the explanation would disappear, leaving only a generic error message "Please correct errors before moving to the next step." In this release, if ping errors are encountered during deployment, the user will be informed of the issue, and the message will remain in the error window until the issue is resolved.

BZ#1638096

The self-hosted engine backup and restore flow has been improved, and now works correctly when the self-hosted engine storage domain is defined as the master storage domain.

BZ#1638124

This release enables VM configuration with memory greater than two terabytes.

BZ#1638606

Previously, the default ntp.conf file was migrated to chrony even when NTP was disabled, overwriting chrony.conf file with incorrect values. In the current release, ntp.conf is only migrated if NTP is enabled.

BZ#1639630

This release sets the proper REST API parameters during the VM creation to allow and make the VM available for use immediately.

BZ#1640016

The default CPU type in Red Hat Virtualization 4.2 is deprecated in Red Hat Virtualization 4.3. Previously, when you used the Edit Cluster dialog to create a new cluster or edit an existing cluster, changing the cluster compatibility version from 4.2 to 4.3 when the CPU Architecture was set to x86_64 caused the CPU Type to be set to an invalid setting, resulting in an exception. Now the CPU Type defaults to a valid entry and no exception occurs.

BZ#1640977

This release ensures that all values for Quality of Service links are visible.

BZ#1641536

Previously, after using virt-v2v to import a virtual machine from Xen or VMware environments, the Red Hat Virtualization Manager was incorrectly removing the virtual machine. The Manager was removing the import job too early, causing it to remove the job reference twice.

This issue has been fixed in the current release. The Manager only removes the import job after processing is complete. Using virt-v2v to import virtual machines from VmWare and Xen works.

BZ#1643476

Migration bandwidth limit was computed incorrectly from the user-defined settings and set to an incorrect value. In this release, the migration bandwidth limit is now set correctly.

BZ#1643486

This release ensures the value of the migration bandwidth limit is correct.

BZ#1643663

When performing an upgrade, make sure the ovirt-hosted-engine-ha and ovirt-hosted-engine-setup package versions match.

BZ#1643733

Previously, after performing an upgrade, packages that shipped files under /var were not updated correctly as /var was not layered. In this release, if an updated file exists on both the new image and the running system, the original file will be saved as ".imgbak" and the new file will be copied over enabling both the original and new files to reside under /var.

BZ#1643743

Host logs were being filled with vnc_tls errors due to problems with read permissions. In this release, the erroneous logs are no longer recorded by the host.

BZ#1644636

Previously, incorrect parsing of images named 'rhv-toolssetup_x.x_x.iso' caused a NullPointerException (NPE).

The current release fixes this issue. This image name can be parsed without causing an exception.

BZ#1645007

Previously, making an API call to the foreman (hosts, hostgroups, compute resources) returned only 20 entries. The current release fixes this issue and displays all of the entries.

BZ#1645395

Previously, imgbased failed upon receiving the e2fsck return code 1 when creating a new layer. In the current release, imgbased handles the e2fsck return code 1 as a success, since the new file system is correct and the new layer is installed successfully.

BZ#1646861

This release ensures Red Hat Virtualization Manager sets the recommended options during the creation of a volume from Red Hat Virtualization Manager to distinguish creating volumes from the Cockpit User Interface.

BZ#1647607

Previously, an incorrectly named USB3 controller, "qemu_xhci," prevented virtual machines from booting if they used a host passthrough with this controller. The current release corrects the controller name to "qemu-xhci," which resolves the booting issue.

BZ#1650177

This release ensures the upgrade process in Red Hat Virtualization Manager sets the configuration value ImageProxyAddress to point to the Red Hat Virtualization Manager FQDN if the configuration value was set to "localhost".

BZ#1650422

Red Hat Virtualization Manager no longer logs messages regarding non-preferred host penalizations if the VM is not configured to have a preferred host.

BZ#1651426

Previously when converting to OpenStack, failed conversions revealed passwords for accessing OpenStack in the wrapper log. This issue has been fixed and passwords are no longer revealed.

BZ#1652519

Previously, during an upgrade, dracut running inside chroot did not detect the cpuinfo and the kernel config files because /proc was not mounted and /boot was bindmounted. As a result, the correct microcode was missing from the initramfs.

The current release bindmounts /proc to the chroot and removes the --hostonly flag. This change inserts both AMD and Intel microcodes into the initramfs and boots the host after an upgrade.

BZ#1652795

Previously, even if lvmetad was disabled in the configuration, the lvmetad service left a pid file hanging. As a result, entering lvm commands displayed warnings.

The current release masks the lvmetad service during build so it never starts and lvm commands do not show warnings.

BZ#1654417

Previously, if an xlease volume was corrupted, VDSM could not acquire leases and features like high-availability virtual machines did not work. The current release adds rebuild-xleases and format-xleases commands to the VDSM tool. Administrators can use these commands to rebuild or format corrupted xlease volumes.

BZ#1654442

There was a bug in the REST API for non-administrator users related to VNIC Profiles. Consequently, an error message appeared saying "GET_ALL_VNIC_PROFILES failed query execution failed due to insufficient permissions." The code was fixed and the error no longer occurs.

BZ#1655375

Previously, after upgrading to version 4.2 or 4.3, the Compute > Hosts > Network Interfaces page in the Administration Portal did not display host interfaces. Instead, it would throw the following obfuscated exception several times: webadmin-0.js:formatted:176788 Mon Dec 03 11:46:02 GMT+1000 2018 SEVERE: Uncaught exception com.google.gwt.core.client.JavaScriptException: (TypeError) : Cannot read property 'a' of null

The current release fixes this issue.

BZ#1655911

In this release, the following changes have been made in the view filters for VMs in the Administration Portal under Compute > Hosts > selected host: New view filter names: - From "Running on host" to "Running on current host" (default view) - From "Pinned to host" to "Pinned to current host" - From "All" to "Both" - when "Both" is selected, a new column named "Attachment to current host" is displayed to indicate that the VM is: "Running on current host" , "Pinned to current host", or "Pinned and Running on current host".

BZ#1656092

Previously, when re-importing a virtual machine as an OVA file, duplicate Image IDs and Disk IDs caused errors while attempting to recreate the image. Also, after a failure, continuing to attempt to attach the image instead of failing immediately caused the error reported. Because the identifiers already existed, Red Hat Virtual Manager could not import the virtual machine OVA file even though the virtual machine name had been changed.

This issue has been fixed in the current release. The Red Hat Virtual Manager can regenerate Identifiers. When copying the image, the Manager can use image mapping to correlate the previous Image ID to the new Image ID. Finally, the Manager can move the attach image handling so that it will not be called when creating a new image if the database fails. As a result, importing virtual machines using OVA files works.

BZ#1657977

Previously, the "Multi Queues enabled" checkbox was missing from the New- or Edit Instance Types window in the Administration Portal. The current release fixes this issue.

BZ#1658976

This bug fix sets the template ID properly to address a null pointer exception during the import of a thin-provisioned VM disk from an Open Virtualization Framework configuration file.

BZ#1660441

This release ensures Red Hat Virtualization Manager defines the attribute subjectAlternativeName correctly during the renaming of the httpd certificate to prevent browser warnings or a certificate rejection.

BZ#1660595

During a self-hosted engine deployment, SSO authentication errors may occur stating that a valid profile cannot be found in credentials and to check the logs for more details. The interim workaround is to retry the authentication attempt more than once. See BZ#1695523 for a specific example involving Kerberos SSO and engine-backup.

BZ#1662321

Previously, when trying to clone a virtual machine from an Active VM snapshot, a 'Failed to get shared "write" lock. Is another process using the image?' error appeared for the following snapshot types: 'ACTIVE', 'STATELESS', 'PREVIEW' and 'NEXT_RUN'. In this release, the cloning operation will be blocked for these snapshot types.

BZ#1662449

If a user with an invalid sudo configuration uses sudo to run commands, sudo appends a "last login" message to the command output. When this happens, VDSM fails to run lvm commands. Previously, the VDSM log did not contain helpful information about what caused those failures.

The current release improves error handling in the VDSM code running lvm commands. Now, if VDSM fails, an error message clearly states that there was invalid output from the lvm commands, and shows the output added by sudo. Although this change does not fix the root cause, an invalid sudo configuration, it makes it easier to understand the issue.

BZ#1662878

Self-hosted engine deployment failed when the network interface was defined as other than 'eth0'. In this release, any valid network interface name can be used.

BZ#1663616

In this release, redirection device types are no longer set to unplugged and can now obtain the proper address from the domain xml when supported or from the host when they are not supported.

BZ#1664342

The sorting order in the list of Disks in the Storage tab of the Administration Portal was sorted alphabetically by text values in the Creation Date, instead of by time stamp. In this release, the list is now sorted by the time stamp.

BZ#1664540

A user with a UserRole or a role with a Change CD permit can now change CDs on running VMs in the VM Portal

BZ#1666886

This release updates the Ansible role to configure the Rsyslog Elasticsearch output correctly to ensure the certificate information reaches the Red Hat Virtualization Host.

BZ#1666958

This release ensures the SR-IOV vNIC profile does not undergo an invalid update while the vNIC is plugged in and running on the VM during the validation process. To update the SR-IOV vNIC profile, unplug the vNIC from the VM. After the updates are complete, replug the vNIC into the VM.

BZ#1670370

VDSM attempted to collect OpenStack related information, even on hosts that are not connected to OpenStack, and displayed a repeated error message in the system log. In this release, errors originating from OpenStack related information are not recorded in the system log. As a result, the system log is quieter.

BZ#1674477

Previously, testing of Ansible 2.8 returned deprecation errors and warnings during deployment. The current release fixes this issue.

