

Red Hat Hyperconverged Infrastructure:
la prima soluzione HCI (Hyperconverged Infrastructure)
production-ready open source basata sulla tecnologia di
virtualizzazione e piattaforma storage software-defined di Red Hat

*Maurizio Pagani,
Senior Consultant & Technical Account Manager, Sinergy*



#redhatosd

Agenda



1) Cos'è RHHI

- Architecture & Technology

2) Features

- Feature Core

- Feature Network

- Feature Storage

3) Backup

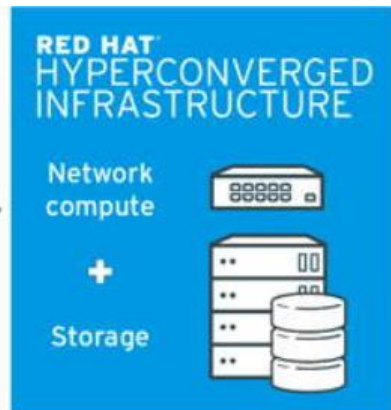
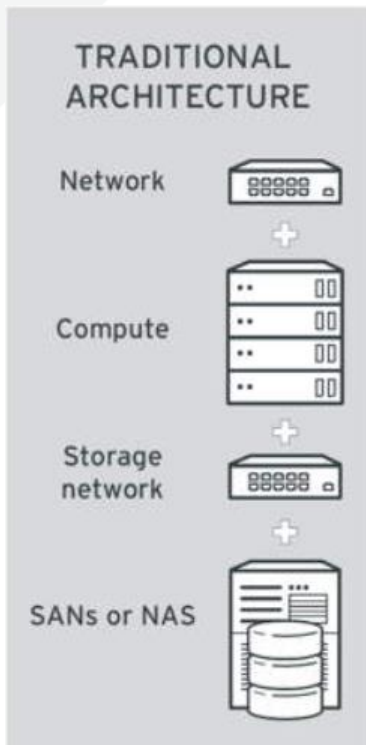
4) Disaster Recovery

