

# SolarWinds Virtualization Manager

## Powerful, Unified Virtualization Management That Won't Break the Bank!



At SolarWinds, we've improved the way that IT professionals around the world manage their networks, applications, servers and storage environments. Now, we are doing it again with SolarWinds Virtualization Manager, formerly Hyper9 Virtualization Manager, our comprehensive all-in-one virtualization management software that delivers integrated capacity planning, VM sprawl control, performance monitoring,

configuration management and chargeback automation—all in one affordable product that's easy to download, deploy and use. In fact it's so easy that you can be up and running in less than an hour! Whether you currently manage as few as fifty virtual machines or a massive corporate cloud, SolarWinds Virtualization Manager can scale to meet your needs. In fact, SolarWinds virtualization management software is already helping IT pros like you manage early deployments as well as large-scale, distributed environments of over 10,000 VMs.

### SolarWinds Virtualization Manager Highlights

#### Capacity Management

- Proactively monitor, predict, detect, and troubleshoot virtualization capacity bottlenecks with real-time dashboards and alerts
- Determine optimal VM placement, explore what-if scenarios, identify capacity shortfalls and determine application-specific capacity needs
- Efficiently budget and plan for new purchases, identify waste and investigate public cloud options
- Control VM sprawl
- Find idle/stale VMs, zombie VMs, orphaned files and over-allocated VMs

#### Performance Monitoring

- Proactively monitor virtualization-unique performance problems
- Deeply analyze storage I/O problems unique to virtual and private cloud deployments

## System Requirements for SolarWinds Virtualization Manager

### Manage:

VMware ESX 3.5+, 3.5i+,  
vSphere 4+, ESX 4i+; VMware  
vCenter Server 2.5+, 4+

### Operating System:

Virtual Appliance based  
installation with 4 vCPU; 8 GB+  
RAM; 1 x vNIC (e1000 driver or  
better); 40 GB+ Free Disk Space;  
Most current version of VMware  
Tools installed

- Troubleshoot application and workload issues in the context of discovered virtual dependencies
- Quickly discover and act on performance issues using flexible alerts and integrated recommendations

### Configuration Management

- Track VM and host configurations over time and determine if your virtual environment configuration is drifting from the gold standard
- Generate ad hoc and scheduled reports across 100s of collected parameters
- Leverage the power of search to report across all of your VMs and Virtual Centers

### Chargeback and Showback

- Enable Chargeback Automation
- Govern and chargeback/showback IT, infrastructure and cloud services
- Identify what it would cost to run in the cloud (Amazon EC2)

## SolarWinds Virtualization Manager Features

### VMware® Capacity Management

Virtualized shared resource pools have introduced entirely new capacity management challenges that make it harder than ever to stay a step ahead of contention issues. Without real-time capacity monitoring, resource bottlenecks can quickly turn into crippling performance problems. Without the right management and analytics tools, capacity optimization and planning are virtually impossible. SolarWinds delivers capacity operations management, capacity optimization, and capacity planning features that span the needs of your enterprise at every timeframe—from minute-to-minute troubleshooting, to what-if optimization, to longer-term resource forecasting.

### Virtual Capacity Operations

Proactively monitor, predict, detect and troubleshoot capacity bottlenecks with real-time dashboards and alerts. Shared resource bottlenecks will have nowhere to hide when you use the virtual capacity operations management features in SolarWinds Virtualization Manager.

### Virtual Capacity Optimization

SolarWinds virtual capacity optimization features enable you to determine optimal VM placement, explore what-if scenarios, identify capacity shortfalls and determine application-specific capacity needs. SolarWinds Virtualization Manager delivers critical virtual capacity optimization and analysis capabilities.

### Virtual Capacity Planning

Efficiently budget and plan for new purchases, identify waste and investigate public cloud options. The virtual capacity planning and management capabilities in SolarWinds Virtualization Manager enable you to efficiently plan, manage, budget, purchase and report on the capacity of shared resource pools in your virtualized environment.

### VM Sprawl Control

Find idle/stale VMs, zombie VMs, orphaned files and over-allocated VMs. Additionally, attack virtual sprawl, virtual stall and vMotion sickness! What ails your virtualized IT infrastructure? The VM sprawl control features in SolarWinds Virtualization Manager give you the tools you need to identify and eliminate waste in your virtualized infrastructure.





### Virtualization Reports

Quickly build ad-hoc and scheduled reports starting with a rich set of out-of-the-box and community-contributed content. SolarWinds Virtualization Manager is built upon a robust search engine that enables you to search, filter and sort across collected configuration and performance attributes. This gives you incredible flexibility when creating reports, dashboards, alerts, trends and other kinds of content. You can even post virtualization reports to a portal such as SharePoint and schedule recurring reports via email delivery, making it easy to share key status information with stakeholders without giving access to VMware vCenter™ or installing the VI client on their desktops.

### VMware Performance Monitoring

Quickly identify the virtualization-unique performance problems in your IT environment. Virtualization has created new performance management and monitoring challenges. As if you didn't already have enough on your plate, now you have to actively manage contention for shared pools of CPU, memory and storage resources—contention that makes it increasingly difficult to determine the source of application and workload performance problems. Navigating through the layers upon layers of shared resources—changing at the speed of dynamic, virtualized data centers—requires a new approach. Unlike performance management solutions originally designed for physical environments, SolarWinds Virtualization Manager was designed from the bottom up to help you conquer the unique performance problems found in your virtualized environment.