BZ#1676426

Previously, the Self-Hosted Engine pane in Cockpit had a few minor typos. The current version fixes these issues.

BZ#1676461

updated by engine-setup. If an error occurs, engine-setup treats this is a failure and tries to rollback, which is a risky process. To work around this scenario, the package ovirt-engine-setup-plugin-ovirt-engine now requires ovirt-vmconsole 1.0.7-1. Updating the setup packages with yum should also update ovirt-vmconsole. If an error occurs, yum evaluates it as a non-fatal error. See also bug 1665197 for the actual error from ovirt-vmconsole.

BZ#1676822

Previously, while testing a RHEL 8 build of the virt-v2v daemon that turns a Red Hat Virtualization Host into a conversion host for CloudForms migration, you could not update the network profile of a running virtual machine guest. The current release fixes this issue.

BZ#1685517

This release allows an Ansible playbook to run on isolated, offline nodes.

BZ#1686537

In this release, VM migration is supported when both the origin and destination hosts have Pass-Through Host CPU enabled.

BZ#1688056

This fix includes a signed certificate for rhev-apt.exe until 2022-01-25.

BZ#1690446

This fix ensures the **/etc/hosts** directory label is correct for SELinux on the Red Hat Virtualization Manager virtual machine.

BZ#1690782

This fix ensures that installing the OVS-2.10 package restarts the OVS/OVN services after the package completes the install and update process.

BZ#1691173

This release ensures that during self-hosted engine deployments, downloading and installing the rhvm-appliance package does not occur if the corresponding OVA file is present.

BZ#1695038

Previously, upgrading from RHV 4.0 to 4.2 failed while using "ovirt-fast-forward-upgrade" tool due to 'eap7-jboss*' dependency issues. The current release includes a patch that fixes this bug.

4.1.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1009608

This release allows you to limit east-west traffic of VMs, to enable traffic only between the VM and a gateway. The new filter 'clean-traffic-gateway' has been added to libvirt. With a parameter called GATEWAY_MAC, a user can specify the MAC address of the gateway that is allowed to communicate with the VM and vice versa. Note that users can specify multiple GATEWAY_MACs. There are two possible configurations of VM:

1) A VM with a static IP. This is the recommended setup. It is also recommended to set the parameter CTRL_IP_LEARNING to 'none'. Any other value will result in a leak of initial traffic. This is caused by libvirt's learning mechanism (see https://libvirt.org/formatnwfilter.html#nwfelemsRulesAdvIPAddrDetection and https://bugzilla.redhat.com/show_bug.cgi?id=1647944 for more details).

2) A VM with DHCP. DHCP is working partially. It is not usable in production currently (https://bugzilla.redhat.com/show_bug.cgi?id=1651499).

The filter has a general issue with ARP leak (https://bugzilla.redhat.com/show_bug.cgi?id=1651467). Peer VMs are able to see that the VM using this feature exists (in their arp table), but are not able to contact the VM, as the traffic from peers is still blocked by the filter.

BZ#1111783

In the current release, Windows clustering is supported for directly attached LUNs and shared disks.

BZ#1111784

The current release supports Windows clustering for directly attached LUNs and shared disks.

BZ#1155676

In this release, users can now export VM templates to OVA files located on shared storage, and import the OVA files from the shared storage into a different data center.

BZ#1209881

The iptables and iptables-service have been removed from the list of dependencies in self-hosted engine deployment.

BZ#1284775

The current release adds support for memory hot-plug for IBM POWER (ppc64le) virtual machines.

BZ#1286219

In the current release, the disk alias of a cloned virtual machine is **Alias_<Cloned-Virtual-Machine-Name>**.

BZ#1372134

The current release of the self-hosted engine supports deployment with static IPv6.

BZ#1388098

The current release provides a software hook for the Manager to disable restarting hosts following an outage. For example, this capability would help prevent thermal damage to hardware following an HVAC failure.

BZ#1408584

Previously the REST API did not include the CPU Type when it returned information about the host. Now, the CPU Type is included with the rest of the information concerning the host that the REST API returns, which is consistent with the Administration Portal.

BZ#1439733

In this release, VMs converted to oVirt (from VMware, Xen or OVA) now include RNG device and memory balloon device, provided that the guest OS has the necessary drivers installed.

BZ#1451297

TLSv1 and TLSv1.1 protocols are no longer secure, so they are forcefully disabled, and cannot be enabled, in the VDSM configuration.

Only TLSv1.2 and higher versions of the protocol are enabled. The exact TLS version depends on the underlying OpenSSL version.

BZ#1454389

The current release of the Administration Portal supports search queries for virtual machines with a specific cluster compatibility override setting or with a different cluster compatibility override setting (or none): **Vms: custom_compatibility_version = X.Y** or **!= X.Y**.

BZ#1454673

When renaming a running virtual machine, the new name is now applied immediately, even when the QEMU process is running and is set with the previous name. In this case, the user is provided with a warning that indicates that the running instance of the virtual machine uses the previous name.

BZ#1467332

Feature: Support default route role on IPv6-only networks, but only for IPv6 static interface configuration.

Reason: oVirt engine should support IPv6 only networks for its existing capabilities.

Result: – You can set the default route role on an IPv6-only network provided it has an IPv6 gateway. – For Red Hat Virtualization Manager to correctly report the sync status of the interfaces, configure all of the interfaces with static IPv6 addresses only. Also, configure the IPv6 gateway on the logical network that has the default route role. – IPv6 dynamic configuration is currently not supported. – The IPv6 gateway on the default route role network is applied as the default route for the v6 routing table on the host. – You can set an IPv6 gateway on a non-management network. This was previously possible only on the management network). – If more that one IPv6 gateway is set on the interfaces of a host, the Manager will be in an undefined state: There will be more than one default route entry in the v6 routing table on the host, which causes the host to report that there are no v6 gateways at all (meaning that the interfaces will appear as out of sync in the Manager.)

BZ#1510336

This release adds the ability to manage the MTU of VM networks in a centralized way, enabling oVirt to manage MTU all the way from the host network to the guest in the VM. This feature allows for the consistent use of MTUs in logical networks with small MTU (e.g., tunneled networks) and large MTU (e.g., jumbo frames) in VMs, even without DHCP.

BZ#1510856

Making large snapshots and other abnormal events can pause virtual machines, impacting their system time, and other functions, such as timestamps. The current release provides Guest Time Synchronization, which, after a snapshot is created and the virtual machine is un-paused, uses VDSM and the guest agent to synchronize the system time of the virtual machine with that of the host. The

time_sync_snapshot_enable option enables synchronization for snapshots. The time_sync_cont_enable option enables synchronization for abnormal events that may pause virtual machines. By default, these features are disabled for backward compatibility.

BZ#1511234

The new boot_hostdev hook allows virtual machines to boot from passed through host devices such as NIC VF's, PCI-E SAS/RAID Cards, SCSI devices for example without requiring a normal bootable disk from a Red Hat Virtualization storage domain or direct LUN.

BZ#1511891

Previously, copying volumes to preallocated disks was slower than necessary and did not make optimal use of available network resources. In the current release, qemu-img uses out-of-order writing to improve the speed of write operations by up to six times. These operations include importing, moving, and copying large disks to preallocated storage.

BZ#1518697

Red Hat Virtualization Manager setup now uses oVirt Task Oriented Pluggable Installer/Implementation (otopi) to generate its answer files to eliminate the need for additional code or manual input on stated questions.

BZ#1526033

This release enables the export of a VM template to an Open Virtualization Appliance (OVA) file and the import of an OVA file as a VM template to facilitate VM template migration between data centers without using an export domain.

BZ#1527860

This release adds USB qemu-xhci controller support to SPICE consoles, for Q35 chipset support. Red Hat Virtualization now expects that when a BIOS type using the Q35 chipset is chosen, and USB is enabled, that the USB controller will be qemu-xhci.

BZ#1530031

The 'engine-backup' script now has default values for several options, so you do not need to supply values for these options.

To see the default values, run 'engine-backup --help'.

BZ#1532969

Previously, virtual machines could only boot from BIOS. The current release adds support for booting virtual machines via UEFI firmware, a free, newer, more modern way to initialize a system.

BZ#1539829

This feature provides support for adding security groups and rules using the ovirt-provider-ovn package, as described by the OpenStack Networking API.

BZ#1542136

Feature: Auto persist changes on SetupNetworks Instruct VDSM to commit any changes applied during setup networks immediately upon successful completion of the setup networks process and if connectivity is successfully re-established with the Red Hat Virtualization Manager. If this flag is not specified in the request, it is assumed that it was set to false, which is backward compatible with the previous behavior.

When setupNetworks is invoked from the Administration Portal, the default is 'true'. When it is invoked with a REST API call, the default is 'false'. When it is invoked from an ansible script, the default is 'true'.

Reason: When the commit was not part of the setupNetworks request, the following commit request issued by the Manager upon successful re-establishment of the connection with VDSM would sometimes fail, leaving the configuration in a non-persisted state although the intention was to persist it.

Result: The configuration is persisted immediately.

BZ#1553902

The current release of the User Interface Plugin API supports the updated Administration Portal design with the following changes: - Custom secondary menu items can be added to the vertical navigation menu. - Some functions have been renamed for consistency with the new Administration Portal design. A deprecation notice is displayed when the old names are used. - Some functions no longer support the **alignRight** parameter because the tabs are aligned horizontally, flowing from left to right.