5) Use Cases

COS'E RHHI

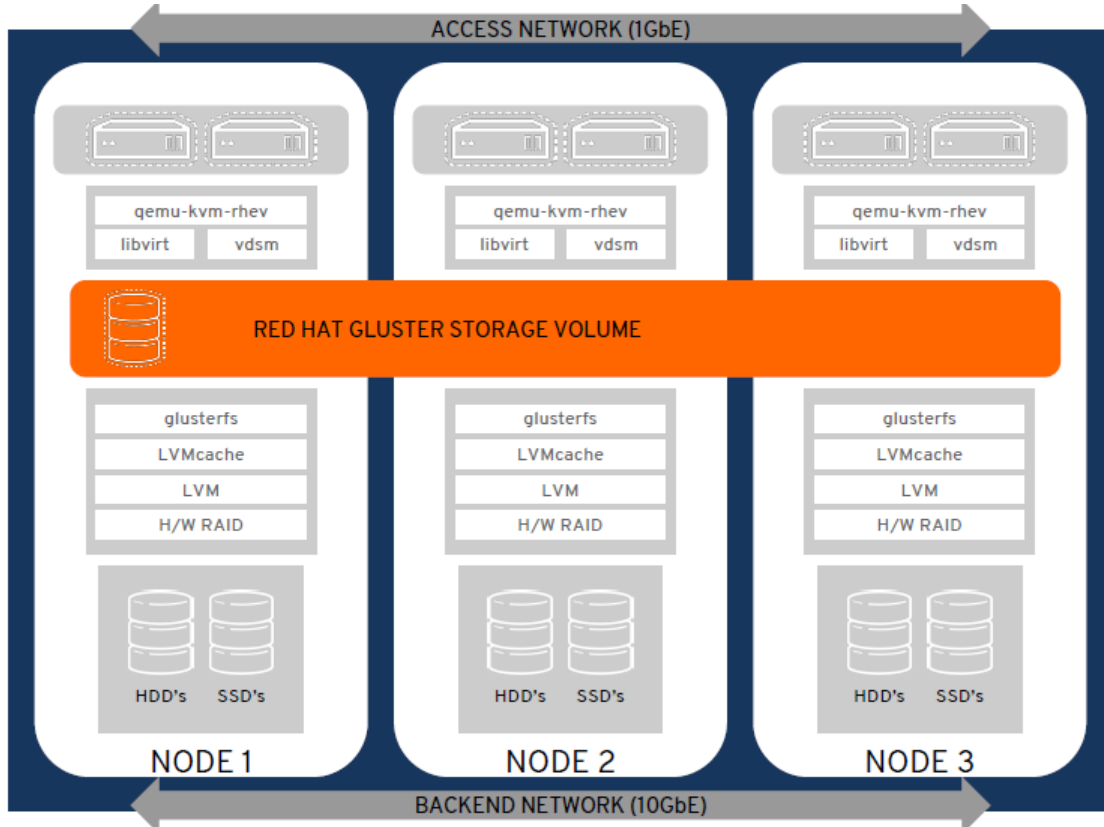


Red Hat Hyperconverged Overview



- Eliminare la complessità storage
- Budget unico per la parte computazionale e storage
- Implementazione & gestione semplificata
- Single Point Of Contact per il supporto di tutto lo stack
- Unico Team di gestione per l'intero stack

RHHI Architecture Overview



FEATURES



RHHI Feature Core

Single Point of Management for Virtual Resources	HA for Virtual Machines & Management	Automated Resource Mgmt/Load Balancing
CPU Pinning	VM Templates	CPU QoS
RBAC & Tiered Access	Secure Browser Based Management	Hot Add Memory & CPU
Power Management	Streamlined Deployment & Operations	Advanced Live Migration Policies
Support for RHEL & Windows Workloads	Python, Ruby, & Java SDKs	Live Migration
Firewall/SELinux	REST API / Integrate w/ Red Hat Portfolio	

RHHI Feature Network

VLAN Tagging

Open Virtual Network (Tech Preview)

Network QoS

IPv6 Support (guest)