### Virtualization Performance Analyzer

Proactively monitor virtualization-unique performance problems. With the Virtualization Performance Analyzer and performance management dashboards in SolarWinds Virtualization Manager, you can proactively monitor the health of your virtual environment, ensure it meets SLAs and minimize shared resource contention for CPU, memory, network I/O and SAN I/O.

### Virtualization Storage I/O Analyzer

Deeply analyze storage I/O problems unique to virtual and private cloud deployments. Virtualized applications are often storage-intensive or storage-inefficient, resulting in critical storage I/O contention, latency and failures. These storage issues are some of the most common virtualization problems you will struggle with—and some of the hardest to pinpoint. SolarWinds Virtualization Manager enables you to proactively monitor storage I/O health and capacity and gain deep visibility into virtual storage bottlenecks across Fibre Channel (FC), iSCSI and NFS environments.

### Virtual Application (vApp) Monitoring and Mapping

In a virtualized environment, performance management solutions must understand the interrelationships and dependency mapping between the workloads and the underlying infrastructure—linking infrastructure performance issues to application problems becomes a science experiment. Older generation performance management tools have traditionally relied on time-series performance data and self-learning algorithms to correlate problems—first in the physical world and now in the virtual world. In virtualized and cloud infrastructures, that approach fails to account for the health of virtualized applications or model the context of the business in which they run. Using the virtual application (vApp) monitoring and mapping features in SolarWinds Virtualization Manager, you can relate the virtual infrastructure to the critical application services it delivers.

VM Name	Status	CPUs	Memory	Storage	Network
VM1	Running	2	4GB	10GB	100Mbps
VM2	Running	4	8GB	20GB	200Mbps
VM3	Running	2	4GB	10GB	100Mbps
VM4	Running	4	8GB	20GB	200Mbps
VM5	Running	2	4GB	10GB	100Mbps
VM6	Running	4	8GB	20GB	200Mbps
VM7	Running	2	4GB	10GB	100Mbps
VM8	Running	4	8GB	20GB	200Mbps
VM9	Running	2	4GB	10GB	100Mbps
VM10	Running	4	8GB	20GB	200Mbps

### Virtualization Performance Alerts with Recommendations

Quickly discover and act on performance issues using integrated recommendations. When a performance problem happens, you need quick notification with recommended actions and communications. With the virtualization performance alerts in SolarWinds Virtualization Manager, you can receive proactive alerts into

the health of your virtual environment with recommendations and active links to next steps. With the power of search, you can create targeted alerts customized to your environment or use more than 40 out-of-the-box best practices covering availability, performance and configuration.



### Virtualization Dashboards

Get at-a-glance insight into the performance, capacity, configuration and usage of your virtualized infrastructure. The web-based virtualization dashboards provided by SolarWinds Virtualization Manager delivers the information you need in an easy-to-understand format. Customizing virtualization dashboards is a breeze using a robust search capability that enables you to search, filter and sort across collected configuration and performance attributes. This gives you incredible flexibility when creating dashboards, reports, alerts, trends and other kinds of content.

### Virtual Machine Configuration Management

Track VM and host configurations over time and determine if your virtual environment configuration is drifting from the gold standard. The virtual machine configuration management features in SolarWinds Virtualization Manager makes it easy to track and trend the configuration of your VMs, guest operating systems and virtualized applications in order to troubleshoot, determine if configs are drifting from the gold standard and identify historic changes. Virtualization Manager speeds troubleshooting by reducing the volume of data that must be collected and analyzed—allowing you to quickly and easily compare the differences between one virtual machine and another, a virtual machine and a template image, or a virtual machine to itself over time.

### Time Travel and Dependency Mapping

Since Virtual Environments are extremely dynamic, Time Travel and Dependency Mapping enable you to track changes over time and perform forensic troubleshooting and problem analysis. This feature allows you to map dependencies between virtual datacenter objects such as objects such as VMs, hosts, datastores, clusters and vApps. You can also use Time Travel to perform forensic troubleshooting and problem analysis.



### Chargeback Automation

As you consider rolling out self-service portals and cloud provisioning systems to your business, an automated, dynamic decision engine is required to balance and optimize real-time business demands against IT supply, capacity, policies and performance. If a 3-minute self-service request takes 3 weeks to manually analyze—because you need to first determine where to place the VM, whether you have sufficient capacity to place it there and what additional resources are now required for other planned services—the critical path is not the portal or the provisioning system but instead, the automated intelligence required to drive the proper decision of what to deploy where, when and how. The chargeback automation features in SolarWinds Virtualization Manager provide the cloud governance and automated intelligence required to make self-service IT a business reality.

### vSphere Plugin

Are you looking for VMware vSphere plugins that can help you manage your virtualized infrastructure? Here's one that will enable you to perform virtualization management tasks directly from the VMware vCenter inventory. SolarWinds Virtualization Manager takes you from the early stages of virtualization deployment and all the way to implementation of private cloud initiatives and IT-as-a-Service. Virtualization Manager appears as a tab within the client, and many Virtualization Manager operations can be performed directly from the vCenter inventory.

## About SolarWinds

SolarWinds is an IT Management software company that makes powerful, affordable, easy to use software. SolarWinds has over 95,000 customers worldwide and an active community site [thwack.com](http://thwack.com) with more than 60,000 IT practitioners. SolarWinds offers free trial versions of its products which can be downloaded from [solarwinds.com](http://solarwinds.com) and in most cases, they can be installed and running in under an hour.