

# Cisco HyperFlex and Veeam

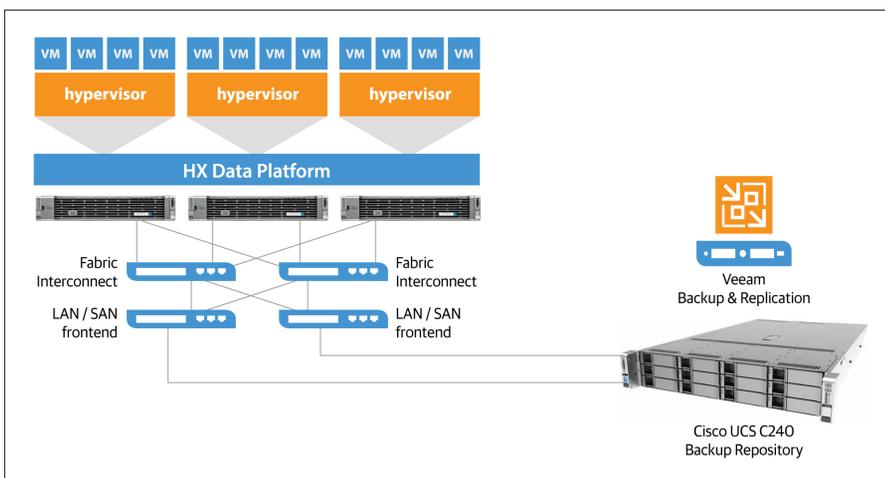
## Enterprise grade availability for the modern Enterprise

Today's business requires new levels of IT efficiency and infrastructure agility to meet user expectations and business demands. To overcome these challenges, Veeam® Availability Solutions offer unique integration with Cisco HyperFlex hyperconverged systems to come together to transform IT infrastructure with data protection that is easy to deploy, simple to manage and scales as fast as business needs change.

### The power of Availability and hyperconverged systems

Cisco HyperFlex combines compute, storage, networking and virtualization into a simplified, easy-to-use system that brings new levels of speed and efficiency to IT. Cisco HyperFlex includes an integrated network fabric, powerful data optimization and unified management to deliver the full potential of hyperconvergence for a wider range of workloads and use cases.

Veeam complements Cisco HyperFlex, to deliver enterprise grade data Availability, protection and disaster recovery (DR). HyperFlex provides high availability for the cluster by mirroring data within the cluster, and proactively self-healing in case of hardware failure.



Veeam integrates with native HyperFlex snapshots to deliver efficient virtual machine (VM) backup and replication to dramatically lower the recovery times for ALL applications and data.

Veeam replication between HyperFlex clusters, both local and distributed, provides site-level DR. Veeam also provides backup and recovery at the VM- and item-level for instant recovery from more common, day-to-day problems. These isolated Veeam managed backups, stored on secondary storage, cloud or tape, allow organizations to meet both internal and external data protection and recovery requirements.

### Enterprise Grade Modern Data Protection

Four out of five IT professionals admit that they have an "Availability Gap." In a recent study, 81% of respondents recognized the inadequacies of their recovery capabilities when compared with SLA expectations of their business units. The study also found:

- The average length of unplanned outages was 85 minutes
- 66% of organizations report their digital transformation is being hindered by unplanned insufficient application Availability.

Source: Veeam Availability Report

Cisco HyperFlex Systems and Veeam Availability solutions combine to protect data and applications with backup, recovery and replication for disaster recovery.

Veeam's unique native snapshot integration with HyperFlex provides faster backups without impacting production and dramatically reduces the recover point objectives.

