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GLUSTER

The storage for your Hybrid Cloud

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SDC India - 24th May, 2018

CONTENTS

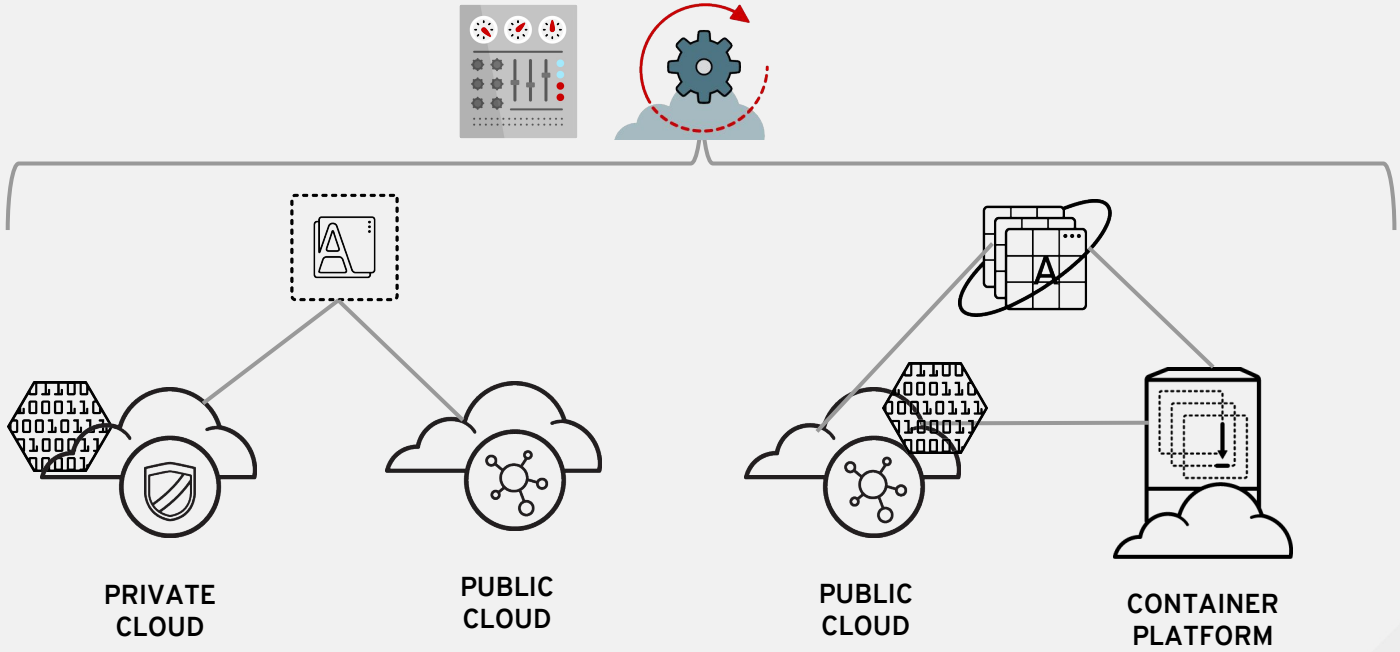
- Define: Hybrid Cloud & Infrastructure
- Understand: What are the storage needs of hybrid cloud
- Why Gluster fits the use-case really well?
- Future: Features in the making...

WHAT IS HYBRID CLOUD ?

Hybrid cloud is a combination of one or more **public** and **private** cloud environments

HYBRID CLOUD

AT LEAST ONE PUBLIC AND PRIVATE CLOUD (OFF & ON PREMISES) THAT HAVE A DEGREE OF INTEROPERABILITY, APPLICATION OR DATA PORTABILITY OR COMMON MANAGEMENT



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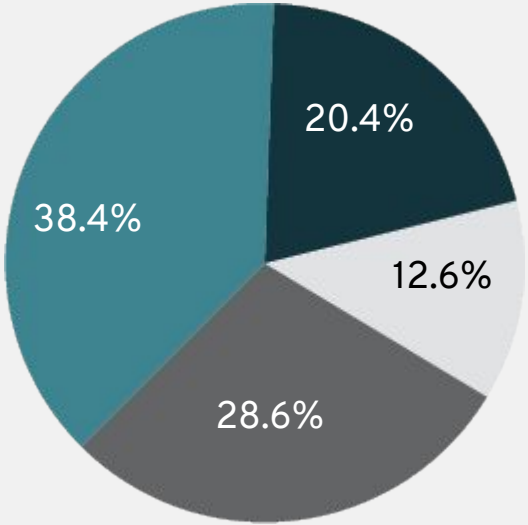
HYBRID CLOUD IS GROWING

Nearly 62% are / will have multiple cloud environments



How will organizations use different cloud environments in the next 2 years?

