

Guide for System Center Hyper-V Management Pack for Windows Server 2019

Microsoft Corporation

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# Guide for System Center Hyper-V Management Pack for Windows Server 2019 Release

This guide was written for the 2019 release of the Hyper-V Management Pack.

### Guide History

|  |  |
| --- | --- |
| Release Date | Changes |
| November 1, 2022 | Hyper-V VM Discover fails when OEM info is added with Error event 1000 |
| May 15, 2020 | Original release of this guide |

### Supported Configurations

This management pack requires System Center 2019 – Operations Manager. A dedicated Operations Manager management group is not required.

The Hyper-V Management Pack monitors the Hyper-V role on the 64-bit edition of the following operating systems:

* Windows Server 2019
* Windows Server 2016

The following table details the supported configurations:

|  |  |
| --- | --- |
| Configuration | Support |
| Operations Manager | System Center 2019 – Operations Manager |
| Clustered servers | Yes |
| Agentless monitoring | No |

### Prerequisites

The Hyper-V Management Pack for Windows Server 2019 has the following dependencies:

· System Center 2019 – Operations Manager

· Microsoft.Windows.HyperV.Library

· Microsoft.Windows.Library

· System.Library

· Microsoft.SystemCenter.Library

· Microsoft.Windows.HyperV.2019.Discovery

· Microsoft.Windows.Server.Library

· Microsoft.Windows.Server.2019.Discovery

· Microsoft.Windows.HyperV.2019.Monitoring

· System.Health.Library

· System.Performance.Library

· System.Virtualization.Library

### Files in this Management Pack

The Hyper-V Management Pack for Windows Server 2019 includes the following files:

· Microsoft.Windows.HyperV.2019.Discovery.mp

· Microsoft.Windows.HyperV.2019.Monitoring.mp

· Microsoft.Windows.HyperV.Library.mp

· EULA.rtf (Microsoft end-user license agreement)

· OpsMgr\_MP\_WS\_HyperV.docx (management pack guide)

# Management Pack Purpose

In this section:

· [Monitoring Scenarios](#zc0034fed7e084f58bb7308cb8da8513e)

· [How Health Rolls Up](#zf3b7d0be290a471c875e4e39c2d0fdd7)

# Monitoring Scenarios

The following table lists the monitoring scenarios provided by this management pack.

|  |  |  |
| --- | --- | --- |
| Monitoring scenario | Description | Associated rules and monitors |
| Essential monitoring of the host computer that is running Hyper-V. | Monitors critical services to ensure the health of the Hyper-V role. Critical services include networking and storage components. | **·** Monitor: Virtual Machine Management Service  **·** Rule: Virtual Network Sent Throughput  **·** Rule: Virtual Network Received Throughput |
| Essential monitoring of the virtual machines and their virtual components that are running on the host computer. | Monitors events that result in critical errors. | **·** Monitor: Virtual Hard Disk Free Disk Space |
| Monitoring related to RemoteFX. RemoteFX is integrated with the RDP protocol. | Monitors the configuration of hosts that are using Microsoft RemoteFX technologies. | **·** Monitor: Hyper-V 2019 RemoteFX Capable GPU  **·** Monitor: Server GPU Configuration  **·** Monitor: Hyper-V 2019 RemoteFX Virtual Machine Display Resolution |
| Monitoring related to virtual machine replication. | Monitors the availability and configuration of hosts that are using Microsoft Hyper-V Replica technology. | **·** Monitor: Hyper-V 2019 Replica Network Listener  **·** Monitor: Hyper-V 2019 Replication Critical Suspended State  **·** Monitor: Hyper-V 2019 Replication Resync Required State  **·** Monitor: Hyper-V 2019 Replication Not Started  **·** Monitor: Hyper-V 2019 Replica Broker Configuration |

# Configuring the Hyper-V Management Pack for Windows Server 2019

This section provides guidance on configuring and tuning this management pack.

· [Best Practice: Create a Management Pack for Customizations](#z2)

· [Security Configuration](#z3)

· [Tuning Monitor Rules](#z4)

## Best Practice: Create a Management Pack for Customizations

By default, Operations Manager saves all customizations, such as overrides, to the Default Management Pack. As a best practice, you should instead create a separate management pack for each sealed management pack that you want to customize.

When you create a management pack for storing customized settings for a sealed management pack, it is helpful to base the name of the new management pack on the name of the management pack that it is customizing, such as “Windows Server 2019 Hyper-V Management Pack Customizations.”

Creating a new management pack for storing customizations of each sealed management pack makes it easier to export the customizations from a test environment to a production environment. It also makes it easier to delete a management pack, because you must delete any dependencies before you can delete a management pack. If customizations for all management packs are saved in the Default Management Pack and you need to delete a single management pack, you must first delete the Default Management Pack, which also deletes customizations to other management packs.

## Security Configuration

The following run as a Privileged Monitoring Account, which defaults to Local System:

· Virtual Machine Discovery

· Virtual Network Discovery

· Guest Computer Relationship Discovery

· Virtual Network Relationship Discovery

· Free Disk Space Collection Rule

# Troubleshooting

The following table lists issues that can occur with the Hyper-V Management Pack for Windows Server 2019 and possible solutions.

|  |  |
| --- | --- |
| Issue | Solution |
| Virtual machines and hardware components are not discovered. | Ensure that the Hyper-V Virtual Machine Management service (vmms) is running. When the vmms service is not running and discovery runs, new Hyper-V roles and virtual networks are not discovered and previously discovered Hyper-V roles and virtual networks are removed. |
| Virtual network adapters and guest computer containment relationships with the virtual machine are not discovered. | Ensure that the virtual machine is running. On virtual machines that are not running, virtual network adapters and guest computer containment relationships with the virtual machine are not discovered. |
| Errors are generated by the script GetDiskPartitionSpacev2.ps1. | Ensure that the Hyper-V Virtual Machine Management service (vmms) is running. |
| Hyper-V 2019 Hard Drive Used Space dashboard does not show data. | No workaround. |