

Cisco UCS Management and Microsoft System Center Integration



The Cisco Unified Computing System™ (Cisco UCS™) with its underlying programmable technology and management tools integrates with Microsoft systems management offerings to help optimize operations. You can simplify the tool set needed to monitor and manage bare-metal, virtualized, and cloud environments. With Cisco UCS and Microsoft integration, you can boost operation efficiency and improve visibility and control.

Cisco and Microsoft have jointly developed and enhanced management packs for Microsoft System Center Operations Manager (SCOM) and PowerShell, so you can automate data center setup, provisioning, and management. This programmatic control is central to the provisioning of hybrid cloud infrastructure to enable self-service provisioning.

Cisco UCS Management Suite for Microsoft SCOM

A management pack is a definition file with predefined monitoring settings that enables you to monitor a specific service or application in an operations manager. The [Cisco UCS Management Pack Suite for Microsoft System Center Operations Manager](#) is a set of management packs that provide visibility into the health, performance, and availability of Cisco UCS servers managed by Cisco [UCS Manager](#), Cisco [UCS Central Software](#), and Cisco® [Integrated Management Controller \(IMC\)](#).

Cisco UCS Manager provides embedded management for all software and hardware components in Cisco UCS. It supports Cisco UCS B-Series Blade Servers, C-Series Rack Servers, and S-Series Storage Servers;

Cisco UCS Mini, and Cisco HyperFlex™ hyperconverged infrastructure. The IMC supports C-Series servers in standalone environments.

In addition to monitoring the health of Cisco UCS, you can do the following:

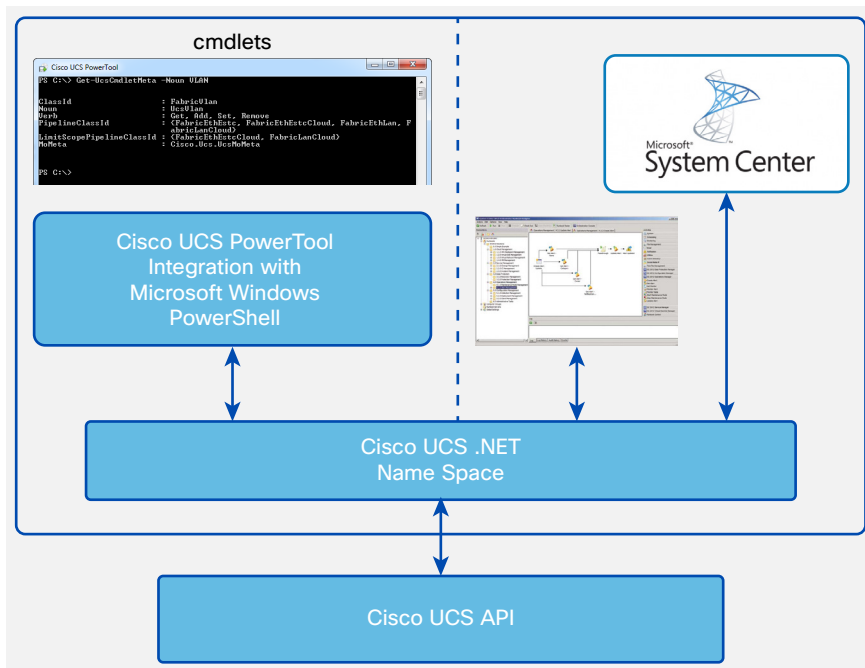
- View Cisco UCS physical and virtual resources, service profiles, operating systems, and virtual machines (VMs).
- Correlate faults and events between Cisco UCS infrastructure and both bare-metal and virtualized OSs that you manage with SCOM.
- Visually correlate blades, service profiles, and host OSs by using SCOM status views to quickly determine the way an event will affect the overall system.

Cisco UCS PowerTool Suite

The [Cisco UCS PowerTool Suite](#) consists of a set of [Microsoft Windows PowerShell](#) modules for Cisco UCS Manager, Cisco IMC, and Cisco UCS Central Software that helps you configure and manage Cisco UCS domains and solutions. This command-line toolkit is based on PowerShell and is used to automate and integrate Cisco UCS management with Microsoft servers and applications (Figure 1). The UCS PowerTool module for UCS Manager includes over 1,970 cmdlets.

In addition, by using Cisco UCS PowerTool together with similar management tools based on PowerShell from third-party vendors, you can manage and operate all components programmatically.

Figure 1. Cisco UCS PowerTool Management Suite



provisioning VMs, etc. You can manage Server Message Block (SMB) file share, Hyper-V host clustered storage, and LUNs. Cisco UCS Director also supports the following network models, which are defined based on the types of logical networks in SCVMM: VLAN-based, private VLAN-based, and network virtualization-based.

Cisco UCS Manager Integration with Microsoft SCO

Cisco UCS Manager [Integration Pack for Microsoft System Center Orchestrator](#) (SCO) can be used to automate the configuration, monitoring, and deployment of Cisco UCS resources in the data center by creating new runbooks or integration with existing runbooks. The integration pack exposes prebuilt runbook actions created for Cisco UCS. It is built on the same Cisco UCS Manager API framework as Cisco UCS Manager and enables runbook actions designed in SCO to connect to Cisco UCS. Using the integration pack, administrators can deliver consistent service across multiple systems and departments using workflows while reducing the potential for human errors.

For More Information

For more information about Cisco UCS and Microsoft solutions, visit www.cisco.com/go/microsoft.

Cisco UCS Director and Microsoft SCVMM

Microsoft System Center Virtual Machine Manager (SCVMM) is a virtualization and cloud management platform. SCVMM allows an administrator to configure and manage the servers, network, and storage resources. With SCVMM, you can manage your applications and services across multiple hypervisors and across hybrid cloud infrastructure to deliver flexible and cost-effective IT services. It includes the following constructs to model and configure the networks on the Microsoft Hyper-V servers: logical network, network site, VM network, IP pool, port profile, port classification, and logical switch.

[Cisco UCS Director](#) is integrated with SCVMM through PowerShell. The PowerShell agent acts as an interface layer between Cisco UCS Director and SCVMM. It enables you to perform basic SCVMM actions on a VM, such as powering a system on and off, adding and removing disks,