BZ#1559694

If a VM does not use virtual NUMA nodes, it is better if its whole memory can fit into a single NUMA node on the host. Otherwise, there may be some performance overhead. There are two additions in this RFE:

1. A new warning message is shown in the audit log if a VM is run on a host where its memory cannot fit into a single host NUMA node.

2. A new policy unit is added to the scheduler: 'Fit VM to single host NUMA node'. When starting a VM, this policy prefers hosts where the VM can fit into a single NUMA node. This unit is not active by default, because it can cause undesired edge cases. For example, the policy unit would cause the following behavior when starting multiple VMs: In the following setup:

   - 9 hosts with 16 GB per NUMA node

   - 1 host with 4 GB per NUMA node When multiple VMs with 6 GB of memory are scheduled, the scheduling unit would prevent them from starting on the host with 4 GB per NUMA node, no matter how overloaded the other hosts are. It would use the last host only when all the others do not have enough free memory to run the VM.

BZ#1560132

In the Administration Portal, it is possible to set a threshold for cluster level monitoring as a percentage or an absolute value, for example, 95% or 2048 MB. When usage exceeds 95% or free memory falls below 2048 MB, a "high memory usage" or "low memory available" event is logged. This reduces log clutter for clusters with large (1.5 TB) amounts of memory.

BZ#1561033

The current release adds AMD SMT-awareness to VDSM and RHV-M. This change helps meet the constraints of schedulers and software that are licensed per-core. It also improves cache coherency for VMs by presenting a more accurate view of the CPU topology. As a result, SMT works as expected on AMD CPUs.

BZ#1561413

In the current release of the Red Hat Virtualization Manager, the "Remove" option is disabled if a virtual machine is delete-protected.

BZ#1561539

A new option, Activate Host After Install, has been added to the Administration Portal under Compute > Hosts, in the New Host or Edit Host screen. This option is selected by default.

BZ#1563271

An Ansible role, **ovirt-host-deploy-spice-encryption**, has been added to change the cypher string for SPICE consoles. The default cypher string satisfies FIPS requirements ('TLSv1.2+FIPS:kRSA+FIPS:!eNULL:!aNULL'). The role can be customized with the Ansible variable **host_deploy_spice_cipher_string**.

BZ#1570040

This release adds support for external OpenID Connect authentication using Keycloak in both the user interface and the REST API.

BZ#1570077

The current release of the User Interface Plugin API provides an "unload" handler that can be attached to a primary/secondary menu item or a details tab to perform clean-up when the user navigates away from these interface elements.

BZ#1571024

This feature provides the ability to enable live migration for HP VMs (and, in general, to all VM types with pinning settings). Previously, Red Hat Virtualization 4.2 added a new High-Performance VM profile type. This required configuration settings including pinning the VM to a host based on the host-specific configuration. Due to the pinning settings, the migration option for the HP VM type was automatically forced to be disabled. Now, Red Hat Virtualization 4.3 provides the ability for live migration of HP VMs (and all other VMs with a pinned configuration like NUMA pinning, CPU pinning, and CPU passthrough enabled). For more details, see the feature page: https://ovirt.org/develop/release-management/features/virt/high-performance-vm-migration.html

BZ#1571283

Previously, changing log levels required editing libvirt.conf and restarting the libvirtd service. This restart prevented support from collecting data and made reproducing issues more difficult.

The current release adds the libvirt-admin package to the optional channel for Red Hat Virtualization Host. Installing this package enables you to run the virt-admin command to change libvirt logging levels on the fly.

BZ#1571371

High-performance virtual machines require pinning to multiple hosts to be highly-available. Previously virtual machines with NUMA pinning enabled could not be configured to run on more than one host. Now virtual machines with NUMA pinning enabled can be configured to run on one or more hosts. All hosts need to support NUMA pinning, and the NUMA pinning configuration needs to be compatible with all assigned hosts.

BZ#1571399

The current release of the User Interface Plugin API provides greater control over the placement of action buttons.

BZ#1574494

This update adds support for bare-metal machines based on IBM POWER9 CPUs running hypervisors on the RHEL-ALT host operating system. These hypervisors can run virtual machines with POWER8 or POWER9 virtual CPUs. This update also adds support for live migration of virtual machines with POWER8 virtual CPUs between hosts based on either POWER8 or POWER9 CPUs.

BZ#1578339

This release provides an Ansible role to ensure the correct shutdown of Red Hat Virtualization Manager or a Red Hat Hyperconverged Infrastructure environment.

BZ#1578775

The qemufwcfg driver has been added for the built-in firmware configuration (fw_cfg) system device on Windows 10 and Windows Server 2016 guests. As a result, fw_cfg devices are now identified correctly in the Device Manager on these guests.

BZ#1578782

The virtio-smbus driver installer for the built-in SMBus device on Windows 2008 guests has been added to the RHV Windows Guest Tools. As a result, SMBus devices are now identified correctly in the Device Manager on these guests.

BZ#1580346

In this release, the cluster property "set maintenance reason" is enabled by default.

BZ#1585008

The current release adds a new 'ssl_ciphers' option to VDSM, which enables you to configure available ciphers for encrypted connections (for example, between the Manager and VDSM, or between VDSM and VDSM). The values this option uses conform to the OpenSSL standard. For more information, see https://access.redhat.com/articles/4056301

BZ#1588498

With this release, the size of the **rhvm** package has been reduced.

BZ#1590202

This release adds a feature to control toast notifications. Once any notifications are showing, "Dismiss" and "Do not disturb" buttons will appear that allow the user to silence notifications.

BZ#1592853

In this release, ovirt-log-collector now supports batch mode.

BZ#1597085

A new option has been added to the Administration Portal under Compute > Clusters in the Console configuration screen: Enable VNC Encryption

BZ#1598141

In this release, self-hosted engine installation supports Ansible playbooks that use tags.

BZ#1598318

The openscap, openscap-utils and scap-security-guide packages have been added to RHVH in order to increase security hardening in RHVH deployments.

BZ#1598391

Red Hat OpenStack Platform 14's OVN+neutron is now certified as an external network provider for Red Hat Virtualization 4.3.

BZ#1602968

Previously, "Power Off" was missing from the virtual machine context menu in the Administration Portal; although it was present in previous versions, it was removed as part of the new user interface in 4.2. Now, "Power Off" is once again present when a running virtual machine is right-clicked.

BZ#1609139

Previously, you could only assign one vGPU device type (mdev_type) to a virtual machine in the Administration Portal. The current release adds support for assigning multiple Nvidia vGPU device types to a single virtual machine.

BZ#1611889

This feature allows the user to select the cloud-init protocol with which to create a virtual machine's network configuration. The protocol can be selected while creating or editing a VM, or while starting a VM with Run Once. In older versions of cloud-init, backward compatibility needed to be maintained with the ENI protocol, whereas on newer cloud-init versions the OpenStack-Metadata protocol is supported.

BZ#1615348

In this release, an Ansible playbook enables you to deploy the Metrics Store on a single node or on multiple nodes and to scale out an existing deployment.

BZ#1615974

The current release replaces Fluentd with Rsyslog, which can collect oVirt logs, engine.log, VDSM logs, and collectd metrics.

Systems upgraded from 4.2 will still have Fluentd installed, but it will be disabled and stopped. After upgrading to 4.3, you can remove the Fluentd packages. Fluentd will not be supported in RHEL 8. Rsyslog offers better performance.

Rsyslog can output to Elasticsearch on Red Hat OpenShift Container Platform. Sending data to your own instance of Elasticsearch is not currently supported.

Collectd is reconfigured to use write_syslog, a new plugin, to send metrics to Rsyslog. When deploying ovirt metrics, Rsyslog is configured on the Red Hat Virtualization Manager and host to collect and ship the data to the requested target.

BZ#1616415

Virtual machines can be forcibly shut down in the VM Portal.

BZ#1619210

In the past, high-performance virtual machines were pinned to specific hosts and did not support live migration. The current release enables live migration of high-performance virtual machines, as well as virtual machines with NUMA pinning, CPU pinning, or CPU passthrough enabled.

BZ#1619391

In the current release, invoking the ovirt-aaa-jdbc-tool logs the following three events to the syslog server: the user who invokes the ovirt-aaa-jdbc-tool; the parameters passed to ovirt-aaa-jdbc-tool except filter passwords; and whether invoking ovirt-aaa-jdbc-tool was successful.

BZ#1620569

Qemu Guest Agent packages for several Linux distributions have been added to make it easier to install the guest agent offline.

BZ#1620594

In this release, virt-v2v attempts to install the QEMU Guest Agent on Linux guests during VM conversion. For this feature to work properly, a current RHV guest tools ISO must be attached during the conversion.

BZ#1625543

When Importing KVM VMs and Sparseness is specified, the actual Disk Size should be preserved to improve the performance of the Import as well as to conserve disk space on the Destination Storage Domain. Previously, when you set thin provisioning for importing a KVM-based VM into a Red Hat Virtualization environment, the disk size of the VM within the Red Hat Virtualization storage domain was inflated to the volume size or larger, even when the original KVM-based VM was much smaller. KVM Sparseness is now supported so that when you import a virtual machine with thin provisioning enabled into a Red Hat Virtualization environment, the disk size of the original virtual machine image is preserved. However, KVM Sparseness is not supported for Block Storage Domains.

BZ#1625612

This release adds support for importing VMware virtual machines that include snapshots.

BZ#1629437

As part of replacing Fluentd with Rsyslog, the RHEL Ansible role **logging**, from the **linux-system-roles** collection of roles, is responsible for deploying Rsyslog configuration files and service handling for multiple projects. This role is maintained by RHEL and makes Rsyslog deployment easier and more maintainable. In this release, the Rsyslog service and configuration are deployed on the oVirt engine and hosts using this role when you deploy oVirt metrics.

