VMware HCX for Ongoing Workload Rebalancing

Ensure business-critical workloads always operate in the optimal environment

AT A GLANCE

VMware HCX®, an application mobility platform, simplifies application migration, rebalances workloads and optimizes disaster recovery across data centers and clouds. HCX enables high-performance, large-scale app mobility across VMware vSphere® and non-vSphere cloud and on-premises environments to accelerate data center modernization and cloud transformation.

HCX automates the creation of an optimized network interconnect and extension, and facilitates interoperability across KVM, Hyper-V and vSphere 5.0+ to current vSphere versions. This delivers live and bulk migration capabilities without redesigning the application or re-architecting networks.

HCX REBALANCING

Move workloads at any time to meet scale, cost management, compliance and vendor neutrality goals. Actively rebalance your cloud and on-premises application footprint with HCX as an always-on, secure, high-throughput, WAN-optimized, hybrid interconnect that tethers cloud to on-premises estates for on-demand migration, data center extension and cloud bursting.

Cloud migration is not a one-time event. In today's cloud services environment, it's becoming clear that no single platform or provider will meet the needs of every business or application. Organizations adapt their infrastructure and applications to become more agile, which reflects in the growing adoption of hybrid and multi-cloud strategies. Choosing the right platform today may not mean having the right platform next year. To ensure business-critical workloads always operate in the optimal environment to meet security, compliance, performance, availability and financial needs, organizations must create and maintain hybrid connectivity for application migration and ongoing workload rebalancing.

Key reasons for workload rebalancing

Demand and usage – All applications have lifecycles. It's important to continually evaluate their level of demand and resource consumption to determine the optimal environment in which to run them to meet cost and performance goals.

Capacity shifts – Where data center capacity adapts slowly and predictably, public cloud capacity needs can often change rapidly. Organizations should be aware of long- and short-term public cloud commitments and available on-premises resources, and move workloads accordingly.

Business changes – Adding data center capacity through mergers and acquisitions (M&A) activities or planning for data center closures can have a significant impact on both application delivery and infrastructure capacity needs.

Application support – As applications evolve, so will the level of support required to maintain service-level agreements (SLAs), meet security and compliance requirements, and deliver desired responsiveness.

The HCX application migration and mobility platform

The VMware HCX platform automates the creation of a hybrid interconnect to enable IT administrators to easily and securely migrate workloads to the cloud while maintaining IT best practices, operations and business continuity. Leveraging HCX for application mobility accelerates data center transformation and hybrid cloud adoption with seamless migration of VMware vSphere and non-vSphere workloads on premises and in the cloud without upgrading vSphere versions. Enabling secure, large-scale, zero-downtime live migrations can accelerate time to value for new software-defined data center (SDDC) stacks and cloud environments while driving down operational costs to update, migrate and maintain disparate systems.

RESOURCES

Take the HCX Hands-on Lab

Visit the VMware HCX product page

Watch informative demos, overview videos and more

Read our latest HCX blogs

Follow @VMwareHCX on Twitter and give us a shout with #VMwareHCX

Read VMware HCX documentation

Read our Enterprise Guide to Migrating to the Cloud

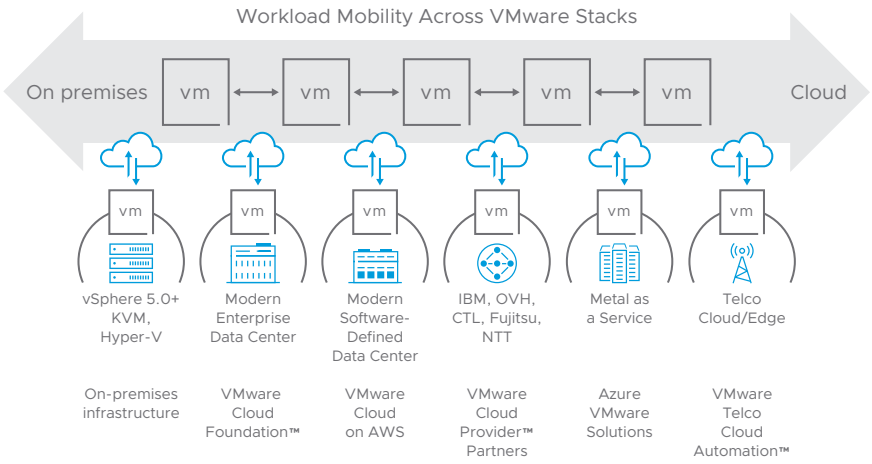

FIGURE 1: Move VMs to and from on-premises and cloud data centers enabled with VMware HCX.

Key capabilities

Perform a bulk migration of live VMs – Simply schedule the movement of hundreds of VMs in parallel.

Utilize simple migration planning tools – Easily identify application and workload relationships, and logically group VMs for efficient migration.

Enable mobility across data centers and clouds – Move VMs within your data center—from your local data center to the cloud, or across cloud regions or providers—to optimize resource utilization.

Migrate with zero downtime – Don't worry about IP re-architecting.

Migrate across any vSphere versions (5.0+) – Eliminate the need to invest in bringing both sites up to parity, enabling you to modernize your data centers with the full SDDC/VMware Cloud Foundation™ stack, managed service or infrastructure as a service (IaaS).

Migrate non-vSphere workloads – Migrate KVM and Hyper-V workloads to current vSphere versions compatible with full VMware Cloud™, VMware Cloud Foundation, VMware Cloud Provider™ Program and IaaS offerings.

Work across the WAN and LAN – This enables a unique model of infrastructure with a mix of private, public and hybrid clouds, based on workload requirements.

Seamlessly extend your network and IP space – Extensively reduce complexity and ensure your IP addressing policies, security policies and administrative boundaries are not broken.