

Infrastructure provisioning

SYSTEM CENTER 2016



Reduce complexity and streamline infrastructure

As the speed of innovation increases, IT Operations is faced with an expanding array of specialized tools built for specific new capabilities. However, the proliferation of tools limits agility and increases the difficulty of datacenter management. System Center 2016 reduces complexity and makes it seamless to deploy, configure, and manage your software-defined datacenter infrastructure across compute, networking, storage, and security.

Improved Fiber-Channel SAN Connectivity

IT professionals can seamlessly integrate, discover, and add fiber channel SAN devices while centrally managing iSCSI and fiber channel capabilities. Once connected, they can create and assign LUNs, initialize disks, create partitions and volumes, remove capacity, unmount volumes, or mask LUNs.

Updated Storage QoS Management

Service (QoS) policies help IT teams define thresholds to ensure QoS for storage resources. These thresholds can be minimum or maximum IOPS, or minimum or maximum bandwidth in MBs/s. Custom QoS policies can be defined for any single virtual machine or for the group of virtual machines.

Nano Server Lifecycle Management

Performs lifecycle management of minimal footprint Nano Server-based hosts and virtual machines to enable better resource utilization, faster reboots, and fewer upgrades. Configure bare metal machines as Nano-server based hosts, compute clusters, and storage clusters using System Center 2016 Virtual Machine Manager.

KEY BENEFITS

- **Effectively manage virtual environments** with enterprise-class virtualization management and support for Windows Server and Linux at scale
- **Reduce infrastructure complexity** with simplified provisioning and migration; manage new Windows Server 2016 Storage Spaces Direct, Nano Server, network controller, guarded hosts, and shielded virtual machines.
- **Deliver efficient infrastructure services across customer base** using multi-tenant cloud infrastructure and virtual networks management)
- **Utilize a single tool for on-premises and cloud provisioning** and extend management to Azure using the integration pack

Simplified provisioning and migration

Simplified provisioning of infrastructure resources within the datacenter and on the cloud include provisioning of resources including virtual machines, SAN devices, and network devices. For example, Scale-Out File Server provides scale-out file shares that are continuously available for file-based server application storage and can share the same folder from multiple nodes of the same cluster. The Cluster OS Rolling Upgrade is a new feature in Windows Server 2016 that enables upgrading the operating system of the cluster nodes from Windows Server 2012 R2 to Windows Server 2016 without stopping the Hyper-V or the Scale-Out File Server workloads.

IT Operations can protect data on hosts or other virtual machines that may be compromised by configuring Shielded VMs and Guarded Fabrics. Additionally, Dynamic Optimization can be configured on a host group to migrate virtual machines within host clusters with a specified frequency and aggressiveness. Power Optimization can save energy by turning off hosts that are not needed and turning the hosts back on when they are needed.

Support for Windows Server Scale and Performance



Hot-add memory modifies assigned memory in running virtual machines built on both Generation 1 and Generation 2 virtual machines.



Resizing of online VHDX lets you gain scalability by resizing virtual hard disk of a running virtual machine on Hyper-V.



Checkpoints for virtual machines: Provides different types of checkpoints for virtual machines to capture the state, data, and hardware configuration of a running virtual machine.

Comprehensive Multi-Tenant Cloud Infrastructure

System Center 2016 is designed to work in multi-tenant mode to provide complete isolation among infrastructure resources. It also provides better visibility and deep insight into infrastructure resource usages separately for different customers, with detailed chargeback reports.

Multi-Hypervisor Infrastructure: Virtual Machine Manager (VMM) enables you to deploy and manage virtual machines and services across multiple hypervisor platforms, including Hyper-V and VMware ESXi hosts, using direct integration.

Multi-Tenant Edge Gateways: A solution that supports multiple host-to-host VPN tenant connections, Internet access for tenant virtual machines by using a gateway NAT feature, and forwarding gateway capabilities for private cloud implementations.

IP Address Management: Customizable administrative and monitoring capabilities for the IP address and DNS infrastructure on enterprise or cloud service provider network.

Learn more

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