BZ#1630243

During virtual machine live migration, the migration progress bar is now also shown in the host's Virtual Machine tab.

BZ#1631587

In this release, the Correlation-Id can be passed to the vdsm-client by using the '--flow-id' argument with the vdsm-client tool.

BZ#1636256

In previous versions, it was not possible to limit the number of simultaneous sessions for each user, so active sessions could significantly grow up until they expired. Now, Red Hat Virtualization Manager 4.3 introduces the ENGINE_MAX_USER_SESSIONS option, which can limit simultaneous sessions per user. The default value is -1 and allows unlimited sessions per user.

To limit the number of simultaneous sessions per user, create the 99-limit-user-sessions.conf file in /etc/ovirt-engine/engine.conf.d and add ENGINE_MAX_USER_SESSIONS=NNN, where NNN is the maximum number of allowed simultaneous sessions per user. Save and restart using: systemctl restart ovirt-engine.

BZ#1637015

With this release, users can now disable pop-up notifications. When a pop-up notification appears in the Administration Portal, the following options are now available for disabling notifications: - Dismiss All - Do Not Disturb - for 10 minutes - for 1 hour - for 1 day - until Next Log In

BZ#1641125

Previously, version 4.2.0 added support for vGPUs and used a Consolidated ("depth-first") allocation policy.

The current release adds support for a Separated ("breadth-first") allocation policy. The default policy is the Consolidated allocation policy.

BZ#1644693

Previously, for virtual machines with a Windows 10 guest, the host CPU load was too high.

The current release reduces the CPU load by adding enlightenments that enable the hypervisor synthetic interrupt controller (SynIC) and stimer.

For example, with this enhancement, the host CPU load of a virtual machine running an idle Windows 10 guest should be approximately 0-5%.

BZ#1651225

Red Hat Enterprise Linux 8 is fully supported as a guest operating system. Note that GNOME single sign-on functionality, guest application list, and guest-side hooks are not supported.

BZ#1651255

You can now set the number of IO threads in the new/edit VM dialog in the Administration Portal, instead of just the REST API.

BZ#1654253

The current release presents the OpenSCAP security profile as an option to users installing and upgrading Red Hat Virtualization Hosts. This feature helps organizations comply with the Security Content Automation Protocol (SCAP) standards.

BZ#1656794

This release disables the "Remove" button on the Everyone permissions page to prevent misconfiguring Red Hat Virtualization Manager permissions.

BZ#1661921

The release ensures the Red Hat Virtualization internal OVN database connections and OpenStack REST APIs use TLS 1.2 and HIGH ciphers to address configurable OVN internal connections and the default Red Hat Enterprise Linux version 7 OpenSSL configuration allowing insecure ciphers.

BZ#1663288

The current release updates the QEMU post-copy migration policy from a Technology Preview to a Supported Feature. As a cautionary note, a network failure during migration results in a virtual machine in an inconsistent state, which cannot be recovered by the Manager. Administrators using this feature should be aware of the potential for data loss.

BZ#1664490

This release enhancement preserves a virtual machine's time zone setting of a virtual machine when moving the virtual machine from one cluster to a different cluster.

BZ#1665072

In this release, the write_syslog collectd plugin is now automatically installed on the system running the ovirt-engine service to provide metrics store support.

BZ#1665073

In this release, the write_syslog collectd plugin is now automatically installed on managed hosts for metrics store support.

BZ#1667842

Previously, the background process to migrate virtual machines considered affinity groups. This release updates the background process to migrate virtual machines to consider both affinity groups and affinity labels.

BZ#1669047

In order to create and use a Managed block storage domain, a new database must be created that is accessible by cinderlib. In this release, a new database can be created during the engine-setup process, using the same procedures described in the documentation for "Configuring the Red Hat Virtualization Manager".

BZ#1671074

In this release, the available SSL ciphers used in communication between the Red Hat Virtualization Manager and VDSM have been limited, and now exclude weak or anonymous ciphers.

BZ#1673303

In this release, the IPv6 default route of a host is managed by restricting the IPv6 default gateways so that there is only one such gateway for all host interfaces. Note that: 1. When the default route role is moved away from a network, its IPv6 gateway is automatically removed from the corresponding interface. 2. After moving the default route role to a new network, you should set a static IPv6 gateway on this network. 3. If the host and Red Hat Virtualization Manager are not on the same subnet, the Manager will lose connectivity with the host on moving the default route role between networks (see note 1). You should take precautions to avoid this scenario.

BZ#1679133

The current release ships a new version of Red Hat Gluster Storage, RHGS 3.4.4, in Red Hat Virtualization Host (RHVH).

BZ#1693279

This enhancement installs the v2v-conversion-host-wrapper RPM by default on Red Hat Virtualization Host.

4.1.3. Technology Preview

The items listed in this section are provided as Technology Previews. For further information on the scope of Technology Preview status, and the associated support implications, refer to Technology Preview Features Support Scope.

BZ#1636749

This technology preview includes the flexvolume-driver and volume-provisioner component to enable dynamic storage provisioning for OpenShift Container Platform deployed on Red Hat Virtualization virtual machines. The container can use any of the existing storage technologies Red Hat Virtualization supports.

4.1.4. Rebase: Bug Fixes Only

The items listed in this section are bugs that were originally resolved in the community version and included in this release.

BZ#1625591

Previously, after importing and removing a Kernel-based Virtual Machine (KVM), trying to re-import the same virtual machine failed with a "Job ID already exists" error. The current release deletes completed import jobs from the VDSM. You can re-import a virtual machine without encountering the same error.

4.1.5. Release Notes

This section outlines important details about the release, including recommended practices and notable changes to Red Hat Virtualization. You must take this information into account to ensure the best possible outcomes for your deployment.

BZ#1304300

Large guest operating systems have a significant overhead on the host. The host requires a consecutive non-swapped block of memory that is 1/128th of the virtual machine's memory size. Previously, this overhead was not accounted for when scheduling the virtual machine. If the memory requirement was not satisfied, the virtual machine failed to start with an error message similar to this one: "libvirtError: internal error: process exited while connecting to monitor: ... qemu-kvm: Failed to allocate HTAB of requested size, try with smaller maxmem"

The current release fixes this issue by using dynamic hash page table resizing.

BZ#1403674

This release allows Red Hat Virtualization Manager to set a display network and open a console to a virtual machine over an IPv6 only network.

BZ#1511697

Previously, an administrator with the **ClusterAdmin** role was able to modify the self-hosted engine virtual machine, which could cause damage. In the current release, only a **SuperUser** can modify a self-hosted engine and its storage domain.

BZ#1514004

The TLSv1 and TLSv1.1 protocols are no longer secure. In the current release, they have been forcefully disabled in the VDSM configuration and cannot be enabled. Only TLSv1.2 and higher versions of the protocol are enabled. The exact version enabled depends on the underlying OpenSSL version.

BZ#1550634

This release removes the Red Hat Virtualization Manager support for clusters levels 3.6 and 4.0. Customers must upgrade their data centers to Red Hat Virtualization Manager 4.1 or later before upgrading to Red Hat Virtualization Manager 4.3.

BZ#1579819

This release updates the command sequence for Preparing Local Storage for Red Hat Virtualization Hosts by adding a command to mount the logical volume.

BZ#1597705

Previously, in the VM Portal, users who did not have permissions to create virtual machines could see the Create VM button. The current release fixes this issue by fetching user permissions and then using them to show or hide the Create VM button.

BZ#1599321

There are inconsistencies in the following internal configuration options: - HotPlugCpuSupported - HotUnplugCpuSupported - HotPlugMemorySupported - HotUnplugMemorySupported - IsMigrationSupported - IsMemorySnapshotSupported - IsSuspendSupported -

ClusterRequiredRngSourcesDefault Systems that have upgraded from RHV 4.0 to RHV 4.1/4.2 and are experiencing problems with these features should upgrade to RHV 4.2.5 or later.

BZ#1599617

Previously, the VM Portal displayed all clusters, regardless of user permissions. The current release fixes this issue by fetching user permissions and displaying only those clusters which the user has permissions to use.

BZ#1609884

In this release, the oVirt release package for master, ovirt-release-master, enables a new repository hosted on the Cool Other Package Repositories (COPR) service for delivering ovirt-web-ui packages.

BZ#1627753

The current release replaces Fluentd with Rsyslog for collecting oVirt logs and collectd metrics. Hosts upgraded from 4.2 will still have Fluentd installed, but the service is disabled and stopped. After upgrading to 4.3, you can remove the Fluentd packages.

BZ#1627756

The current release replaces Fluentd with Rsyslog for collecting oVirt logs and collectd metrics. Systems upgraded from 4.2 will still have Fluentd installed but it will be disabled and stopped. After upgrading to 4.3, you can remove the Fluentd packages.

BZ#1651140

Red Hat Virtualization Manager now requires JBoss Enterprise Application Platform.

BZ#1653291

Context-sensitive help has been removed from Red Hat Virtualization (RHV) 4.3. RHV user interfaces no longer include small question mark icons for displaying context-sensitive help information.

To access the RHV documentation, use the RHV welcome page and the Red Hat Documentation tab.

BZ#1655115

The current release removes the VDSM daemon's support for cluster levels 3.6/4.0 and Red Hat Virtualization Manager 3.6/4.0. This means that VDSM from RHV 4.3 cannot be used with the Manager from RHV 3.6/4.0. To use the new version of VDSM, upgrade the Manager to version 4.1 or later.

BZ#1671635

oVirt now requires WildFly version 15.0.1 or later.

