



# Red Hat OpenShift Container Storage Update

Luis Rico

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**CNS** (Container Native Storage)

is now

**OCS** (OpenShift Container Storage)

**RED HAT**<sup>®</sup>  
**OPENSHIFT**  
Container Storage



# WHY ARE CONTAINERS SO NEEDED?

## WHY DO CONTAINERS NEED STORAGE?

- When containers die, **application data vanishes**
- Applications need storage **provisioned at runtime**

## HOW DO CONTAINERS IMPACT STORAGE?

- Change how enterprises **consume infrastructure**
- **Adapt** to how we deploy applications
- Data, storage, and applications need to **coexist**

## HOW IS CONTAINER STORAGE DIFFERENT?

- Needs to be **natively delivered** to the platform
- **Cannot simply be a thin wrapper** to extend legacy platforms
- Standalone storage is not **integrated, container storage**

# WHAT IS OPENSIFT CONTAINER STORAGE?

The de facto storage for Red Hat OpenShift Container Platform



## Highly scalable, production-grade persistent storage

- For containerized applications in Red Hat® OpenShift
- Optimized as a storage backend for Red Hat OpenShift infrastructure
- Ideal for improve legacy storage

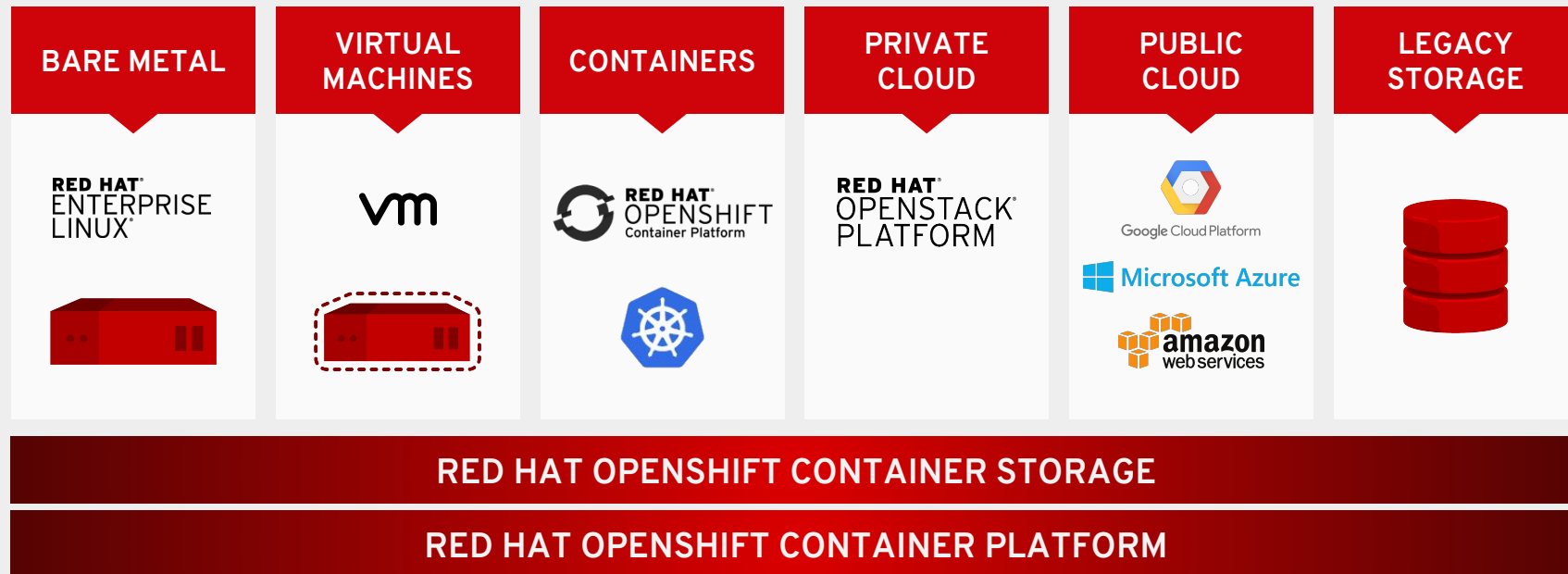
## Built on battle-tested Red Hat Gluster Storage

- Capable of supporting multipetabyte workloads
- Developed, maintained, and deployed in synch with Red Hat OpenShift releases
- Supported via a single contract with Red Hat OpenShift

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# Consistent & Multi-Cloud Persistent Storage Experience

Application Portability And Lower Costs



# RHOCS: Benefits

Persistent Storage for OCP based on Glusterfs

- Integrated with OCP through storage provisioner and Heketi API
- Valid for all types of storage (RWO, RWX, ROX)
- 2 multi-cloud deployment modes with same set of features:
  - Converged mode (CNS): Gluster containerized on top of OCP
  - Independent mode (CRS): Gluster in baremetal/VMs outside
- Openshift-ansible deployment for both options
- High Availability, redundancy
- Dynamic Provisioning
- Compatible with / On top of any existing storage

(If well deployed, and well used becomes THE **INVISIBLE** STORAGE)

# CONTAINER PLATFORM - COMPLETE FROM Red Hat



UNIFIED CLUSTER | COMPLETE PLATFORM UNIFIED | INTEGRATED & TESTED  
SINGLE VENDOR | SINGLE POINT OF SUPPORT

# INTRODUCING LATEST VERSIONS OF RHOCS 3.10 & 3.11

- *New name for Container Native Storage!*
- New Features in OpenShift Container Storage 3.10 (Sept'18):
  - Arbiter Volume Support
  - Improved Support for Block Storage
  - OpenShift Container Storage Heketi Topology & Configuration metrics available from OpenShift
- New Feature in OpenShift Container Storage 3.11 (Nov'18):
  - Online Expansion of Persistent Volumes from Admin console

