Microsoft®
System Center Virtual Machine Manager 2008

Maximize Resources, Achieve Agility, Leverage Existing Skills

What's New in System Center Virtual Machine Manager 2008?

This overview highlights the new and significantly enhanced features in System Center Virtual Machine Manager 2008 which Microsoft recently released in a beta version.

Support for VMs running on Windows Server® 2008

- System Center Virtual Machine Manager 2008 was designed to fully utilize the foundational features and services of Windows Server 2008 and Microsoft Hyper-V™ Server. This includes Hyper-V's 64-bit architecture, attack hardened security model, fail-over cluster support (see below) and others.
- Virtual Machine Manager 2008 (VMM) supports the management of hosts running Hyper-V and VMM can actually enable Hyper-V remotely from the VMM 2008 console.
- VMM 2008 integrates with new clustering support in Windows Server 2008 to allow for fault-tolerant and cluster aware virtual machines to be created
- VMM 2008 supports all Hyper-V functionality while providing VMM-specific functions, such as Intelligent Placement, the Self-Service Portal, and the integrated Library.

Multi-vendor virtualization platform support

- In addition to support for Hyper-V, VMM 2008 integrates multi-hypervisor management into one tool with its support for virtual machines running on VMware ESX infrastructure and Microsoft Virtual Server.
- VMM 2008 provides comprehensive support for VMware VI3 including moving virtual machines among virtual hosts with no downtime via VMotion, through integration with VMware's Virtual Center.
- VMM 2008 specific features such as Intelligent Placement, consolidation candidate recommendations and others can be run against virtualized infrastructure on any supported platform.
- Windows PowerShell™ scripts for customization or automation are also supported across Hyper-V, VMware ESX or Virtual Server implementations.

Performance and Resource Optimization

- Performance and Resource Optimization (PRO) is a feature of VMM which can dynamically respond to failure scenarios or poorly configured components that are identified in hardware, operating systems or applications.
- Working through PRO-enabled Management Packs and in consort with System Center Operations Manager 2007's deep monitoring capabilities, PRO can either alert an administrator

of an unhealthy system or application state and its proposed recommended corrective action or it can respond automatically creating a system that is responsive and self healing.
- Because of the much more granular level of monitoring available to PRO, a wide range of hardware, operating system or application variables can trigger PRO to take corrective action.
- As a feature of VMM 2008, PRO's capabilities are also available to VMware ESX or Virtual Server hosts thus allowing administrators to manage their entire virtualized environment regardless of the virtualization platform they are using.

Host Cluster Support for "High Availability" Virtual Machines

- With greatly expanded support for failover clusters, VMM 2008 improves its "high availability" capabilities for managing mission-critical virtual machines. VMM 2008 is now fully cluster-aware meaning that it can detect and manage Hyper-V host clusters as a single unit.
- New in this version of VMM is automatic detection of virtual hosts that are added or removed from the cluster – thus easing the burden on the administrator to manage this function.
- In VMM 2008, creating a high availability virtual machine (HA VM) has never been easier. Gone are the complex multi-step manual processes from before – now, an administrator clicks a simple checkbox which designates a VM as highly available. Behinds the scenes, VMM orchestrates the creation of that HA VA which includes instructing the Intelligent Placement feature of VMM 2008 to recommend only hosts that are part of a host cluster for the newly minted HA VM.
- Improved HA VM management features of VMM 2008 include the Failover Cluster Management Console for various cluster-related tasks such as designation and management of cluster reserves, letter-less disk drives, guest clusters, among others.
- VMM 2008 also supports VMware host clusters in which the nodes of the cluster are VMware ESX Servers.

Other Changes in VMM 2008

- Re-engineered administrative permissions engine; creation of the "delegated administrator" role which maintains the management abilities of a full administrator but on a reduced scope of responsibility such as a designated sub-set of virtual hosts.
- Thoroughly re-designed and re-built web interface for the self service portal including user access to the PowerShell interface and commandlets.
- In guest virtual machine support for Windows Server 2008 and Windows Vista® operating systems as well as Physical-to-Virtual (P2V) and Virtual-to-Virtual (V2V) support for those guest operating systems.
- Updated network permission policies allow VMM 2008 to manage a domain-joined virtual infrastructure that is not part of a specifically "trusted" domain.
- Additional PowerShell commandlets and "view script" controls.
- General refresh and "face lift" of the VMM 2008 user interface and management console.