NIC Bonding

Jumbo Frames

VM-FEX Support

Network Labels

RHHI Feature Storage

Geo-replication

REST API for backup/restore

Sharding support

3-way Data Replication

Live Snapshots/Merge

Thin & Thick Provisioning

Block discard

Storage-based fencing

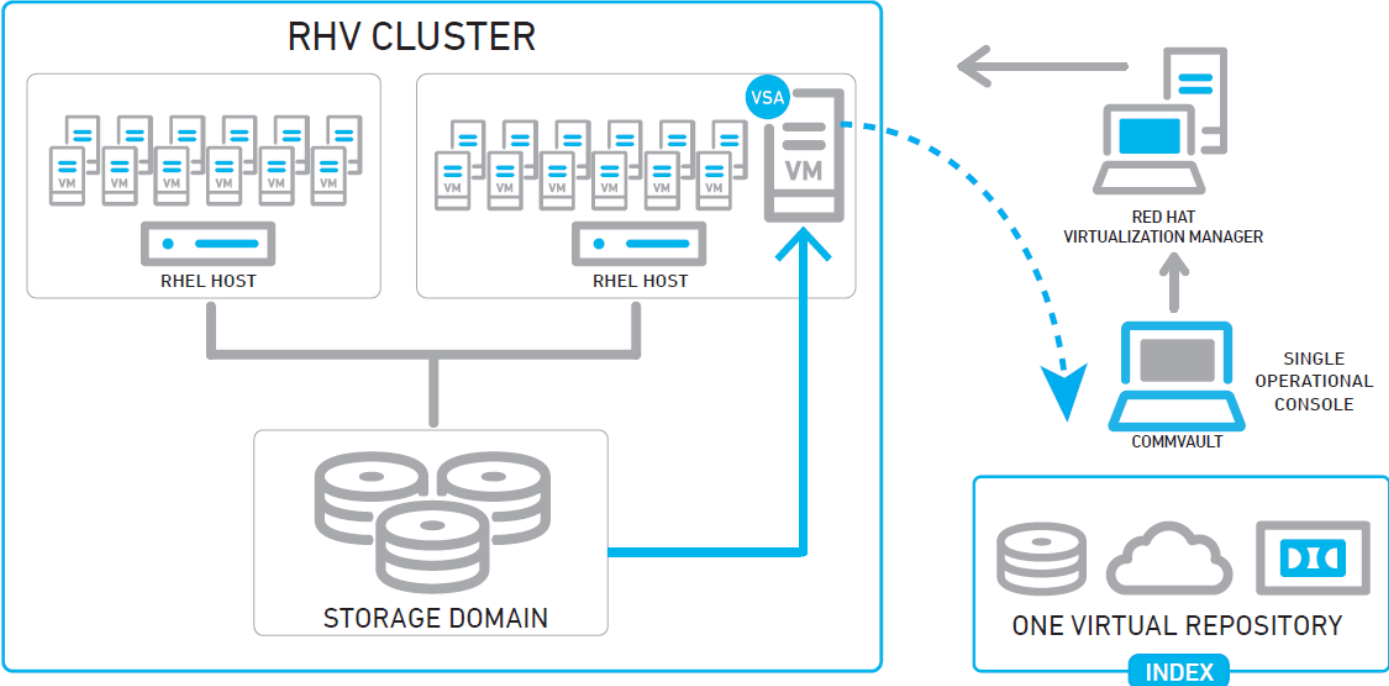
SSD Caching

BACKUP



CommVault Solution

RED HAT VIRTUALIZATION



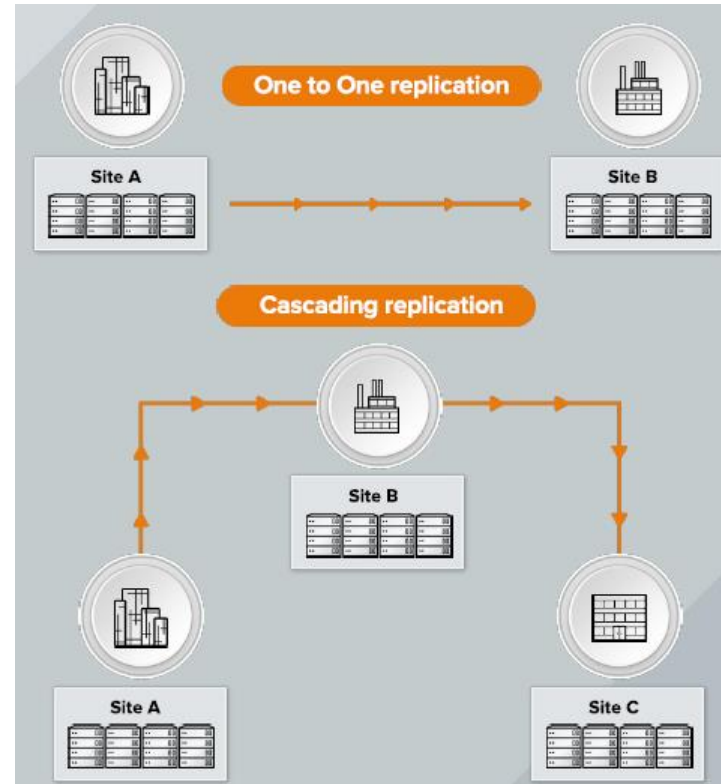
