VMware HCX Capabilities

Extend older vSphere versions to any VMware Cloud Provider. Support for vSphere 5.1 and above

No requirement for single SSO domain.

Works across any VMware networking technologies, on premises can remain VDS. Additional capabilities if NSX

Extend on premises layer-2 VM networks to a VMware Cloud Provider over the encrypted HCX interconnect, works over the internet or a private line

In built WAN optimization and intelligent routing make the WAN appear like the LAN and dramatically reduce migration times

Highly performant L2C, can achieve 6 Gbs per VLAN and scale to the networking demands of the enterprise

Multisite support, extend multiple on premises sites to the same VMware Cloud Provider Instance

Seamless bidirectional migration of workloads, no need to update application, OS, Network IP or MAC

Ability to bulk migrate 100's of VMs at a time

VMs can be migrated cold, warm (reboot) or live with no downtime

Advanced migration scheduling with post migration workflows to ensure the VM is running the latest VM tools and VM HW

VMware HCX addresses many of the challenges customers face when consolidating on premises data centers to a cloud provider. VMware HCX works to tether two VMware environments, as both source and target are running vSphere no OS or application changes are required for migrated workload. VMware HCX Infrastructure Proxies permit an architecture where the on the premises vSphere environment and the VMware Cloud Provider environment don't need to be tightly coupled, they communicate with each other via the proxies over a secure encrypted channel. This masking approach has many benefits

- Sensitive management and vMotion networks do not need to be routable to their counterparts in the VMware Cloud Provider. They just need to be presented to the local Hybrid Cloud Infrastructure Proxy

- Supports a wider range of vSphere versions, no need to upgrade on premises environments

- On premises and the VMware Cloud Provider instance can be on separate SSO domains

Once the encrypted channel is in place High Throughput Layer 2 Concentrators (HTL2C) can extend on premises VM networks to a VMware Cloud Provider instance. Each HTL2C can support up to 6 Gbps, this makes the WAN appear like the LAN and greatly simplifies the migration of workloads to the VMware Cloud Provider, VMs can be moved retaining their current IP and MAC. VMs can be migrated live individually or warm in bulk with just a reboot of the VM. Migration "waves" of 100's of VMs can be moved and VMware HCX provides a detailed dashboard of progress and success.

The optimized VMware HCX SD WAN permits application components to reside both on premises and in the VMware Cloud Provider Instance, for example a physical data base can remain in the on premises data center while the application and web tier are moved, the Data Base can then be migrated at a later date. The ability to avoid a "Big Bang" approach means migration projects can start straight away.