BZ#1697297

Previously, Python-openvswitch used a compiled C extension wrapper within the library for speedier JSON processing. The memory object used to store the JSON response was not freed and was leaked. The current release fixes this issue by de-allocating the memory stored for the JSON parser so the memory is recovered.

4.1.6. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1073434

When the ISO Uploader uploads ISO image files, it sets the file permissions incorrectly to -rw-r-----. Because the permissions for "other" are none, the ISO files are not visible in the Administration Portal.

Although the ISO Uploader has been deprecated, it is still available. To work around the permissions issue, set the ISO file permissions to -rw-r—r-- by entering: chmod 644 filename.iso

Verify that the system is configured as described in the "Preparing and Adding NFS Storage" section of the Administration Guide for Red Hat Virtualization.

The above recommendations may also apply if you encounter permissions/visibility issues while using the following alternatives to the ISO Uploader: * Manually copying an ISO file to the ISO storage domain, as described in https://access.redhat.com/solutions/46518/. * In version 4.2 of Red Hat Virtualization onward, uploading virtual disk images and ISO images to the data storage domain using the Administration Portal or REST API.

BZ#1146115

If the same iSCSI target is used to create two or more storage domains, even if the storage domain is put into maintenance mode, the iscsi session does not get logged out. Red Hat recommends to use different iSCSI targets to create different storage domains. To work around this issue, restart the hypervisor host.

BZ#1543411

In the current release, Q35 machines cannot support more than 500 devices.

BZ#1636254

VDSM uses lldpad. Due to a bug, lldpad confuses NetXtreme II BCM57810 FCoE-enabled cards. When the VDSM configuration enables lldpad to read lldp data from the card, it renders the card unusable. To work around this issue, set enable_lldp=false in vdsm.conf.d and restart VDSM. Check that lldpad is disabled on all relevant interfaces by entering the command, "lldptool get-lldp -i $ifname adminStatus". If lldp is enabled, disable it by entering "lldptool set-lldp -i $ifname adminStatus=disabled". After ensuring that lldp support is disabled in VDSM, networking should be unaffected.

4.1.7. Deprecated Functionality

The items in this section are either no longer supported or will no longer be supported in a future release.

BZ#1381223

With this update, ovirt-image-uploader has been retired. In Red Hat Virtualization 4.0 ovirt-image-uploader was deprecated in favor of ovirt-imageio.

BZ#1399709

The **ovirt-shell** tool has been deprecated since RHV 4.0 and has not been updated since. It is included in RHV 4.3 and later, in order not to break existing scripts, but the tool is now unsupported.

BZ#1399750

Version 3 of the REST API has been deprecated as of RHV version 4.0. It will not be supported from RHV version 4.3, along with the ovirt-shell and version 3 of the Python SDK Guide, Ruby SDK Guide, and Java SDK Guide.

BZ#1533086

The "Scan Alignment" feature in the previous versions of the Administration Portal is only relevant to guest OSes that are outdated and unsupported.

The current release removes this "Scan Alignment" feature, along with historical records of disks being aligned or misaligned.

BZ#1540921

Conroe and Penryn CPU types are no longer supported. They will not appear as options for Compatibility Version 4.3, and a warning is displayed for older versions.

BZ#1627636

The ovirt-engine-cli package uses the version 3 REST API which is deprecated and unsupported. With this update, ovirt-engine-cli is no longer a dependency and is not installed by default.

4.2. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 1 (OVIRT-4.3.4)

4.2.1. Bug Fix

The items listed in this section are bugs that were addressed in this release:

BZ#1627958

The self-hosted engine was not detecting exceptions or failures when the '--vm-start' command was initiated. As a result, the retry count was not incremented and therefore the score of the host was not reduced for rescheduling.

In this release, the self-hosted engine setup fails when the create VM functionality fails. As a result, the self-hosted engine High Availability agent can adjust its retry count and reduce the score of the host, giving other hosts a higher priority.

BZ#1698548

Previously, the Conversion playbook failed while creating an .ssh directory. The current release fixes this bug.

BZ#1704826

Previously, when upgrading the Open Virtual Network (OVN), the status of the ovn-controller service was not saved, and consequently, the service did not start after the upgrade. The ovn-controller service is now included in the list of tracked services, and starts after the upgrade.

BZ#1707983

Previously, when converting virtual machines to Red Hat Virtualization using the SSH method, the SSH wrapper used the root SSH key instead of the VDSM user's SSH key. This bug is now fixed.

BZ#1710740

Updating the Data Center level while the virtual machine was suspended, resulted in the virtual machine not resuming activity following the update. In this release, the suspended virtual machine must be resumed before the Data Center level update. Otherwise, the operation fails.

BZ#1711792

When a virtual machine migration entered post-copy mode and remained in that mode for a long time, the migration sometimes failed and the migrated virtual machine was powered off. In this release, post-copy migrations are maintained to completion.

BZ#1714154

Converting a storage domain to the V5 format failed when there were partly deleted volumes with cleared metadata remaining in the storage domain following an unsuccessful delete volume operation. In this release, storage domain conversion succeeds even when partly deleted volumes with cleared metadata remain in the storage domain.

BZ#1717434

In some scenarios, the PCI address of a hotplugged SR-IOV vNIC was overwritten by an empty value, and as a result, the NIC name in the virtual machine was changed following a reboot. In this release, the vNIC PCI address is stored in the database and the NIC name persists following a virtual machine reboot.

4.2.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1341161

A new generic Linux x86 operating system selection named 'Other Linux (kernel 4.x)' has been added to the drop down list of operating systems available when creating a new virtual machine in Red Hat Virtualization.

BZ#1655503

This release adds support for virtual machines to use Windows 2019 x64 in the Administration Portal.

BZ#1689702

A new configuration variable 'EventPurgeTimeoutInHours' has been added to set the number of hours an event can stay in the queue before being cleaned up. The variable can be modified using engine-config. The initial default value is 3 hours.

BZ#1695567

When a host is running in FIPS mode, VNC must use SASL authorization instead of regular passwords because of the weak algorithm inherent in the VNC protocol.

In order to facilitate that process, the Ansible role 'ovirt-host-setup-vnc-sasl' is provided. It must be run manually on all FIPS hosts. The role does the following: * Creates an (empty) SASL password database * Prepares an SASL configuration file for qemu * Changes the libvirt configuration file for qemu

BZ#1709895

Previously, you could only test a host's network connectivity with ICMP (ping). Sometimes the gateway does not reply to a ping request, such as when ping is blocked at the network level. When such a failure occurred during the installation of a self-hosted engine, the installation failed. Now you can test network connectivity by checking if the DNS resolution is working, by pinging the gateway, by testing a TCP connection to a configurable port on a configurable host, or you can proceed with installation without running any test.

4.2.3. Release Notes

This section outlines important details about the release, including recommended practices and notable changes to Red Hat Virtualization. You must take this information into account to ensure the best possible outcomes for your deployment.

BZ#1670576

Red Hat Virtualization 4.3 supports host machines with AMD EPYC processors.

4.3. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 2 (OVIRT-4.3.5)

4.3.1. Bug Fix

The items listed in this section are bugs that were addressed in this release:

BZ#1630824

In this release, engine-backup correctly backs up and restores configuration and data files of Open vSwitch and ovirt-provider-ovn.

BZ#1667489

Previously, although SSO tokens are supposed to expire after a period of user inactivity that is defined in engine-config, the VM portal sent a request every minute. Consequently, the SSO token never expired on the VM portal, and the VM portal continued running even when was unused in the background.

This bug is now fixed. When the user does not actively use the VM portal for a period of time defined in engine-config, the VM portal presents a prompt. The user is automatically logged out after 30 seconds unless choosing to stay logged in.

BZ#1674352

When a user edited the initial run data of a Virtual Machine created by a pool, it caused ambiguous results by allowing different Virtual Machines to have different values within the same pool even though they were created when creating the pool. In this release, the user cannot modify an individual Virtual Machine's initial run data when the Virtual Machine is part of a pool.

BZ#1674386

Previously, the Affinity Rules Enforcer tried to migrate only one Virtual Machine, but if the migration failed, it did not attempt another migration. In this release, the Affinity Rules Enforcer tries to migrate multiple Virtual Machines until a migration succeeds.

BZ#1699684

When updating an existing Cluster, all of the Virtual Machines residing on the cluster were also updated. However, when each Virtual Machine was initialized for updating, the initial run data was not loaded, and therefore appeared to be empty. In this release, there is an added initialization of the initial run data for each Virtual Machine before calling the VM Update functionality from the update cluster. This results in the initial run data being preserved and not deleted.

BZ#1700461

Previously, migration failed with an XDG_RUNTIME_DIR error in the virt-v2v log. The current release fixes this error by dropping XDG_RUNTIME_DIR from the environment.

BZ#1712667

Previously, hosted-engine-setup automatically configured only the management network on the host used at restore time. If the backup file contained references to additional required logical networks, the missing networks prevented the host from booting.

Now, hosted-engine-setup detects the missing networks and displays a hint to enable the user to connect to the engine manually, so the host can boot.

BZ#1716951

Previously, when lease data was moved from the VM Static to the VM Dynamic DB table, there was no consideration that upgrading from 4.1 to later versions would leave the lease data empty when a lease storage domain ID had been specified. This caused validation to fail when the VM launched, so that the VM no longer ran without the user resetting the lease storage domain ID. Consequently, HA VMs with lease storage domain IDs failed to execute.

This bug is now fixed, such that validation no longer takes place when the VM runs, and the lease data is automatically regenerated when the lease storage domain ID is set. After the lease data is regenerated, the VM has the information it needs to run.

