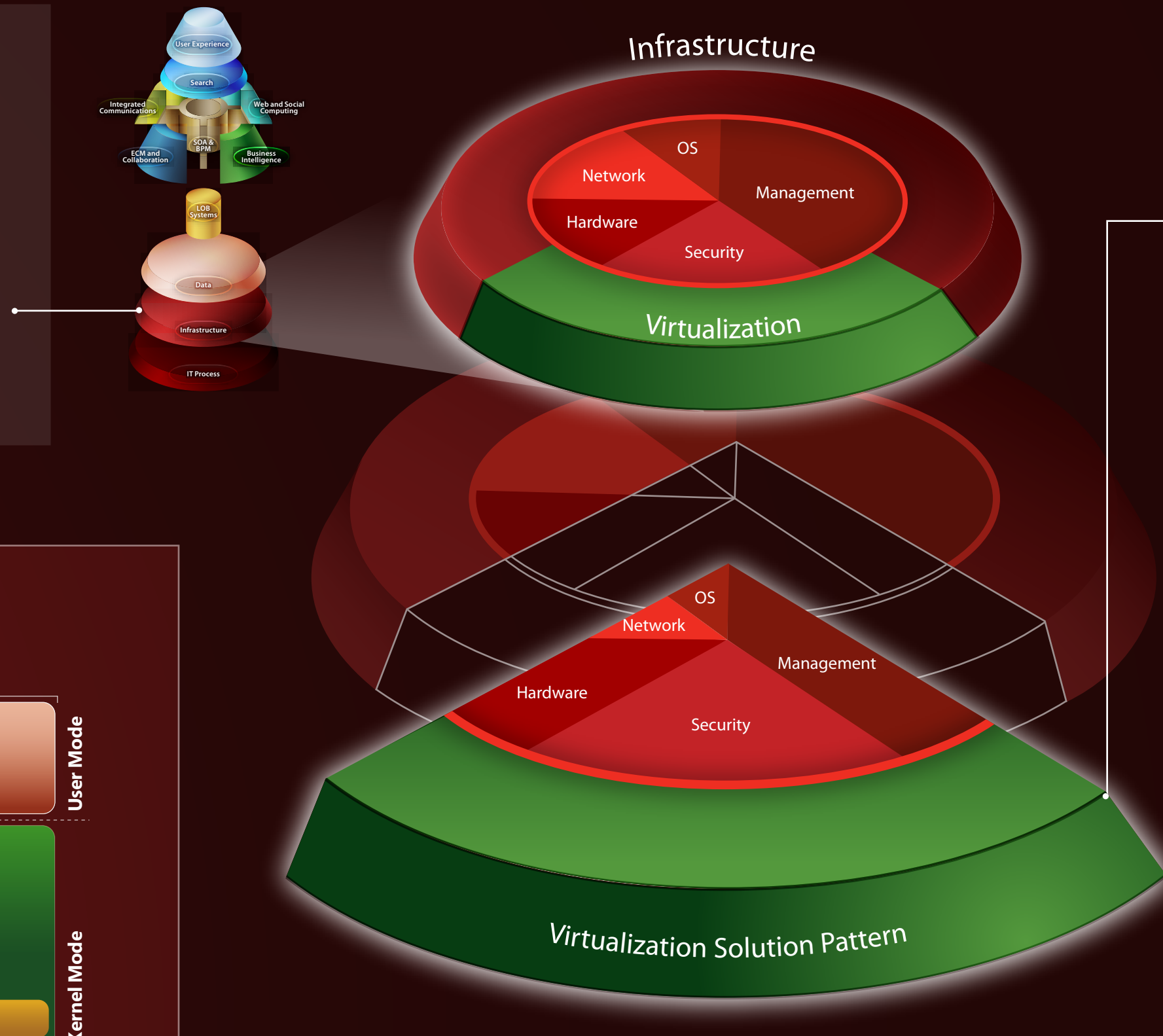


The Platform Vision architectural model represents the technologies and services that make up the capabilities of IT in any business. This model is unbiased in terms of specific technology products and can therefore be applied to show how products relate to each other and existing technology implementations in an IT stack.

