VMware HCX Datasheet
Multi Cloud App Mobility and Infrastructure Hybridity

AT A GLANCE

VMware HCX provides infrastructure hybridity and workload mobility across on-premises to private cloud (modern data center) and public cloud across different versions of vSphere. VMware HCX abstracts on-premises and cloud infrastructures, builds hybrid interconnects, and enables seamless, secure, multi-site mobility of VMs, disaster recovery and hybridity with no retrofit/re-architecture of the source sites and networks.

VMware HCX includes:

- Ability to extend, evacuate and consolidate on-premises to modern on-premises, private and public cloud without requiring network/application modifications.
- Capability to seamlessly and securely migrate applications from any vSphere version on-premises to latest vSphere version at destination.
- Sophisticated hybrid networking and replication capability allows multiple types of migrations, such as, Live, Warm and Cold migrations. Workloads are protected between on-premises and cloud as well, across cloud to cloud.
- Capability to perform partial and full disaster recovery and back up.

KEY BENEFITS

Infrastructure Hybridity:

- Tether vSphere versions 5.0+ from legacy vSphere to latest vSphere without requiring upgrade.
- High throughput secure network extension without need for NSX on-premises at source.
- Enable workload migration without changing IP or MAC address.
- Work across multiple administrative domains (such as Enterprise to Cloud Provider) without a need to join SSO domains
- Hybrid interconnects are WAN optimized, traffic engineered and with intelligent routing capabilities to make the WAN appear like LAN
- Communication over the VMware HCX interconnect with Suite B encryption

App Mobility:

- HCX vMotion for large scale Live migration to cloud means no app downtime (In Preview)
- Bulk VM migrations mean 100s of VMs can be moved to the cloud at a time

What is VMware HCX

VMware HCX unlocks the app mobility and infrastructure hybridity between different vSphere environments across on-premises, private and public cloud.

VMware HCX interconnects source and destination environments with NSX Hybrid Connect. Over that, it builds an abstraction layer and tethers source and destination. Networks can be stretched securely across the hybrid interconnects enabling a seamless environment, between on-premises, private and public cloud. This we refer to as Hybridity. Over this, the VMs can be migrated seamlessly and securely, enabling bi-directional, multi-site app mobility

HCX optimizes traffic with in-built WAN optimization and provides high throughput migration over internet or direct connect. HCX does not require modification of IP address, DNS, MAC address, eliminating reconfiguration and provides seamless VM migration. VMware HCX provides multiple migration options for customers to migrate workloads, including large scale live migrations with HCX vMotion, bulk migration and cold migration. VMware HCX provides rich day 1 and day 2 operations automation.

With these capabilities, VMware HCX use cases are multifold.

- Multi Cloud Applications: Freely move application to span over on-premises, private and public cloud.
- Extend Data Center: Seamlessly and securely extend data center across on-premises, private cloud and public cloud as and when required.
- Consolidate Data Center: Consolidate data center to private or public cloud with multisite bidirectional migration.
- Modernize Data Center: Bulk migrate workloads to modern data center in private cloud without requiring app modification or network re-architecture.
- Transform to IaaS: Migrate workloads from a simple vSphere to a full SDDC and make use of private or public cloud capabilities.
- Hardware Refresh and Software Upgrade: Use VMware HCX migration capability to seamlessly move to private or public cloud to refresh on-premises hardware or software.
- DR to the cloud: Granularly protect on-premises or cloud workload. Cost effective full or partial DR.
Key Features and Capabilities

• Application mobility between different vSphere versions at source and destination. Tether legacy vSphere to next-gen vSphere.
• Multi-site, bidirectional mobility and hybridity
• Multiple app migration models. HCX vMotion for large scale, live VM migration (In Preview for VMware Cloud for AWS), live vMotion, bulk migration, and cold migration.
• Live and Bulk migration, with user specified schedule options
• Rich day 1 and day 2 operations automation capabilities
• Traffic engineered, high throughput network connections over internet and direct connect
• MTU adaptation to meet source and destination requirements
• Multi Tenancy
• Service Mesh
• Agile Intelligent Routing capabilities, such as proximity routing
• WAN Optimized, compressed, de-duped connectivity
• Network extensions for IP and access management
• Traffic load balancing overlay, enforced through policy
• Application group based DR policies
• Automatic VPN connectivity across sites
• High performance - 5Gbps + speeds for VLAN
• 5 minute RPO and RTO

How To Buy

VMware HCX is available for on-premises to on-premises (private cloud) with NSX Enterprise Plus license. VMware HCX is included with VMware Cloud on AWS at no additional cost.

VMware HCX is also available with Hybrid Cloud Bundle for VCPP partners. HCX is available with partner clouds such as, IBM cloud, OVH US, Fujitsu, NTT, CTC, Rackspace, IIJ, Navisite.

Supported Environments

• Any Networking:
  • Migrate from Legacy vSS, vDS, Cisco Nexus 1000v vSwitch to NSX-vSphere NSX-T support
• Any Compute: vSphere 5.0 to a Modern vSphere stack
• Any Storage: NFS / iSCSI / VSAN etc.
• Any VIM: Latest VCF / vCloud Director / VMware Integrated Openstack
• VMware vSphere 5.0 and above for Bulk migration
• VMware vSphere 5.5+ and above for HCX vMotion
• VMware vCenter 5.0 and above

Find Out More

Visit the VMware HCX web page at:
https://cloud.vmware.com/vmware-hcx

Get to know more about VMware HCX at:
https://hcx.vmware.com