Now, after upgrading from 4.1 to later versions, HA VMs with lease storage domain IDs execute normally.

BZ#1718829

Previously several important packages were removed when disabling RHV conversion hosts. This bug is now fixed.

BZ#1721362

When the host running the engine Virtual Machine was set into Maintenance Mode from the engine, the engine Virtual Machine was going to be migrated by the ovirt-ha-agent as an indirect action caused by Maintenance Mode. In this release, the engine has full control of the migration process.

BZ#1722173

Previously, iperf3 RPMs were missing from the optional Red Hat Virtualization Host (RHVH) repository, rhel-7-server-rhvh-4-rpms. The current release adds the iperf3 package to the RHVH image instead of the optional repository.

BZ#1722933

Previously, the ovirt-iso-uploader tool did not parse ssh login credentials correctly, and consequently, you could not use it to upload ISO images. This bug has been fixed, so that now you can upload ISO images.

BZ#1723322

In this release, the directory /var/lib/ovirt-hosted-engine-setup/cockpit is created with read permissions only for user 'root'. Non 'root' users cannot view this directory.

BZ#1723873

In Manager in RHV 4.1 and earlier, DiskType is an int value, while from RHV 4.2 and later, DiskType is a string value. Consequently, using RHV 4.3 hosts with Manager in RHV 4.1 causes the VDSM error "Invalid parameter: 'DiskType=2'"

In this release, DiskType is once more an int value, so RHV 4.3 hosts can now work with Manager in RHV 4.1.

BZ#1725660

The Red Hat Virtualization REST API Guide did not include the all_content attribute of the HostNicService, and it was not possible to use this parameter with ovirt-engine-sdk-python.

The REST API Guide has been updated to include the all_content parameter as part of HostNicService.

BZ#1725954

Previously, the libvirt-admin package was missing from the optional Red Hat Virtualization Host (RHVH) repository, rhel-7-server-rhvh-4*. The current release adds libvirt-admin to the RHVH image instead of the optional repository.

4.3.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1651747

In this release, the Affinity Enforcement process now includes Soft Virtual Machine Affinity.

BZ#1688264

In this release, the minimum supported version number for the virt-viewer for Red Hat Enterprise Linux 8 has been added to the list of supported versions in the console.vv file that is displayed when a Virtual Machine console is triggered.

BZ#1713213

In this release, a new notification has been added when loading a large number of LUNs: "Loading... A large number of LUNs may slow down the operation."

BZ#1719735

In this release, a bootable Storage Domain is set as the default lease Storage Domain when HA is selected for a new Virtual Machine.

4.3.3. Rebase: Bug Fixes and Enhancements

The items listed in this section are bugs or enhancements that were originally resolved or introduced in the community version and included in this release.

BZ#1717763

Rebase package(s) to version: openvswitch to 2.11 ovn to 2.11

BZ#1728283

The current release rebases ovirt-host for oVirt 4.3.4. Release Notes: https://ovirt.org/release/4.3.4/

4.3.4. Rebase: Bug Fixes Only

The items listed in this section are bugs that were originally resolved in the community version and included in this release.

BZ#1710696

In this release, when updating a Virtual Machine using a REST API, not specifying the console value now means that the console state should not be changed. As a result, the console keeps its previous state.

BZ#1719726

Previously, engine-setup included one or more incorrect URLs to documentation. These URLs have been fixed.

4.3.5. Release Notes

This section outlines important details about the release, including recommended practices and notable changes to Red Hat Virtualization. You must take this information into account to ensure the best possible outcomes for your deployment.

BZ#1723345

This is the initial release of the Red Hat Virtualization Python SDK for Red Hat Enterprise Linux 8.

BZ#1723349

This is the initial release of the Red Hat Virtualization Ruby SDK for RHEL 8.

4.3.6. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1716608

While installing metrics store according to the documented installation instructions, the playbook cannot locate a filter and therefore fails when it tries to upload the template image. If you run the same role (image-template) outside the Metrics installation playbook with a simple test playbook, the filter is found, and the task completes successfully. There is no workaround at this time.

4.4. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 3 (OVIRT-4.3.6)

4.4.1. Bug Fix

The items listed in this section are bugs that were addressed in this release:

BZ#1660451

Previously, some virtual machine operations unnecessarily blocked other VM operations. This led to some problems with monitoring while shutting down large virtual machines. The current release fixes these issues: It relaxes some conditions for blocking virtual machine operations and makes blocking safer. This should reduce monitoring problems experienced in some scenarios.

BZ#1691760

Previously, trying to enable virtual functions (VFs) on a Broadcom network card generated a "Failed to change the number of virtual functions" error. The current release fixes this issue.

BZ#1710725

The same subnet was used in the local network and the libvirt network, and as a result, the network subnets collided. In this release, no subnet collisions occur.

BZ#1717954

Previously, when you used the oVirt config files to edit the libvirt.conf config file, running 'systemctl status collectd' failed to collect metrics data, instead displaying errors such as the following:

collectd[38874]: write_syslog plugin: wr_callback_init failed. collectd[38874]: write_syslog plugin: error with wr_send_message

When upgrading the collectd package, libvirt.conf is automatically regenerated if it is missing. So now this bug is fixed by replacing libvirt.conf with the following message:

'included in 20-builtins-conf-for-ovirt.conf'

BZ#1733438

During installation or upgrade to Red Had Virtualization 4.3, engine-setup failed if the PKI Organization Name in the CA certificate included non-ASCII characters. In this release, the upgrade engine-setup process completes successfully.

BZ#1734346

Previously, backticks inside the bash 'test' command caused errors to be logged when the bash script was interpreted. The current release fixes this issue by using $() and quoting the output.

BZ#1734671

The Database field guest_cur_user_name in the vm_dynamic Database Table was limited to a size of 255 characters, which was not enough to accept a large number of users (for example, more than 100) to log in. In this release, there is no character limit for the guest_cur_user_name field.

BZ#1740498

Previously, while VDSM service was starting, the nwfilter configuration removed and recreated the 'vdsm-no-mac-spoofing' network filter definition to ensure the filter was up to date. If many vNICs were using the filter, that operation took longer than expected and caused the VDSM startup to timeout. The current release fixes this issue by updating the filter, which takes less than a second independent of how many vNICs are using the filter.

BZ#1744572

Previously, while powering off a virtual machine, the RHV Manager occasionally displayed an error message that the VDSM Get Host Statistics command failed due to an Internal JSON-RPC error: {'reason': '[Errno 19] vnet111 is not present in the system'}. This error occurred because an interface disappeared while the host statistics were being gathered. The current release fixes this issue by suppressing this error under these conditions.

BZ#1746718

Previously, the gluster fencing policy check failed due to a non-iterable object and threw an exception. The code also contained a minor typo. The current release fixes these issues.

BZ#1748395

Previously, v2v was reporting the wrong disk type when using the -o rhv and -o vdsm option; copying disks created by virt-v2v failed with: InvalidParameterException: Invalid parameter: 'DiskType=1'. Although the issue of assigning the wrong disk type was fixed in virt-v2v upstream, we must be able to copy disks created using the "broken" version of virt-v2v. The current release enables us to do this by adding support for that incorrect disk type, "1".

BZ#1750245

Previously, the ioprocess package shipped in both the engine (RHV Manager) and host channels. The current release removes the redundant ioprocess package from engine channel.

BZ#1751142

During host activation, the engine did not check the glusterd status. The gluster service was restarted even though the glusterd was not stopped during maintenance. In this release, the quorum is not lost upon host activation.

BZ#1753168

Previously, a snapshot disk that downloaded when it was attached to a backup Virtual Machine got locked due to a failure to teardown the disk. The current release fixes this error by skipping the disk teardown in case of a snapshot disk.

4.4.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1652861

Some administrators want to avoid restarting a virtual machine after changing its settings. When a user reconfigures a virtual machine in the Administration portal, the portal displays a message that recommends restarting the virtual machine. However, in some cases, restarting is not necessary. In the current release, the documentation indicates whether restarting the virtual machine is optional or required for specific settings. For more information, see the appendices at the end of the Virtual Machine Management Guide.

BZ#1680498

A new text field has been added to the affinity group dialog to set priority. It can contain any real number, not just integers. Priority can also be set using a new parameter in the REST API. When a Virtual Machine is started or migrated, a host is selected, with the broken affinity groups having the lowest priority. If not all affinity groups can be satisfied, the groups with lower priority are broken first.

BZ#1712747

Red Had Virtualization virtual machines now support passing ignition configuration for any guest that supports it, such as RHCOS or FCOS. A guest RHCOS/FCOS guest OS can now be configured by passing ignition configuration using the UI or the API.

BZ#1753116

vdsm now requires a host kernel with fix for CVE-2019-14835

BZ#1753901

The current release provides an API to probe the block size of the underlying filesystem. The vdsm package needs this API to support 4k storage on gluster.

4.4.3. Rebase: Bug Fixes and Enhancements

The items listed in this section are bugs or enhancements that were originally resolved or introduced in the community version and included in this release.

BZ#1734619

The current release rebuilds Red Hat Virtualization (4.3.6) for the current version of Red Hat Enterprise Linux 7.

4.4.4. Rebase: Bug Fixes Only

The items listed in this section are bugs that were originally resolved in the community version and included in this release.

BZ#1745961

Rebase package(s) to version: 1.8.2

Highlights and important bug fixes: Fixes bugs 1737926 and 1747787

4.4.5. Release Notes

This section outlines important details about the release, including recommended practices and notable changes to Red Hat Virtualization. You must take this information into account to ensure the best possible outcomes for your deployment.

