## oVirt

## oVirt and its community

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September 2020



# oVirt 2020



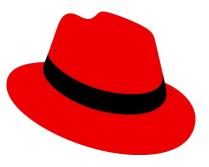
online conference

September 7<sup>th</sup>

# The project



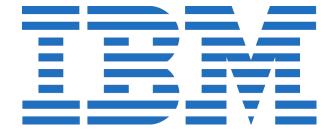
#### oVirt Board 2019



# Red Hat







#### oVirt board updates

Good luck to board members who changed their role:

 Michael Enescu: changed role from: Cisco, Strategic member to: Caltech, Mentor

Thanks for the past contribution to the leaving members

• Scott Moser - Canonical, Strategic member

#### oVirt Board 2020



#### Other projects interaction



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#### Positioning compared to other projects





Hybrid cloud Infrastructure



Cloud Management and automation







Images are under CC-BY-SA from Open Source Program Office @Red Hat

#### Positioning within infrastructure







Virtualization



Private cloud



Public cloud



Storage

Images are under CC-BY-SA from Open Source Program Office team @Red Hat

#### oVirt, CentOS and Fedora



Fedora

CentOS Stream

RHEL

CentOS Linux

- oVirt is not supporting Fedora anymore
- oVirt development
- Features integration
- Non production / test environments
- Changing Nightly

- You should consider RHV instead
- Production environment

- Production environment
- oVirt release may require to wait till new CentOS Linux is rebuilt from RHEL or use CentOS Stream in the meantime

Above represents only oVirt expectations and not those from individual operating systems communities

This is accurate now, may change in the future

## The software

#### oVirt 4.4



CentOS Linux 8.2.2004



**Ansible 2.9.11** 



Gluster 7.7



WildFly 19.1

#### **CentOS Virtualization SIG**

Advanced Virtualization



QEMU-KVM 4.2



Libvirt 6.0

#### oVirt 4.4 - Removed functionalities

- Dropped support for cluster level prior to 4.2.
- Dropped API/SDK v3
- Dropped ovirt-shell
- oVirt Host Deploy replaced by Ansible based code
- The OpenStack Neutron Agent cannot be configured by oVirt anymore
- Dropped oVirt metrics store

#### Automation

- <u>oVirt REST API</u> (v3 has been removed in 4.4)
- oVirt Engine API Python SDK
- <u>oVirt Engine API Java SDK</u>
- oVirt Engine API Ruby SDK
- <u>oVirt Engine API Go SDK</u>
- oVirt Ansible Roles
- oVirt Ansible Modules

#### **Example Playbook**

```
- name: oVirt infra
 hosts: localhost
 connection: local
 gather_facts: false
 vars:
   engine url: https://ovirt-engine.example.com/ovirt-engine/api
   engine_user: admin@internal
   engine_password: 123456
   engine cafile: /etc/pki/ovirt-engine/ca.pem
   cluster name: production
   stopped_vms:
     - openshift-master-0
     - openshift-node-0
     - openshift-node-image
 roles:
   - oVirt.cluster-upgrade
```

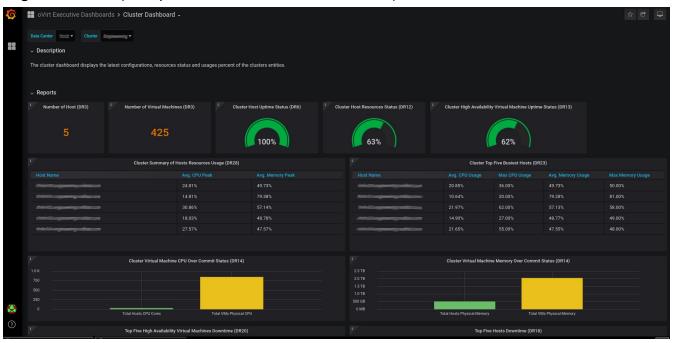
#### oVirt 4.4 - What did we gain from the rebase

- Easier network management and configuration flexibility with NetworkManager.
- VMs based on a more modern Q35 chipset with legacy SeaBIOS and UEFI firmware.
- Support for direct passthrough of local host disks to VMs.
- Live migration improvements for High Performance guests.
- 4K block disk support only for file-based storage. iSCSI/FC storage do not support 4K disks yet.
- You can export a VM to a data domain.
- You can edit floating disks.
- Ansible Runner (ansible-runner) is integrated within the engine, enabling more detailed monitoring of playbooks executed from the engine.
- In oVirt 4.4.1 the maximum memory size for 64-bit x86\_64 and ppc64/ppc64le VMs is now 6TB. For x86\_64 this limit is applied also to VMs in 4.2 and 4.3 Cluster Levels.