DISASTER RECOVERY



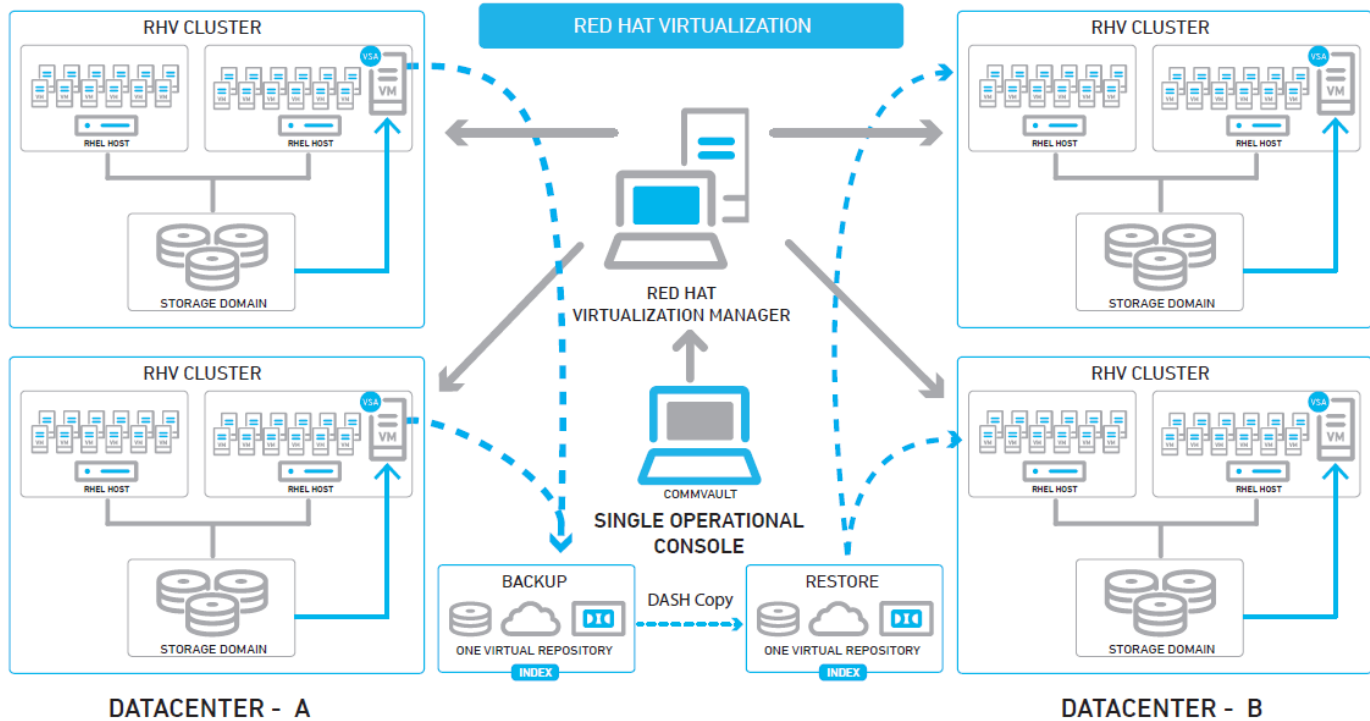
Native Solution (Red Hat Gluster)

- Asynchronous across LAN, WAN or Internet
- Modello Master / Slave
- Cascading Replication
- Molteplici configurazioni:
- Uno a Uno
- Uno a Molti
- Cascata

- PERFORMANCE
- Parallel Transfer
- Efficient source scanning
- Pipelined and batched
- File type/layout agnostic
- CHECKPOINTS
- FAILOVER AND FAILBACK