BZ#1720879

A new Knowledgebase article is available in the Red Hat Customer Portal - "Deploying Metrics Store on an existing OpenShift Container Platform deployment". Use your Red Hat customer login credentials to view the article - https://access.redhat.com/articles/4309251

4.5. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 4 (OVIRT-4.3.7)

4.5.1. Bug Fix

The items listed in this section are bugs that were addressed in this release:

BZ#1730538

The Windows Guest Tools ISO was automatically attached to a Windows virtual machine even when it was an older version. In this release the ISO version is checked in the data domains and the ISO domains, and the ISO is automatically attached only if it is a newer version than the existing one.

BZ#1743427

When importing a KVM in RHV, "Hardware Clock Time Offset" was not set. In this release a default engine setting is set for the "Hardware Clock Time Offset" field. As a result, the engine will recognize the guest agent on a virtual machine imported from KVM.

BZ#1745715

On a self-hosted Red Hat Virtualization Manager, ovirt-ha-broker restarts if it encounters an issue reading or writing to storage. Previously, in some cases, this caused VDSM to get stuck and report the status of the host as "Not Responding" and "Connecting" until the user restarted the Manager. The workaround for this issue was to restart the Manager. The current release mitigates this issue by adding a 5-seconds delay before VDSM sends a report to the Manager that a host is down.

BZ#1750801

Read permissions were not restricted in 10-setup-ovirt-provider-ovn.conf In this release, only the necessary read permissions are defined.

BZ#1754515

Previously, with Red Hat Virtualization 4.3 on RHEL 7, if the system had Python 3 installed, otopi used Python 3. This caused relevant tools such as engine-setup and ovirt-host-deploy to fail. The current release fixes this issue: Now, even with Python 3 installed, otopi uses Python 2, enabling otopi-based tools such as engine-setup and ovirt-host-deploy to succeed. In the next minor version, 1.9, otopi should support Python 3 on RHEL 8 and Fedora.

BZ#1757697

The Administration Portal showed very high memory usage for a host with no VMs running. As a result, VMs could not be migrated to that host. In this release, the free host memory is evaluated correctly.

BZ#1758094

Previously, when a system had many Fibre Channel (FC) LUNs with many paths per LUN and a high I/O load, scanning of FC devices became slow. This caused timeouts in monitoring virtual machine disk size and made virtual machines non-responsive. The current release mitigates this issue by optimizing FC scans for speed, and VM are much less likely to become non-responsive.

BZ#1759015

Previously, using LUKS alone was a problem because the Red Hat Virtualization Manager could reboot a node using Power Management commands. However, the node would not reboot because it was waiting for the user to enter a decrypt/open/unlock passphrase. This release fixes the issue by adding clevis RPMs to the Red Hat Virtualization Host (RHVH) image. As a result, a Manager can automatically unlock/decrypt/open an RHVH using TPM or NBDE.

BZ#1759461

After updating the IPv6 gateway, the host IPv6 default route was not defined. In this release, the IPv6 Default Route is configured correctly following an IPv6 gateway update

BZ#1766666

A missing alias name prevented the Virtual Desktop Server Manager from identifying the VNIC which required a hot unplug. As a result, the hot unplug failed. In this release, if an alias name is not defined in the RHV Manager, it will be generated on the fly, and the hot unplug will succeed.

BZ#1768167

Previously, stopping, killing, or restarting the VDSM service on the Storage Pool Manager (SPM VDSM) while performing a live storage migration risked corrupting the virtual disk data. The current release removes ExecStopPost from the VDSM service to help prevent data corruption on virtual disks during live storage migration.

BZ#1768337

Previously, NICs on a Red Hat Virtualization Host you had configured to remain off were turned back on after rebooting. This happened because a bug expanded %{_libdir} to /usr/lib64 instead of /usr/lib and failed to disable clevis. The current release fixes this bug so that these NICs remain off.

BZ#1768353

Previously, NICs on a Red Hat Virtualization Host you had configured to use "Shared" or "Link-local" mode did not apply the configuration after reboot. The current release fixes this issue and uses the selected mode after rebooting.

4.5.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1392051

In this release, support has been added for OpenSCAP security profiles that can be enabled during self-hosted engine deployment.

BZ#1763109

The following improvements have been made to host certificates used for encrypted communication between the RHV Manager and the Virtual Desktop Server Manager: 1. All newly added host will have certificates with correct SAN field 2. A periodic check for certificate validity is performed and if the SAN

field is not populated an error is reported in the audit log, notifying administrators that the host certificate needs to be re-enrolled. 3. The SAN field in the certificate is also checked during host upgrade, so that the host certificate can be re-enrolled during host upgrade.

4.5.3. Rebase: Bug Fixes and Enhancements

The items listed in this section are bugs or enhancements that were originally resolved or introduced in the community version and included in this release.

BZ#1760383

This release upgrades ovirt-provider-ovn to version 1.2.27.

BZ#1762733

This release upgrades otopi to version 1.8.4.

BZ#1762752

This release upgrades ovirt-host-deploy to version 1.8.4.

BZ#1771557

This release upgrades ovirt-hosted-engine-ha to version 2.3.6.

4.5.4. Deprecated Functionality

The items in this section are either no longer supported or will no longer be supported in a future release.

BZ#1745318

The APT service, used by the Red Hat Virtualization Guest Tools for Windows virtual machines, is deprecated in Red Hat Virtualization 4.3.7, and will be removed in Red Hat Virtualization 4.4 because: - RHV 4.2 removed the automatic upgrading of guest tools, because the APT service subsequently caused a forced reboot of the virtual machine without a confirmation prompt, possibly causing data loss. - Red Hat Virtualization 4.4 will use the virtio-win installer, which requires re-factoring to continue supporting the APT service.

4.6. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 5 (OVIRT-4.3.8)

4.6.1. Bug Fix

These bugs were fixed in this release of Red Hat Virtualization:

BZ#1754979

Previously, upgrading RHV Manager from 4.2 to 4.3 ovirt-fast-forward-upgrade sometimes failed with a yum dependency error if engine-setup was not executed following the yum update of the 4.2. That was causing an inconsistent state of the system, preventing it from upgrading to 4.3. The current version fixes this issue.

BZ#1757423

Normally, when the "UserSessionTimeOutInterval" is set to a negative value such as "-1", the user remains logged into the VM Portal indefinitely. However, in RHV version 4.5.3.6, a negative value automatically logged the user out immediately. The current release fixes this issue, such that, with the value set to -1, the user is never automatically logged out, as expected per the config value definition in ovirt-engine

engine-config.properties: "A negative value indicates that sessions never expire.": https://github.com/oVirt/ovirt-engine/blob/e0940bd9b768cb52c78f9e0d0c97afd6de7ac8a5/packaging/etc/engine-config/engine-config.properties#L218-L220

BZ#1765912

Previously, VDSM v4.30.26 added support for 4K block size with file-based storage domains to Red Hat Virtualization 4.3. However, there were a few instances where 512B block size remained hard-coded. These instances impacted the support of 4K block size under certain conditions. This release fixes these issues.

BZ#1773580

Previously, when you used the VM Portal to create a Windows virtual machine, it failed with the following error "CREATE_VM failed [Cannot add VM. Invalid time zone for given OS type., Attribute: vmStatic]." The Administration Portal did not have this issue. The current release fixes this issue.

BZ#1779664

Previously, when you deleted a snapshot of a VM with a LUN disk, its image ID parsed incorrectly and used "mapper" as its value, which caused a null pointer exception. The current release fixes this issue by avoiding disks whose image ID parses as 'mapper' so deleting the VM snapshot is successful.

BZ#1780290

When sharding was enabled and a file's path had been unlinked, but its descriptor was still available, attempting to perform a read or write operation against the file resulted in the host becoming non-operational. File paths are now unlinked later, avoiding this issue.

BZ#1781380

Previously, after using the REST API to create an affinity group, the resulting group did not have the required labels, even though they were defined in the request body. The current release fixes this issue so the affinity group has the labels that were defined in the request body.

4.6.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1739106

This release adds a new feature, rhv-image-discrepancies, which reports discrepancies between images in the engine database and storage. The report lists images that are present in one location but missing from the other. Also, for images that are present in both locations, the report lists discrepancies in the values of attributes such as status, parent_id, and type.

BZ#1767333

This release adds a new 'status' column to the affinity group table that shows whether all of an affinity group's rules are satisfied (status = ok) or not (status = broken). The "Enforcing" option does not affect this status.

BZ#1779160

To avoid overloading the journal log, in this release, oVirt Guest Agent no longer attempts to query the list of containers on machines without Docker.

BZ#1782412

In the current release, Metrics Store adds support for a flat DNS environment without subdomains. This capability helps you satisfy security policies that mandate having a "flat" DNS environment with no submains. To enable this capability, you add a suffix to the master0 virtual machine when you configure networking for Metrics Store virtual machines. For example, if you set 'openshift_ovirt_machine_suffix' to 'prod' and 'public_hosted_zone' is 'example.com', then the metrics store virtual machine will be called 'master-prod0.example.com'.

4.7. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 6 (OVIRT-4.3.9)

4.7.1. Bug Fix

These bugs were fixed in this release of Red Hat Virtualization:

BZ#1752522

Previously, when upgrading RHV version 4.2 to 4.3 using Satellite, the upgrade failed with a UnicodeEncodeError. The current release fixes this issue.

BZ#1792874

Partial cleanups are not supported. Previously, when the user ran engine-cleanup, it asked whether to remove everything. If the user replied 'No' and selected specific components to remove, the result was a broken system. The current release fixes this issue by eliminating the question. When you run engine-cleanup, the only option is to remove everything.