- Will focus primarily on a single cloud environment
- Will have multiple 'different' cloud environments, but little to no interoperability between the environments
- Will have multiple cloud environments to migrate workloads or data between cloud environments
- Will have multiple cloud environments where the delivery of a single business function across the different cloud environments is seamless

Source: *451 Research Voice of the Enterprise, Cloud Transformation Q1 2017*

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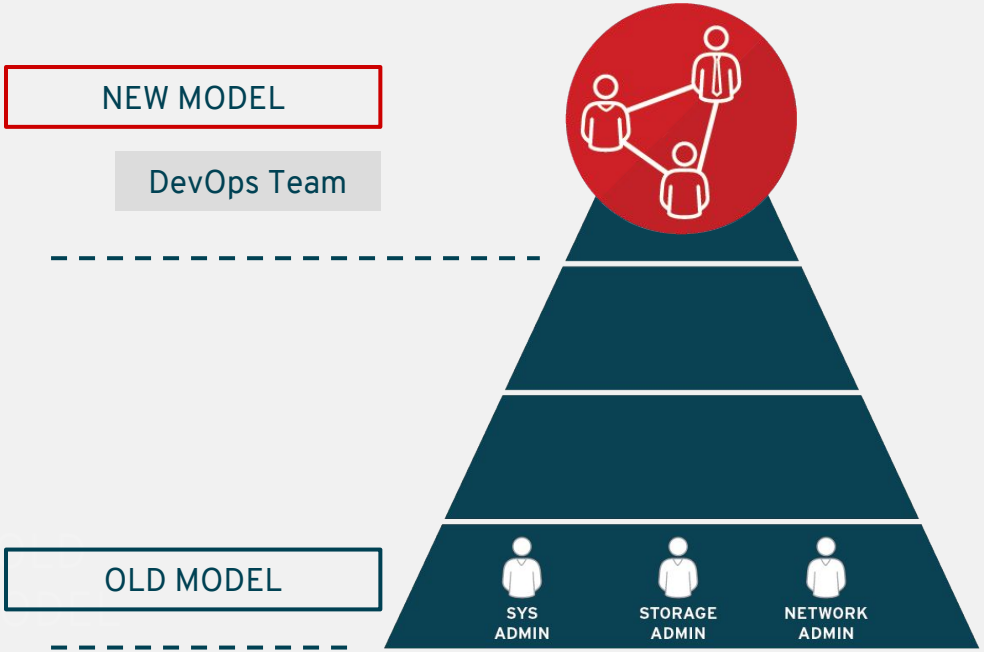
KEY REQUIREMENTS

- Interoperability
- Unified Management
- Scalability

RE-THINKING INFRASTRUCTURE OPERATIONS

The impact of hybrid cloud



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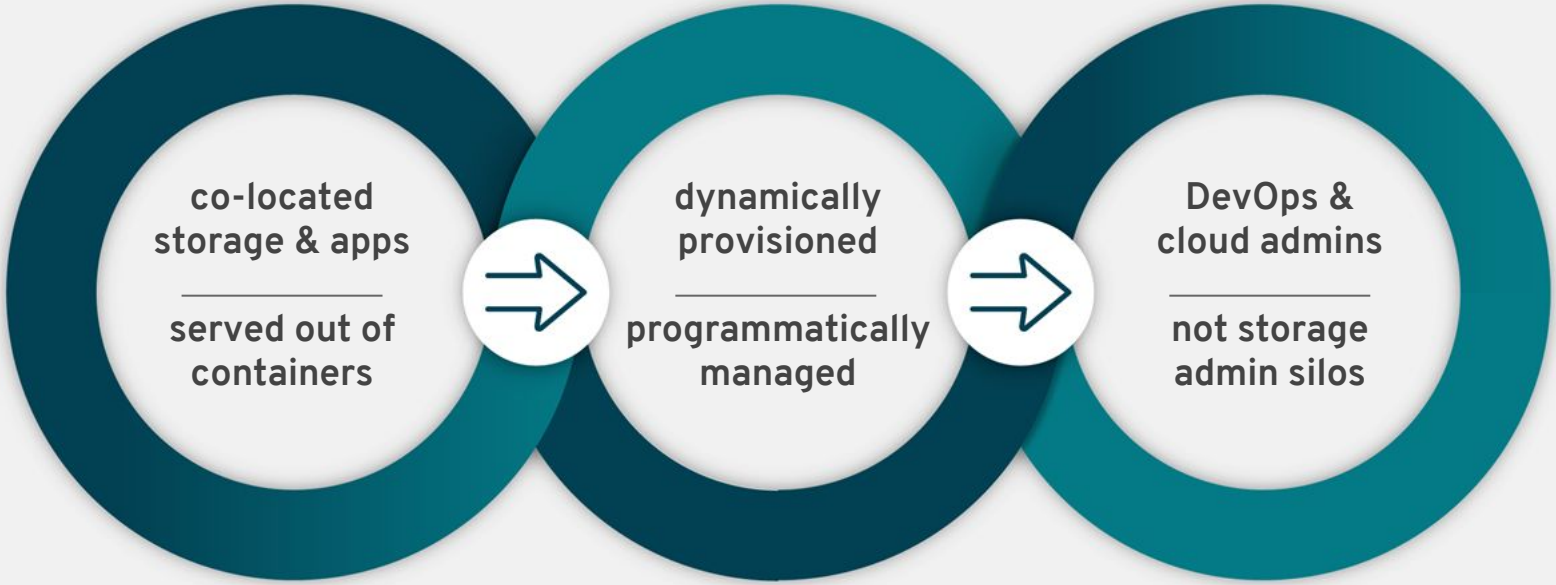
WHAT DOES IT MEANS FOR STORAGE