CommVault Solution



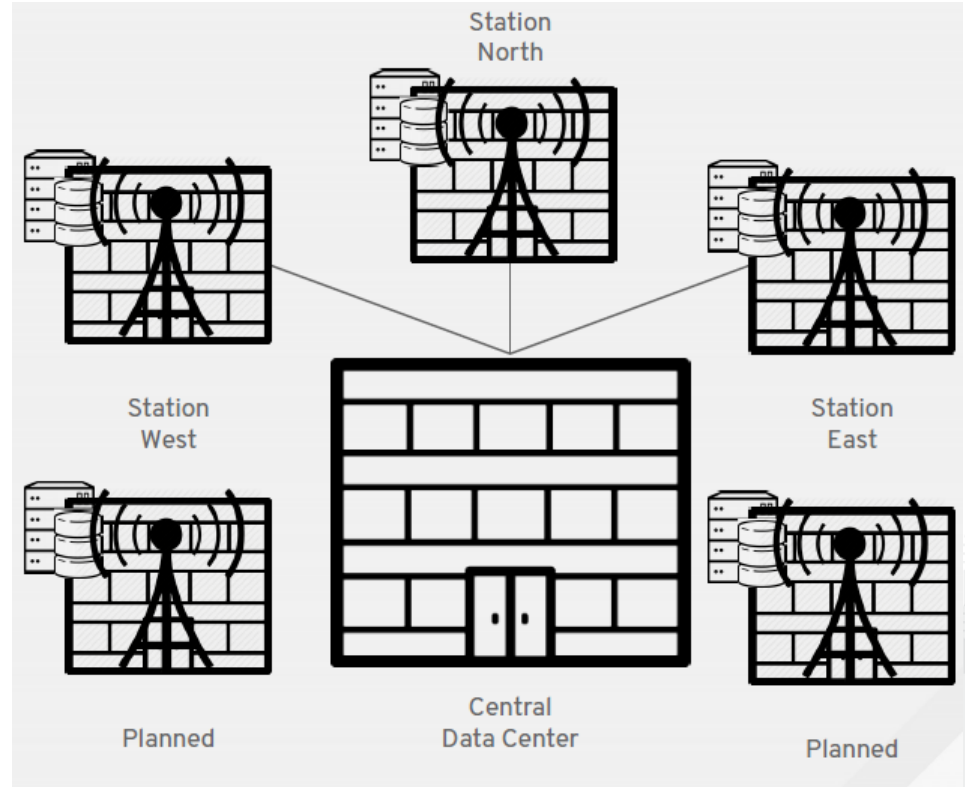
USE CASES



Use Case

PRIMARY USE CASE

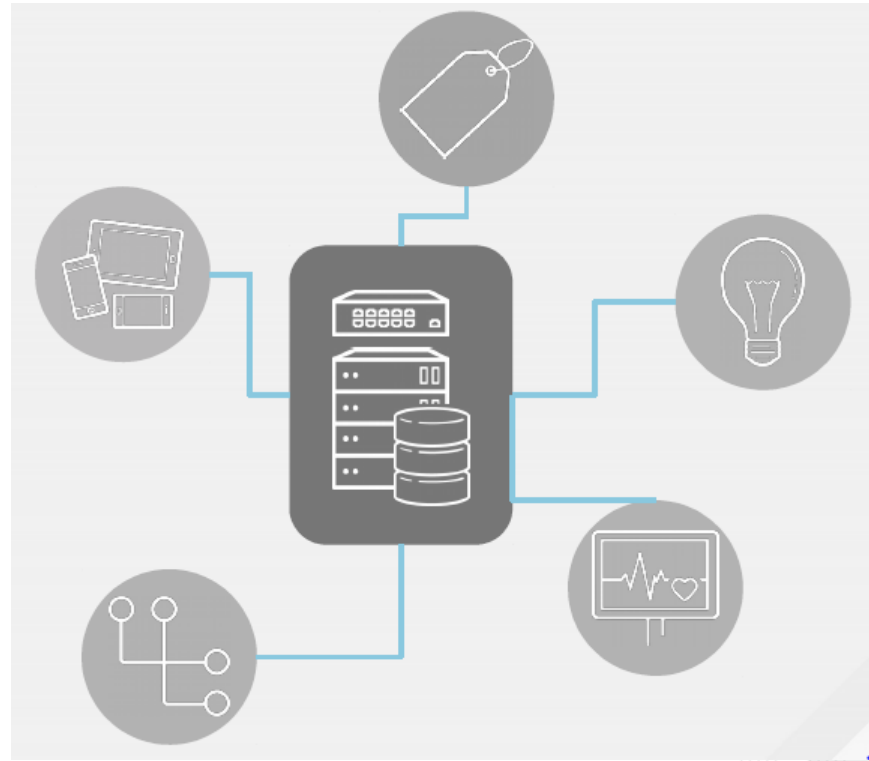
- Deploy compute and storage resources closer to cellular customers
- Distributed infrastructure reduces cellular network congestion
- Enhance network performance and build additional resiliency



