vSphere 5 vs. Hyper-V 3 (Beta)

Comparison of Key Capabilities

vSphere 5 – The Most Trusted Virtualization Platform

		vmware vSphere 5	Microsoft Hyper-V “3” (beta)
Hypervisor Architecture	Scalability	✓ Host – 160 CPUs, 2TB RAM VM – 32 vCPUs, 1TB vRAM	✓ Host – 160 CPUs, 2TB RAM VM – 32 vCPUs, 1TB vRAM
	Purpose-Built Hypervisor	✓ No reliance on general purpose OS	X Hyper-V requires Windows Server OS
	Simplified Patching	✓ No unrelated patching; Image-based with rollback capabilities	X Subject to unrelated Windows patching; Complex architecture of patches reqs add’l effort
	Advanced CPU Management	✓ Specifically tuned to support Intel SMT hyper-threading	X No reliable performance advantage when using hyper-threading
	Advanced Memory Management	✓ Ballooning Transparent page sharing Memory Compression Swap to disk/SSD	~ Relies only on ballooning; Reqs special drivers – No Linux, No NUMA
Platform Security	Small Attack Surface Area	✓ 144MB disk footprint	X Server Core: 5GB disk footprint
	Centralized Management of VM Security	✓ vShield Zones	X Lacks centralized network security management
	Secure Introspection with Leading 3rd Party Tools	✓ EPSEC APIs provide introspection into hypervisor file activity	X No introspection capabilities

…to Run Business Critical Apps…

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Business Continuity	Zero Downtime for Most Critical Apps	✓	Fault Tolerance	X	Nothing comparable; Expensive 3rd party tool req’d
	Robust High Availability	✓	High Availability: Single-click, withstands multiple host failures	X	Failover Clustering: Based on legacy quorum model; complex and brittle
	In-guest Failover Clustering of MS Apps	✓	Supports MSCS in virtualized environment; AppAware HA with API	~	Cumbersome setup and config of Virtual FC reqs storage expertise
	Live Resource Expansion	✓	Hot-add vCPU, vRAM Hot-plug/extend virtual disk	X	No hot-add vCPU No hot-extend virtual disk
Broad Support & Choice	Guest Operating Systems	✓	85 guest OSs inc. more Windows than Hyper-V	X	Hyper-V R2: 25 guest OSs
	Standardized VM Format for Multi-Platform Extensibility	✓	One of the main drivers and sponsors behind OVF	X	Does not support OVF
	3rd Party Virtual Appliance Marketplace	✓	700+ virtual appliances in VMware Solution Exchange	X	Nothing comparable
	ISV Support Statements	✓	2,000+ applications explicitly supported by 1,000+ software providers	X	No explicit support statements for virtualized apps

…at the Lowest Total Cost of Ownership

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Intelligent Automation	Standardized Configurations	✓	Host Profiles	X	Nothing comparable
	Automated Host Provisioning	✓	Auto Deploy: Auto configure and reconfigure new physical servers with host images	X	Legacy bare-metal provisioning is not scalable, not serviceable
	Automated Provisioning of Virtual Networking	✓	vSphere Distributed Switch 3rd party extensible switch	~	Only 3rd party extensible switch
	Automated Server Workload Balancing	✓	Distributed Resources Scheduler & Distributed Power Management	~	Dynamic Optimization does not adhere to affinity and anti-affinity rules
Integrated Storage Management	Automated Storage Workload Balance	✓	Storage DRS	X	Nothing comparable
	Intelligent Storage Selection	✓	Profile-Driven Storage	X	Nothing comparable
	Cluster-Wide Prioritization of Storage I/O	✓	Storage I/O Control	X	Nothing comparable
	Storage APIs	✓	Standards-based array offload capability reqs no add’l infrastructure or config	~	Reqs proprietary API support and add’l infrastructure dependencies