### oVirt 4.4 - Monitoring Changes

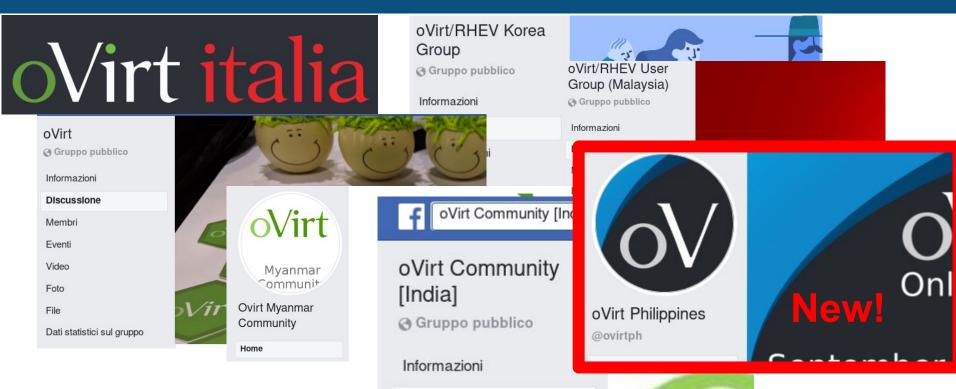


New monitoring solution providing a user interface to oVirt Data Warehouse collected data through Grafana (Deep dive available on <a href="YouTube">YouTube</a>)



# oVirt community and their stories

## A Global Community



Global: 1587(+14%) - Myanmar: 537(+95%) - Italy: 285(+11%) - Korea: 215(-1%)

Malaysia: 113(+4%) - India: 91(+102%) - Philippines: 40 (NEW!)

#### oVirt and COVID-19



#### Sandro Bonazzola

22 maggio

Any story out there using #ovirt for virtualizing workstations for working from home as #covid19 response? I would like to hear about it.



Carlos Solano I am starting to mount on two servers we have on one site, ideally is having two nodes cluster and mount few VMs, also a broker and have some vdi running. If looks good we move to production!

10 s



Latchezar Filtchev Sr. Urged by Covid19 we installed twenty thin Windows 10 VM's. Colleagues used these VM's to RDP their physical workstations. It is not perfect but worked.

10 s





In risposta a @SandroBonazzola, @\_adriend\_ e @ovirt

Well, to be quick, the goals was

1/ to discover the solution and play with it

2/ to (quickly) build a cluster with refurb
hardware to be able to host various services
during the very begining of the COVID crisis
(partialy in case of global network blackout)

#### oVirt and COVID-19

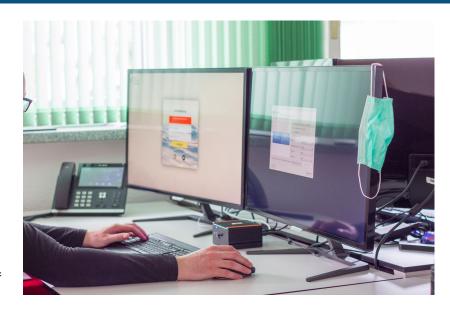
Fabian Keilholz, the IT & Solution Company GmbH

"We were asked to do IT for a hospital at the start of the year"...

"A week or two before the lockdown in Germany started, we got a call, asking us to renew the entire IT to support the nurses and doctors. They also told us, we had two and a half weeks to do that and we needed to start immediately."

"Wherever we could, we chose the ways that meant the less time effort in organizing and installing. That was the point where oVirt came on the scene. We do a lot with open-source software and had experience with oVirt, it has proven to be reliable and fast, immediately available and had anything we needed to get started.

So we installed a hyperconverged oVirt (+Gluster) infrastructure, moved existing machines to it, and also started to introduce Windows 10 Pools for the medical staff to work with. We also built an easy-to-use thin client based off Centos and started deploying it all over the hospital.



To be honest, we weren't quite in time after two and half weeks, due to lots of organizational and logistic issues. However, oVirt was no part of that. From day one it made the entire IT a lot faster, easier and more reliable (we had some cases during the preparation with parts of the hyperconverged cluster failing, with little to no downtime, which was not possible there before the introduction of oVirt)

#### Products based on oVirt













## Who's using oVirt? User stories















ieuwland



Share your story on

https://github.com/oVirt/ovirt-site/issues





#### Who's using oVirt (or derivatives) in the world?

Disclaimer: the following is based on data analysis of oVirt user mailing list on Q2 2020 and have not been officially confirmed All trademarks and registered trademarks are property of their respective owners.





















THE JESUIT UNIVERSITY OF NEW YORK





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ulm university universität















**DEPARTEMENT ELEKTROTECHNIEK (ESAT)** 



Leibniz-Institut für Astrophysik Potsdam





#### How to contribute

Developers Hardware Translators

**Testers** 

**Stories** 

### Ways to contribute

- Join community discussions
- File bugs
- Help localizing
- Promote oVirt (tweet, blog, coffee, workshop, meetup)
- Join surveys
- Share how you're using oVirt (in a case study)
- Derivative works (ovirtclient.com, backup/restore...)
- Update / fix the website and the docs
- Donate hardware ----->



https://bit.ly/33k0181

## oVirt

# Thank you!

https://ovirt.org/

users@ovirt.org