- Scriptable & Flexible Management APIs
- FaaS (Function as a Service)
- Scalability - Need of flexible volume sizes (1GB - few PBs), and volume’s existence time (minutes to lifetime of storage).
- Storage is becoming invisible (or #Unstorage!!)

UNSTORAGE

HYBRID CLOUD AND CONTAINERS HAVE SHAKEN UP THE STORAGE LANDSCAPE



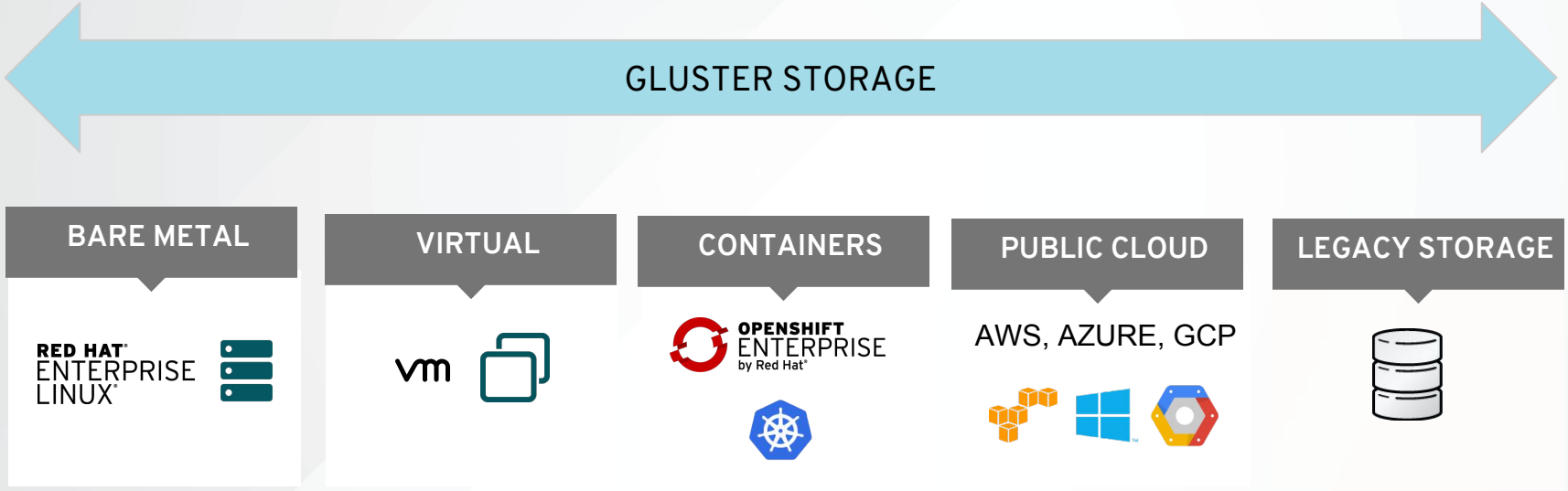
UNSTORAGE - https://www.redhat.com/en/blog/un-storage-modern-enterprise

All this is great!!

Now lets see how Gluster gets into game!!

All this is great!!

Lets see how it looks!!