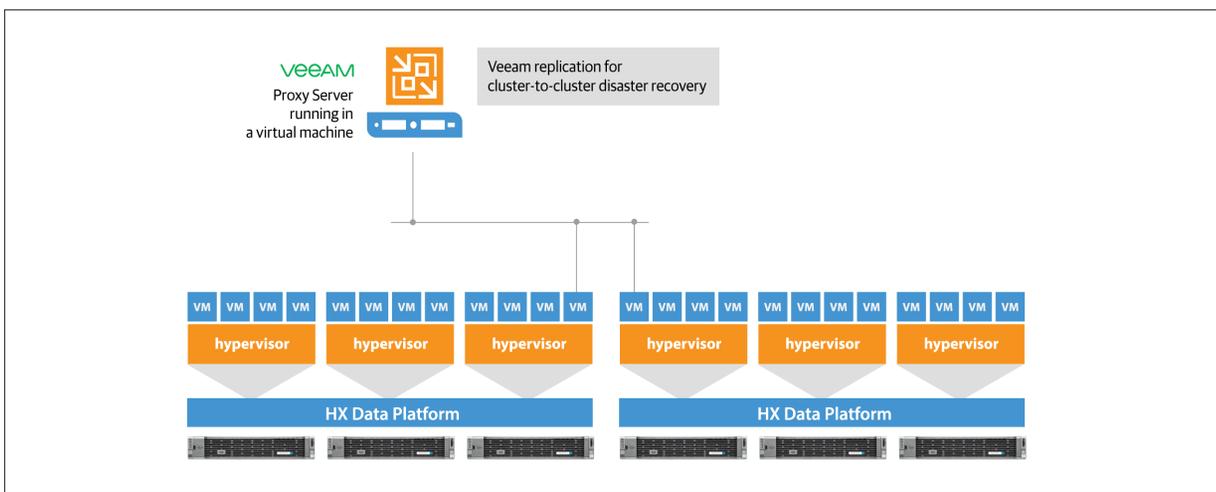
Cisco hyperconverged solutions make an excellent pairing with Cisco UCS and Veeam to provide cost-efficient backup repository storage.

Learn more at [www.veeam.com/veeam-cisco-ucs.html](http://www.veeam.com/veeam-cisco-ucs.html)

## Veeam Backup & Replication

Veeam Availability solutions can be deployed and configured with backup server, proxy and repositories on Cisco UCS storage servers. Veeam orchestrates jobs to create backups and/or replicas for the provisioning of immediate data-protection.

In the Veeam backup infrastructure, a backup proxy acts as a 'data mover' responsible for retrieving and transferring VM data. During backup activities, the backup proxy retrieves VM data from the source HX datastore, processes it and transfers it to the destination backup repository. The backup repository is where backup files are stored and can reside on storage such as a Cisco UCS storage servers. The backup proxy also writes data back to the source HX datastore during full-VM restore and VM-disk restore.



Veeam Backup & Replication copies VM data at a block level. Veeam retrieves VM data from the source storage, compresses and deduplicates data, and then writes it to the backup repository. Subsequent jobs utilize VMware Change Block Tracking (CBT). Veeam orchestrates the entire backup process by leveraging HyperFlex native snapshots. With continual, automated data protection in place, HyperFlex then becomes an efficient source for many types of high-speed recovery scenarios. Veeam provides more than 50 restore options to quickly return business to productivity with full VM-level, file-level, and item-level recovery.

## Replication

An exact copy of the production VM on a Cisco HyperFlex cluster is created in native VMware format on a destination HyperFlex system when a VM is replicated. This copy is, and remains, in sync with the production VM. If a production VM goes down, the administrator can immediately failover to the VM replica on the secondary HyperFlex cluster. Veeam employs VMware CBT making replication much faster, and to schedule replication jobs more frequently down to a near-CDP schedule. You can perform both on-site replication for high availability and off-site replication for DR scenarios with Veeam and Cisco HyperFlex.

Veeam Backup & Replication optimizes data transmission for replication over WAN or slow links, including inline deduplication, data compression and optional WAN acceleration. Veeam also optionally encrypts replica traffic and provides throttling rules to control bandwidth consumption and replica seeding options. For cloud initiatives, Veeam Cloud Connect provides a fast and secure way to backup, replicate from HyperFlex and restore from a cloud-hosting provider or private-cloud infrastructure.

## Cisco and Veeam are Better Together

Bringing together efficient data protection, flexible and high-speed recovery and replication on next generation hyperconverged infrastructure, Cisco and Veeam deliver 24.7.365 Availability to keep business running and users productive.