

# Collax V-Family Competitive Analysis

Product Marketing

## Introduction

This document is founded on an analysis performed in 2011 and is based on published information from a variety of sources. This document was accurate on the date of publication, but functions and features may have changed since then. Collax is not responsible for any current inaccuracies.

This document is meant to be a guide as to the differences between the vendors and tries as best to compare like products.

## Virtualization Features

Feature	Collax V-Cube	VMware vSphere 5.0	Microsoft Hyper-V 2008 R2
<b>All in One Hypervisor (Type 1):</b> Does not need an underlining OS	✓	✓	✓
<b>Small Footprint</b>	✓	✓	✗
<b>Security</b> Firewall functionality for the protection of the virtual and physical networks	✓	✓	✗
<b>CPU Virtualization</b> Maximum number of virtual processors per VM	✓ (16 vCPUs per VM)	✓ (8 vCPUs per VM)	✓ (8 vCPUs per VM)
<b>Processor Hardware Memory Assist</b> Reduces the time required to exchange memory resources between the host and the virtual machine using extensions built into the latest x86 processors.	✓	✓	✗
<b>Memory Over commitment:</b> This is supporting more memory to the guests than is physically available.	✓	✓ (not in VSA-Cluster)	✗
<b>Virtual NICs:</b> Number of network interfaces presented to the guests.	✓ (16 per guest)	✓ (10 per guest)	✓ (4 per guest)
<b>vLANs:</b> The use of Virtual Networking for the guests	✓	✓	✓ (Very complex)
<b>Jumbo Frames</b>	✓	✓	✓ (R2 only)
<b>Guest Operating Systems</b>	Windows 7, Vista, XP, 2000, 2003, 2008, Novell Suse Linux 9, 10, 11, RedHat 3, 4, 5, Ubuntu	Most x86 OS, including Windows, Linux, UNIX	Windows 2003, 2008 (certain SPs), RHEL 5+ only

Feature	Collax V-Cube	VMware vSphere 4.1	Microsoft Hyper-V 2008 R2
<b>Templates:</b> Deployment of virtual machines from a master template.	✓	✓	✓
<b>Thin Provisioning:</b> Allows the creation of virtual machines with virtual disks that do not take up all of their allowed space upon creation.	✓	✓	✓
<b>System Monitoring:</b> Status monitoring	✓	✗ (only alerting or with 3rd party product)	✓ (not in product. Use SCOM)
<b>Remote Access:</b> Remote desktop control and visualization without client software	✓	✓ (limited functions)	✗
<b>Access Control:</b> Administration of user access	✓	✓	✓
<b>Active Directory Support:</b> Connects to an existing Microsoft Active Directory for user access and authentication.	✓	✓	✓
<b>Roles and Permissions:</b> Users can be assigned security access.	✓	✓	✓
<b>Logging:</b> Logging for troubleshooting and analysis.	✓	✓	✓
<b>API</b>	✓	✓	✓
<b>Virtual Disk Files:</b> Virtual disks are stored as disk files.	✓	✓	✓
<b>Integrated Backup</b> Full featured backup	✓	✗ (only with 3 <sup>rd</sup> Party software)	
<b>VM Snapshots</b> Virtual machine snapshots allow administrators to apply patches and upgrades in a transactional way, and roll back to a known good snapshot if the patch runs into an issue.	✓	✓	✓
<b>Live Snapshots</b> Snapshots can be made while VM is running	✓	✓	✓ (limited)
<b>Appliances</b>	✓	✗ (with 3 <sup>rd</sup> party)	✗

## Cluster Features

Feature	Collax Inter-V	VMware vSphere 5.0	Microsoft Cluster with VMM and/or SCCM and Hyper-V 2008 R2
<b>High Availability</b> High availability ensures that virtual machines are automatically restarted on failure of the VM itself or the host on which it resides.	✓	✓ (not with vSphere Essentials)	✓
<b>Live Migration</b> Live Migration can automatically or manually migrate running virtual machines from one host to another without downtime when the virtual disk files reside on a shared storage substrate.	✓	✓	✓ (R2 only)
<b>Maintenance Mode</b> Hosts undergoing maintenance automatically have their guest VMs migrated to other available hosts and are removed as targets for migration until maintenance is complete.	✓	✗	✓
<b>Distributed virtual switch</b> Virtual Switches can be configured once for the entire cluster and not on each Node separately	✓	✗ (only with vSphere Enterprise Plus)	
<b>Resource Management</b> Resources such as CPU, memory, and storage are aggregated and managed at the datacentre or cluster.	✓	✓	✓
<b>Easy wizard driven cluster installation and configuration</b>	✓	✓	✗
<b>Redundant Cluster Management</b>	✓	✗ (only with vCenter Heartbeat)	
<b>Shared Storage</b> Can use NFS, iSCSI and Fibre Channel shared storage for storage of guest machines.	✓ (iSCSI)	✓	✓ (not out of the box)
<b>Storage Multipathing</b>	✓	✓	✓
<b>Storage Virtualization</b> Aggregates and distributes storage resources to maximize flexibility and utilization.	✓	✓	✓
<b>Integrated Backup</b> Full featured backup in cluster context	✓	✓ (only with 3 <sup>rd</sup> Party software)	✓ (with 3 <sup>rd</sup> Party software or scripting)
<b>Cluster File System</b>	✓	✓	✓
<b>Embedded SAN</b> Instead of an additional SAN common storage on the existing hard disks is used	✓ (with Collax V-Store)	✗	✗