Hyper-V vs. VMware Comparison

Choosing the right Virtualization software for your datacenter is a complex task. Microsoft's Hyper-V has become a formidable competitor to VMware, especially with Windows Server 2008 R2. So we thought we would share our experience via this comparison of VMware versus Hyper-V, the leading server virtualization solutions.

Hyper-V versus VMware - Pricing

If you already have a Windows Server 2008 OS platform, you can download Hyper-V Server at no cost. The only cost is for the System Center management framework. Microsoft includes management of physical and virtual environments along with Hyper-V and VMware.

Hyper-V provides you with migration capabilities: Live Migration is included in Windows Server 2008 R2 at no extra charge. We are using it and can attest to R2's robustness. With VMware, VMotion in both Foundation and Standard editions, there is an additional charge if you want to add migration capabilities.

Take a look at the following table, you will see side-by-side the cost comparison of Hyper-V vs VMware. All of VMware feature comparisons use Virtual Infrastructure Enterprise and most of its pricing comparisons use Virtual Infrastructure Foundation. Costs are for five physical servers. We've made the assumption that you've already paid for the host server OS in this comparison.

Microsoft Hyper-V Server with Existing OS	5 Servers
Microsoft Hyper-V Server	$0
System Center Management Suite Enterprise + 2-year SA	7,520
System Center Ops Mgr Server	581
System Center Configuration Manager	580
System Center Data Protection Manager Server	581
Total	**$9,262**

VMware ESXi with Existing OS	5 Servers
Existing operating system	$0
vCenter + 2-year SA	7,318
2 processer infrastructure Enterprise License + 2-year SA	42,125
Total	**$49,443**

Source:
http://www.milesconsultingcorp.com/Hyper-V-versus-VMware-Comparison.aspx

Hyper-V R2 versus VMware - Feature Comparison

The following chart compares VMware Enterprise core features with Microsoft Windows Server 2008 Hyper-V (r2) and System Center Management core features

	VMware VI	Microsoft WS08
Feature	**Enterprise**	**Hyper-V R2/SMSE**
Bare-metal hypervisor	ESX/ESXi	Hyper-V
Centralized hypervisor management	Virtual Center	SMSE (VMM)
VMware and Microsoft management	None	SMSE (VMM)
VM backup	VCB (proxy only)	SMSE (DPM)
VM High availability/failover	Virtual Center	WS08 Clustering
VM migration	VMotion	Live Migration
Storage VMotion	Yes	Not yet
Guest OS patching/management	Yes	SMSE (SCCM)
End-to-end OS monitoring	None	SMSE (Ops Mgr)
Host/VM level optimization	DRS	SMSE (PRO)
Application/service monitoring	None	SMSE (PRO)
Integrated physical and virtual management	None	SMSE

VMI: VMware Infrastructure
VCB: VMware Consolidated Backup
VMM: Virtual Machine Manager

WS08: Windows Server 2008 R2
SMSE: System Center Server Management Suite
DPM: Data Protection Manager

Notes:

With Microsoft, virtualization with Hyper-V was built into Windows Server 2008. For heavy Microsoft shops, this means tighter integration with your existing infrastructure and management tools. Since Hyper-V is part of Windows Server 2008, your IT staff will use it seamlessly because they are familiar with the Windows look-and-feel.

Fewer virtual machines, in some situations, can be run on Hyper-V than you can on ESX Server, but Hyper-V is based on Windows Server 2008 and because of that you can run these machines on pretty well any hardware configuration, any hardware configuration that is designed to support Windows. You can only run VMware on maybe dozens or fewer number of server configurations than you can run Windows. That means that Hyper-V can be run on hundreds and hundreds, if not thousands, of configurations whereas because ESX Server, VMware is a more limited product because of that.

One thing that Microsoft has done very well is that they have tried to add as many management tools for virtualization as possible and of course, the market leader in terms of virtualization management tools is VMware. Microsoft has almost as many tools as VMware in terms of virtualization management.

Microsoft, by the way, just upgraded the number of cores that you can run with Hyper-V by releasing support for Intel's new 6-core processors, so that means you can now run up to 24 cores.

Microsoft supports a limited number of Linux distributions (today SUSE), so keep that in mind. If you have a wider number of platforms to support, VMware ESX is your choice.

Hyper-V lets you manage virtual and physical environments and uses common deployment, provisioning, monitoring, and backup methodologies across both. VMware's answer to management is to use Virtual Infrastructure Enterprise and Virtual Center, but even these tools won't allow to manage multiple hypervisors, physical resources or applications. You may also want see how Hyper-V compares to Xen.