BZ#1795726

Before this update, when migrating a virtual machine, information about the running guest agent wasn't always passed to the destination host, resulting in an after_migration life cycle event not being sent to the virtual machine on the destination host. This update fixes the issue, and the after_migration notification should work as expected.

BZ#1796967

The Red Hat Virtualization Host could not be deployed successfully on systems with an AMD Epyc CPU. In this release, Red Hat Virtualization Host deployment is successful.

BZ#1808038

In RHV 4.1, the default console of the self-hosted engine virtual machine is set to VGA. Previously, after upgrading from RHV version 4.1 to 4.3, these graphical console settings were locked and trying to change them produced an error message. The current release fixes this issue by setting the default display to VNC during the upgrade to 4.3. This fix enables you to change the graphical console setting for the hosted engine virtual machine.

4.7.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1698870

A new Red Hat knowledge base article is available at: https://access.redhat.com/articles/4921101

BZ#1797496

The current release adds support for Red Hat CoreOS (RHCOS), a single-purpose container operating system. This support enables you to create virtual machines that run RHCOS. These virtual machines are also backward compatible with RHV 4.3 clusters.

BZ#1804117

Starting with this release, it is now possible to install Metrics Store on a disconnected system using Satellite.

BZ#1809470

The current version of OVN, ovn2.11-2.11.1-33, runs as a dedicated user. The current release of RHV includes this version of OVN and adjusts the secret key file permissions to accommodate the dedicated user. These secret keys are required for encrypted OVN communication.

4.7.3. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1804095

The Red Hat Virtualization engine-setup asks for the location of the Data Warehouse database after the Data Warehouse was migrated to a standalone server. Workaround: Manually set two of the Data Warehouse setup parameters in the configuration file to False.

4.8. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 7 (OVIRT-4.3.10)

4.8.1. Bug Fix

These bugs were fixed in this release of Red Hat Virtualization:

BZ#1796136

Previously, the landing page for the RHV Manager did not support scrolling. As a result, with specific resolutions or zoom ratios, some areas of the landing page were not visible, including the link to the Administration Portal. The current release fixes this issue by enabling users to scroll the landing page and access any of the links on it.

BZ#1820642

Previously, a new DB was introduced as part of the cinderlib (managed block storage) support, but did not include a backup and restore option. The current release fixes this issue by providing a backup and restore option.

BZ#1828067

Previously, using the Administration Portal to import a storage domain omitted custom mount options for NFS storage servers. The current release fixes this issue by including the custom mount options.

BZ#1837994

Previously,creating a live snapshot with memory while LiveSnapshotPerformFreezeInEngine was set to True, resulted in a virtual machine file system that is frozen when previewing or committing the snapshot with memory restore. In this release, LiveSnapshotPerformFreezeInEngine is set to False by default, making the virtual machine run successfully after creating a preview snapshot from a memory snapshot.

4.8.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1764779

The current release adds support for installing Red Hat OpenShift Container Platform (RHOCP) version 4.4 on Red Hat Virtualization (RHV). The installer that deploys RHOCP on RHV automates the process using "installer-provisioned infrastructure." This installer is available for Linux and macOS only. The resulting RHOCP cluster runs the master and worker nodes on virtual machines in RHV.

BZ#1835929

Red Hat Virtualization now supports native 4K block size on Red Hat Gluster Storage and local storage.

4.8.3. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1765993

When using the REST API to restore a virtual machine snapshot, the request returns before the snapshot commit has finished. Workaround: Confirm that the commit operation has completed before attempting to restart the virtual machine.

4.9. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 8 (OVIRT-4.3.11)

4.9.1. Bug Fix

These bugs were fixed in this release of Red Hat Virtualization:

BZ#1830762

Previously, importing an OVA as a Template using the ovirt-engine-sdk's uploading script failed with a null pointer exception because some storage-related values were not set correctly. The current release fixes this issue. It adds code that checks the storage values and, if needed, sets them using values from the image object. Now, importing the OVA this way succeeds.

BZ#1842377

Previously, while creating virtual machine snapshots, if the VDSM's command to freeze a virtual machines' file systems exceeded the snapshot command's 3-minute timeout period, creating snapshots failed, causing virtual machines and disks to lock.

The current release adds two key-value pairs to the engine configuration. You can configure these using the engine-config tool:

- Setting **LiveSnapshotPerformFreezeInEngine** to **true** enables the Manager to freeze VMs' file systems before it creates a snapshot of them.

- Setting **LiveSnapshotAllowInconsistent** to **true** enables the Manager to continue creating snapshots if it fails to freeze VMs' file systems.

BZ#1845747

Previously, after upgrading to 4.3 and updating the cluster, the virtual machine (VM) tab in the Administration Portal was extremely slow until you restarted the VMs. This issue happened because updating the page recalculated the list of changed fields for every VM on the VM list page (read from the snapshot). The current release fixes this issue. It eliminates the previous performance impact by calculating the changed fields only once when the next run snapshot is created.

BZ#1848877

In previous versions, **engine-backup --mode=verify** passed even if **pg_restore** emitted errors. The current release fixes this issue. The **engine-backup --mode=verify** command correctly fails if **pg_restore** emits errors.

BZ#1849558

Previously, when creating large numbers of virtual machines (~2300 VMs), the associated Data Centers became unresponsive, and the hosts did not have Storage Pool Managers (SPM). With this release, large scale deployment of virtual machines succeeds without errors.

BZ#1850920

Previously, creating a live snapshot with memory while LiveSnapshotPerformFreezeInEngine was set to True resulted in a virtual machine file system that is frozen when previewing or committing the snapshot with memory restore. In this release, the virtual machine runs successfully after creating a preview snapshot from a memory snapshot.

BZ#1850963

Previously, installing guest agents for Windows guests from rhv-guest-tools-iso-4.3-12.el7ev using rhev-apt.exe failed because it could not verify a filename that exceeded Windows' 63-character limit. The current release fixes this issue. It renames the file with a shorter name, so the installation process works.

BZ#1851854

Previously, the **slot** parameter was parsed as a string, causing disk rollback to fail during the creation of a virtual machine from a template when using an Ansible script. Note that there was no such failure when using the Administration Portal to create a virtual machine from a template. With this update, the **slot** parameter is parsed as an int, so disk rollback and virtual machine creation succeed.

BZ#1852314

Previously, exporting a virtual machine or template to an OVA file incorrectly sets its format in the OVF metadata file to "RAW". This issue causes problems using the OVA file. The current release fixes this issue. Exporting to OVA sets the format in the OVF metadata file to "COW", which represents the disk's actual format, qcow2.

BZ#1852315

Host capabilities retrieval was failing for certain non-NUMA CPU topologies. That has been fixed and host capabilities should be correctly reported now for those topologies.

BZ#1855213

After updating the packages on a conversion host, it stopped displaying conversion progress. The current release fixes this issue. The conversion host reports its progress performing conversions, including on the latest RHEL 7-based hosts.

BZ#1855283

Previously, during RHHI-V deployment of three hosts using ovirt-ansible-hosted-engine-setup, the host for the Self-Hosted Engine was added to the default cluster, but the remaining two hosts were not added. In this release, deployment with ovirt-ansible-hosted-engine-setup adds all hosts to the cluster.

4.9.2. Enhancements

This release of Red Hat Virtualization features the following enhancements:

BZ#1698870

The Red Hat knowledge base article, "Monitoring RHV with a standalone Elasticsearch instance," has been updated, and is available at https://access.redhat.com/articles/4921101

BZ#1842522

With this enhancement, while deploying RHEL 7-based hosts, you can configure SPICE encryption so that: - Only TLSv1.2 and newer protocols are enabled - Available ciphers are limited as described in BZ1563271

To apply this enhancement to existing hosts, an administrator puts each host into Maintenance mode, performs a Reinstall, and activates each host. For details, search for "Reinstalling Hosts" in the documentation.

4.9.3. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1765993

When using the REST API to restore a virtual machine snapshot, the request returns before the snapshot commit has finished. Workaround: Confirm that the commit operation is complete before attempting to restart the virtual machine.

4.9.4. Deprecated Functionality

The items in this section are either no longer supported, or will no longer be supported in a future release.

BZ#1745324

The rhv-guest-tools-iso package is deprecated and will be replaced in Red Hat Virtualization 4.4 by virtio-win-guest-tools iso image. For information, see How can I install RHV Windows guest tools in RHEV 4.4?.

BZ#1862793

Red Hat Virtualization (RHV) 4.3 with Metrics Store installations that are upgraded to RHV 4.4 are not supported. Upgrading an existing RHV 4.3 Metrics Store to RHV 4.4 may continue to work, but has not been tested and is not supported. Administrators are encouraged to use the new Grafana dashboards with Data Warehouse. Administrators can also send metrics and logs to a standalone Elasticsearch instance. For more information, see https://access.redhat.com/solutions/5161761

4.10. RED HAT VIRTUALIZATION 4.3 BATCH UPDATE 9 (OVIRT-4.3.12)

4.10.1. Bug Fix

These bugs were fixed in this release of Red Hat Virtualization:

BZ#1889738

> Previously, when performing an upgrade of the Red Hat Virtualization Host, the directory holding configuration files on the Manager was not created correctly.
> In this release, the directory is created correctly during an upgrade.

4.10.2. Known Issues

These known issues exist in Red Hat Virtualization at this time:

BZ#1897179

> After running engine-setup and upgrading the Red hat Virtualization Manager from 4.3.x to 4.3.x+1, a complete yum update fails due to an Ansible dependency that cannot be satisfied with the current subscription channel.
> Workaround: see https://access.redhat.com/solutions/5480561