Works with what you have today, and where you're going tomorrow

GLUSTER - A NATURAL FIT

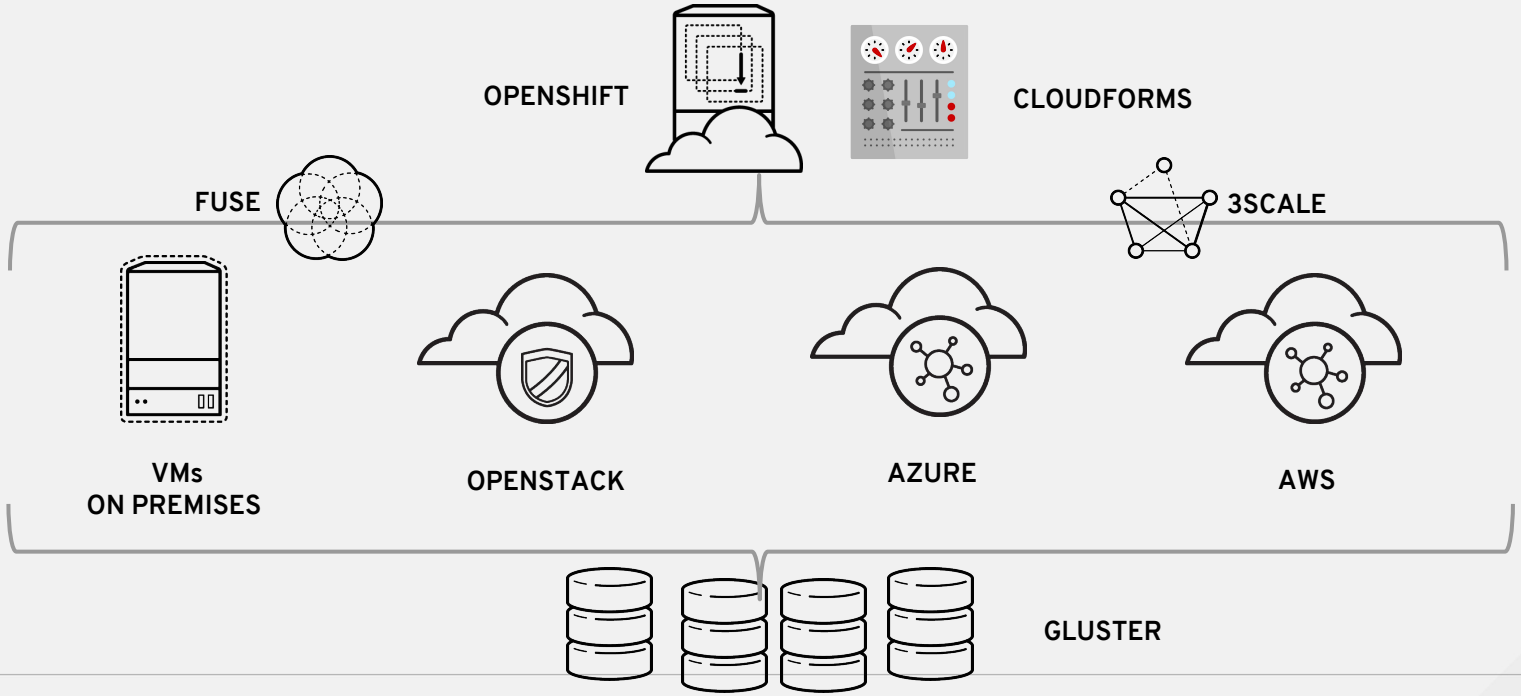
- No hardware dependency
- Software defined storage
  - scale out, programmable, portable.
- Runs everywhere, on-prem, virtualized setup, containers, or cloud.
- Volume sizes can vary from very minimum 1GB, to a max of ~8PB
  - scale of million+.

NOT JUST THOSE

- Scalable management layer with ReST APIs.
- Intelligent Volume Provisioner.
- Performance enhancements to suit different use-cases.
- Multiple ways of accessing data - FileSystem, Object, Block.
  - Applications can choose what they need.
- Well integrated with orchestration engines like k8s.

HYBRID / MULTI - CLOUD IN ACTION

A customer implemented a hybrid development platform based on Red Hat OpenShift Container Platform deployed across a multi-cloud environment with Microsoft Azure and AWS plus on-premises virtualization and private cloud with Gluster Storage, CloudForms, Fuse and 3Scale helping make it all work together.



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FUTURE

- Stretch Cluster
- Halo Replication
- +1 Scaling of nodes
- Cloud Sync
    - Seem-less migrations of data between cloud and on-prem.

THANK YOU

Want to get involved ?

- Community - https://www.gluster.org
- Company :-) We are hiring!! Get in touch

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http://red.ht/2uXj2y6

Reach out to me - amarts@redhat.com

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