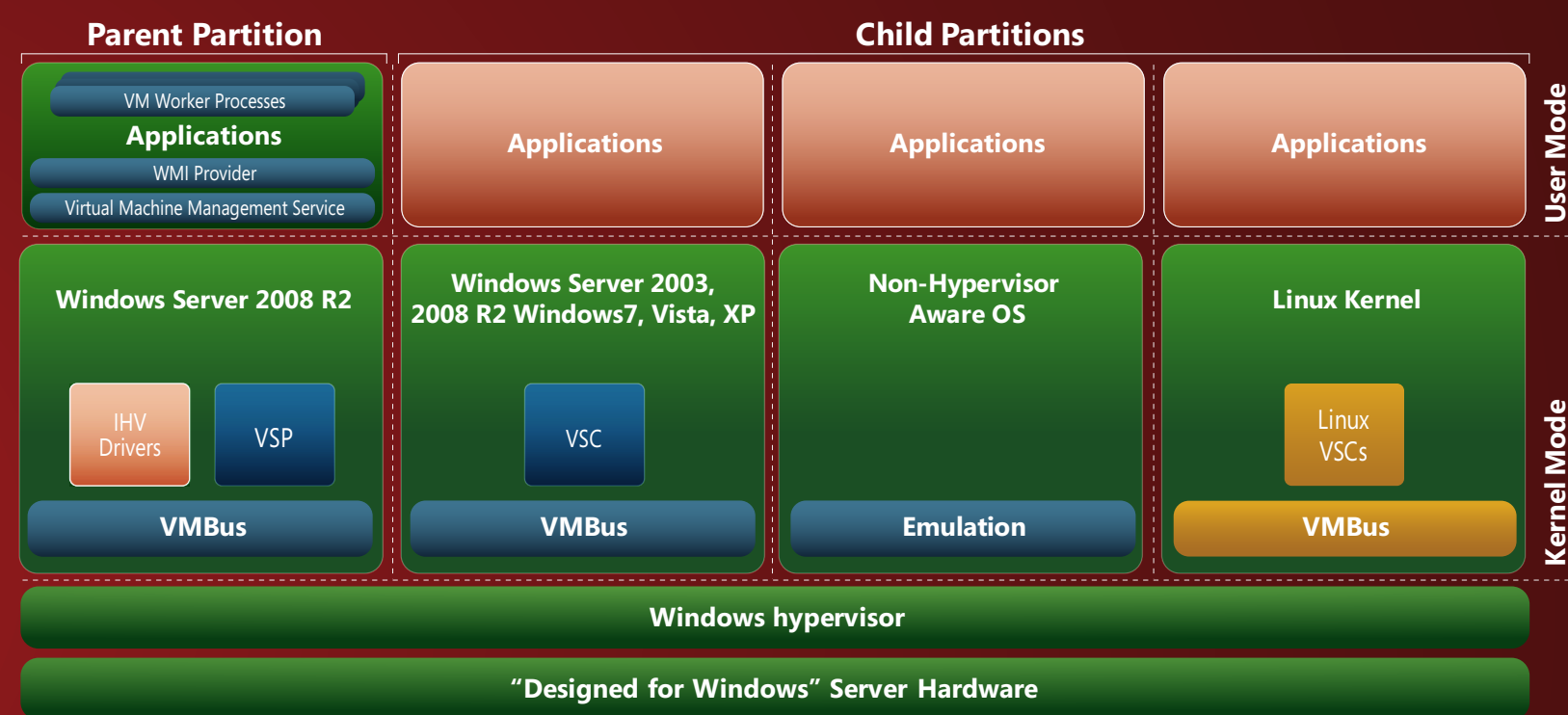
From the model's lowest level (i.e., the IT Process Solution Pattern) upward, the model illustrates dependencies and relationships among the elements of IT. Each layer has dependencies on the layers below it, and each layer provides requirements for layers above it in the model. The Infrastructure Solution pattern rests on the IT Process Solution pattern, signifying that everything above this layer depends on well-thought-out processes and policies. The Infrastructure Solution Pattern is the foundation for everything above this layer.