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# CUSTOMER MOMENTUM WITH CONTAINER STORAGE FROM RED HAT

- More than 300 customers worldwide
- 100 new customers in the last quarter
- All sectors and verticals
- Any size of customer
- CNS Momentum PR:

<https://www.redhat.com/en/about/press-releases/growing-number-organizations-around-world-choose-red-hat-container-native-storage-red-hat-openshift-container-platform>

# Gartner Names Red Hat a Storage Visionary 2018

## Three Years In a Row

### Magic Quadrant

Figure 1. Magic Quadrant for Distributed File Systems and Object Storage



Red Hat Storage continues to lead competitors like NetApp and SuSe on both ability to execute and completeness of vision.

Red Hat Storage is second only to Dell/EMC on completeness of vision, and the only open source vendor listed as a visionary

### Gartner on the Red Hat Storage Portfolio

- Versatile and tightly integrated with Red Hat Platforms and Kubernetes, in hyperconverged and disaggregated form factors
- Hardware independence and open-source model, full-stack infrastructure solutions
- Certified across a broad spectrum of server hardware, with reference architectures available from leading server OEMs

# OpenShift Container Storage Sizing

Last September licencing has changed to core-pair, aligning with OpenShift.

(1 RHOCS node = minimum 4 cores)

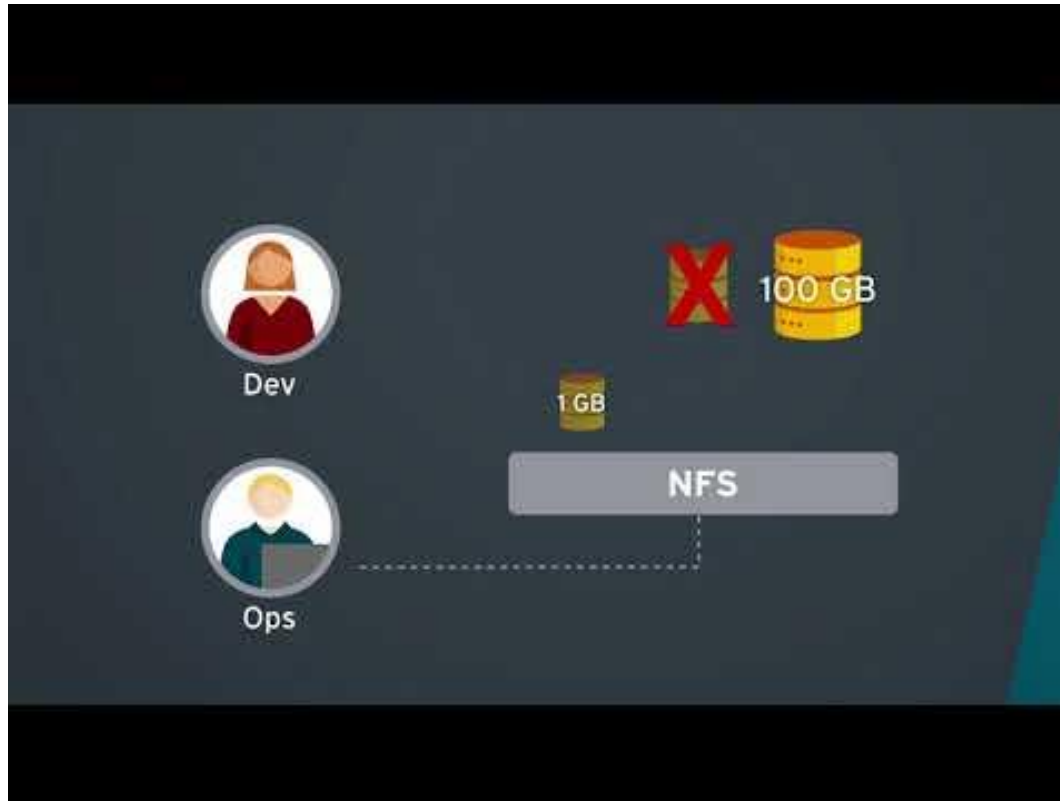
- Small size environments ( $\leq 8$  OCP workers)
  - 8 SKU OCS (4 nodes)
- Medium size environments (9 - 20 OCP workers)
  - 14 SKU OCS (4 nodes + 3 nodes)
- Large size environments ( $\geq 20$  OCP workers)
  - 24 SKUs - \* contact us
- Public Cloud environment Multi-AZ:
  - minimum 6 nodes with 4 cores all for infra+apps - 12 SKU OCS
- Stretched Clusters environments:
  - minimum 6 nodes with 4 cores all for infra+apps (2 data nodes at each datacenter + 2 dedicated arbiter nodes) - 12 SKU OCS

# OpenShift Container Storage Pricing

Storage						PRICING	
SKU INFORMATION		SYSTEM OPTIONS				EUR	1-YEAR PRICING
SKU	SKU Description	# of Nodes	Support Type	CURRENCY	1-Year MSRP	3-Year MSRP	F3 SKU
<b>Red Hat OpenShift Container Storage</b>							
RS00181	Red Hat OpenShift Container Storage, Premium (2 Core)	2 Core	Premium	EUR	2.000	5.400	RS00181F3
RS00182	Red Hat OpenShift Container Storage, Standard (2 Core)	2 Core	Standard	EUR	1.440	3.888	RS00182F3

# RHOCS rocks!

<https://www.redhat.com/en/about/videos/red-hat-openshift-container-storage>





# THANK YOU



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