Use Case

PRIMARY USE CASE

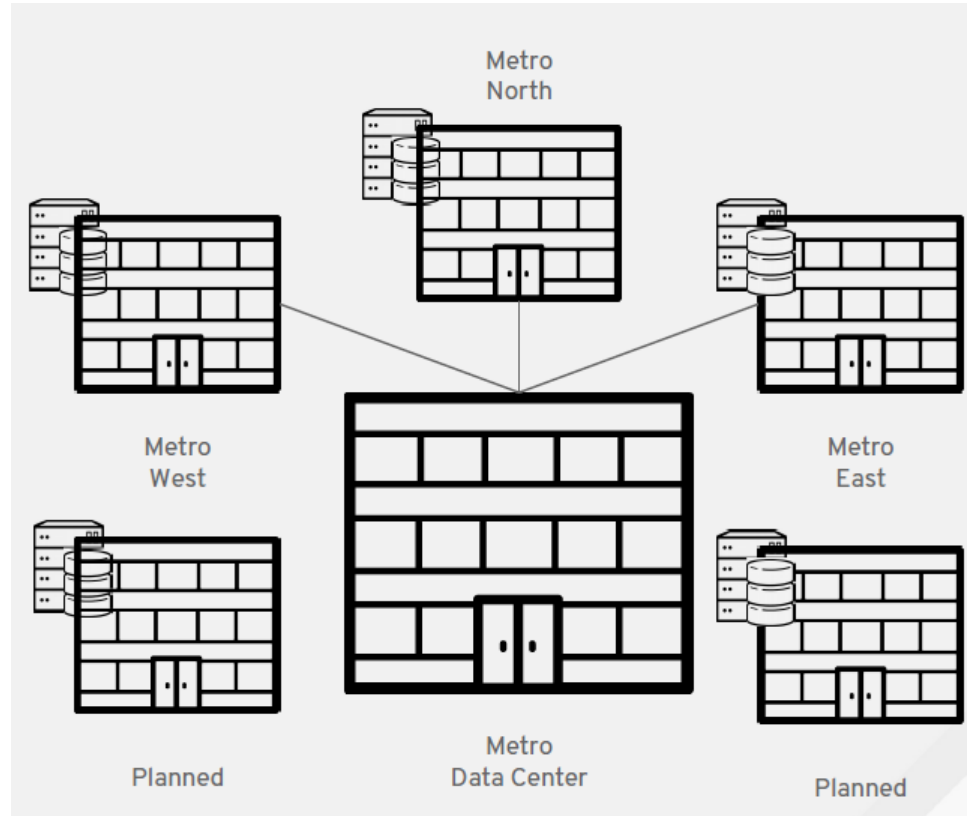
- Implement a robust intelligent gateway tier
- Deploy compute and storage resources closer to endpoints
- Red Hat Hyperconverged Infrastructure becomes a “micro-datacenter” for IoT



Use Case

PRIMARY USE CASE

- Seeking overall reduction in TCO
- Need infrastructure consolidation
- Need reduced footprint - power/cooling costs expanding with traditional models
- Dealing with too many vendors - ease of acquisition/support
- Need to keep key applications local to the remote site





RED HAT OPEN SOURCE DAY

Europe, Middle East & Africa



#redhatosd