The Platform Vision architecture places server/hypervisor virtualization at the Infrastructure level because the functions performed by this type of virtualization reside here. The use of virtualization is optional, so the Platform Vision model deals with server/hypervisor virtualization as an optional extension of the Infrastructure layer. Server/hypervisor virtualization depends on and extends the capabilities of other Infrastructure layer components when server/hypervisor virtualization is present. However, the technologies in the higher layers of the model have no need for awareness of whether the infrastructure is physical or virtual.

A magnification of server/hypervisor virtualization in the Platform Vision model's context shows the architectural representation of this type of virtualization as it relates to the entire model.

## Microsoft Hyper-V Architecture



Provided by Microsoft

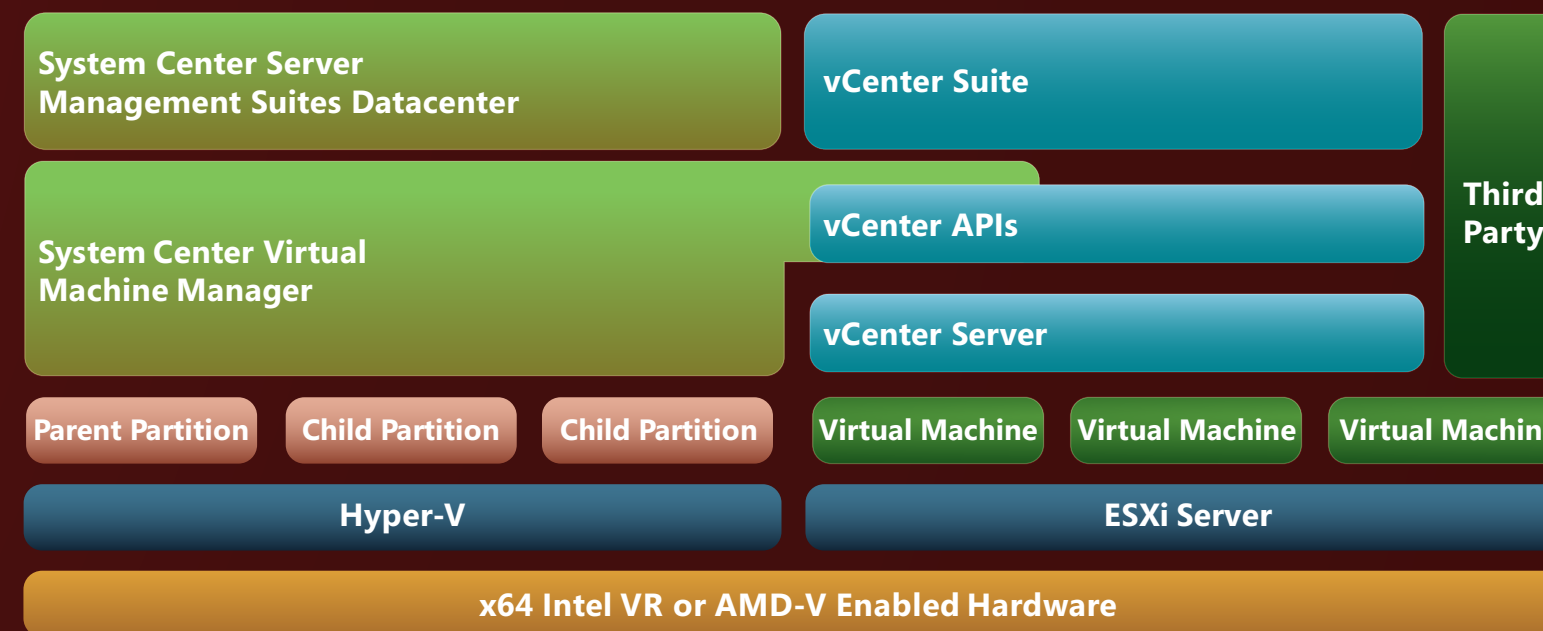
## VMware Virtualization Representation



Provided by VMware

The drilldown into server/hypervisor virtualization explores the two prevalent implementations of server/hypervisor virtualization: Microsoft Hyper-V and VMware ESXi. The purpose of this drilldown is to examine each solution's architecture within the context of the Platform Vision model and to challenge key competitive positioning claims of each of these products.

### Platform Vision View of Microsoft's and VMware's solutions



Microsoft Positioning
<b>BUILT-IN VIRTUALIZATION</b>
Hyper-V integrated with Windows Server 2008 R2
Virtualization management tools included
Scale up and Scale out
<b>EXTENSIVE, UNIFIED MANAGEMENT</b>
Management suite architecturally integrated; suite licensed separately
Management includes both physical and virtual machines and manages heterogeneous environments
Management capabilities provide visibility and control across entire stack, applications, guest OS and host
Management functionality extends to multiple Virtualization platforms such as Virtual Server, Hyper-V and VMware
Consistent interface
<b>DELIVERS SIGNIFICANT COST SAVINGS</b>
Less expensive than VMware
Clustering, high availability, live migration are available at no extra charge

For additional comparative content such as cost assessments, brochures, whitepapers, lab validations, and the Microsoft virtualization blog site, visit <http://www.microsoft.com/vmwarecompare>

Microsoft Products
<b>FOUNDATION</b>
x64
Hardware-assisted virtualization
Hardware-enforced Data Execution Prevention (DEP)
Windows Server® 2008
Windows Server® 2008 R2
Hyper-V™
<b>SECURITY</b>
Active Directory® Domain Services
Forefront™ Client Security
<b>MANAGEMENT</b>
System Center Operations Manager
Windows Update
Windows Server® Update Services
System Center Configuration Manager
Hyper-V™ Manager Microsoft Management Console
System Center Virtual Machine Manager
System Center Data Protection Manager
Microsoft Assessment and Planning Toolkit
Windows Server 2008 / R2 Datacenter host OS: Unlimited software instances on a single license
Windows Server 2008 / R2 Enterprise host OS: Up to 4 software instances on a single license
Windows Server 2008 / R2 Standard host OS: one software instance per single license
Hyper-V Server 2008 / R2: Software instances require their own license

Products marked with this symbol are part of the Server Management Suite Datacenter (licensed separately)

VMware Products
<b>FOUNDATION</b>
Processor Architecture: x64
Hardware Optimization: Hardware assisted virtualization (Preferred)
Operating System: OS-Free Architecture
<b>SECURITY</b>
Network Directory/Identity Service: Active Directory Integration
Anti-Malware: VMware vmSafe
<b>MANAGEMENT</b>
Service Monitoring: VMware vCenter AppSpeed
Patch Management: VMware vCenter Update Manager
Hardware/Software Inventory: VMware vCenter Capacity IQ, VMware Capacity Planner
Configuration Management: VMware vCenter Capacity IQ, VMware Capacity Planner
Auditing/Compliance: VMware vCenter
Software Distribution: VMware vCenter
Recovery Manager: VMware vSphere for High Availability, VMware vCenter Site Recovery Manager for advanced Disaster Recovery and Business Continuity
Capacity Planning: VMware vCenter Capacity IQ and VMware Capacity Planner

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VMware Positioning
<b>MOST TRUSTED SOLUTION FOR BUSINESS INFRASTRUCTURE VIRTUALIZATION</b>
Businesses of all sizes significantly improve IT efficiency, control and flexibility through VMware solutions. Proven 30% less expensive than Microsoft
<b>MOST WIDELY DEPLOYED VIRTUALIZATION PLATFORM AND DE FACTO PLATFORM FOR PRIVATE AND PUBLIC CLOUD ENVIRONMENTS</b>
Drive business agility
Reduce capital and operating expenses
Enable a pragmatic path to the cloud
Most complete business continuity, fault tolerance and availability capabilities
Complete independence of hardware, operating system, application stack, and service providers
Leverage over 1,000 value-add partners
<b>COMPLETE, CENTRALIZED MANAGEMENT</b>
Automation of key IT management processes
Service-Level Assurance and proactive management
Powerful provisioning, performance, capacity planning and disaster recovery without complexity