



Introduction

The decision to update your datacenter by adopting a virtualization strategy was likely predicated on a few things:

- 1 Virtualization would reduce your resource costs.
- 2 Virtualization would dramatically cut downtime.
- 3 Virtualization would simplify administration and system maintenance.

The bottom line: **Virtualization was** *designed* **to save your company time, money and headaches.**

While virtualization has the capacity to deliver on these promises, why hasn't it been adopted by a vast majority of organizations? Because using the wrong management platform can negate valuable benefits of virtualization, making its management time-consuming, resource-intensive and inefficient.

With that in mind, now is the right time to demand more from your organization's virtualization management platform. Does the platform you use make the most of your cloud resources? Does it provide a cost-effective, streamlined and centralized management experience? If you're currently using Microsoft System Center Virtual Machine Manager (SCVMM), the answers to all these questions might confirm what you already suspect:

While SCVMM is considered one of the leading Hyper-V management platforms available and is *designed* to save your company time, money and headaches, in reality it comes up short for enterprises that demand more from their virtual datacenters.

As an SCVMM user, if you can identify with one or more of the following five challenges, consider reevaluating your virtualization management tool set.



5 Reasons You're Not Getting The Most Out Of Virtualization





You have to use multiple tools to perform basic administrative functions.

Consider how many times you've had to access an additional tool to perform certain functions that are essential for virtual machine (VM) management, backup, security and monitoring. Or, if you've been using SCVMM for a while, think about how many times throughout the course of a day you've had to jump from one tool to another to complete a task.

Take cluster management, for instance. Failover clusters are essential for maintaining high availability of applications and services, but the functionality for managing them is not native to SCVMM. That's why you have to access Failover Cluster Manager to create and maintain failover clustering properly. If you've used this tool, you probably spent a good amount of time moving between the SCVMM console and the Failover Cluster Manager console, because neither one has everything you need to get the job done. You're not only wasting time going from one tool to the next, you're also wasting money.

Virtualization Management done better:

Managing your virtual datacenter shouldn't be expensive or time-consuming. In fact, whatever tool you use should enable your team to complete more work in less time. Unify all your virtual resources so there's no need to download additional solutions or switch between consoles daily, or to master multiple graphical user interfaces (GUIs).



Using a unified cloud management tool, your IT virtualization manager should be able to:

- **Administer** your virtual resources, including user control and tenant access.
- Manage your virtual resources, including the ability to centrally configure, manage and migrate VMs across your entire infrastructure.
- **Monitor** your virtual resources and receive alerts on VM performance.
- **Recover** your virtual resources by performing backups and replications.
- You spend more time troubleshooting problems than preventing them from happening in the first place.

With SCVMM, it's difficult to identify performance issues before they happen, which likely causes you to spend a significant amount of time fighting fires. For example, there's no way to get a comprehensive performance overview of all your virtual machines in a single dashboard, making it a challenge to gather information about an impending database crash or a drive running out of space. And even if you've tried to extend SCVMM's monitoring capabilities with the addition of System Center Operations Manager (SCOM), visibility into the virtual environment increases, but so does the number of consoles you're using.

In the end, the complex, time-consuming process for monitoring becomes a chore that many IT departments choose to avoid. Instead, they need a valuable tool for solving real problems.

Virtualization Management done better:

Proactive remediation of problems is critical for organizations that require 99.99% availability. To protect your environment with the least amount of time and effort, you need a management tool that does the following:



Using a unified cloud management tool, your IT virtualization manager should be able to:

- Give you a unified view of all your hosts and VMs in real time, from a single console.
- Give you the ability to customize email alerts to warn you about potential issues before they impact your operations.
- Combine multiple related resources into a single group view, giving you fast, easy access to specific environments.
- Help you forecast future performance by applying linear regression techniques to past performance data, including CPU, memory, disk and network usage.

You're struggling to deliver extraordinary performance with minimal expenditure.

In theory, your virtualization solution was designed to reduce your costs and optimize resources—but whether or not it helps improve these areas depends on the correct load balancing of tasks inside your virtual machines. Underloaded or overloaded machines will eventually start to impact application performance, and if you aren't aware of the imbalance until your performance has been impacted, the issue becomes even more challenging to address.

SCVMM makes cost-effective optimization hard to implement. First, it doesn't have a built-in optimization tool, which means that proper load balancing requires additional downloads and configurations. Second, many settings in SCVMM don't appear on the main management console, which means you need to spend extra time documenting where they're located to seek them out. The end result: something important may easily be overlooked.



Virtualization Management done better:

The right management tool can help avoid or minimize the cost of buying new servers, improve system performance and uptime and provide a better user experience. That's why the solution you choose should be equipped with dynamic optimization tools, like continuous analysis of your virtualized data center environment and automated workload optimization. Plus, a solution that provides an easy way to track workloads over time means you can devote more of your efforts to analyzing those trends, improving future load balancing. You should also be able to observe your data center's load balancing process in real-time on any device that receives email, and be immediately informed of any unplanned VM or storage migrations.



You've lost data in the past due to insufficient backup and recovery.

Managing outages without losing data is a key part of your job, but SCVMM lacks native backup and recovery capabilities. Some SCVMM users back up data by creating and applying checkpoints that save the entire configuration of the VM, giving administrators the ability to revert back to that configuration if needed. That tactic works great for backing up flat files, but not so well for databases, since no duplication has actually occurred. (Duplication is a key component of an actual backup.)

Plus, it's highly likely that changes will be made to the database between the time the checkpoint is applied and the time of a possible outage, so all the interim data added in between will be lost. A checkpoint is a limited solution at best—one that also takes extra time for your IT staff and uses a disproportionate amount of disk space for storage. If you hope for more advanced backup tools, you'll need to download yet another tool: System Center Data Protection Manager.



Virtualization Management done better:

To maintain business continuity for your organization and its customers, you need a virtualization management solution you can rely on. The system you choose should:

- Allow you to backup entire Hyper-V virtual machines to Azure.
- Enable full, incremental or scheduled backups to help save disk space.
- Protect your data with AES 256-bit encryption.
- Replicate key Hyper-V workloads—hourly, daily or weekly—to a secondary location, or replica site.
- The time you spend on your cloud management tasks exceeds the time you spend improving your performance and strengthening your backup and recovery strategies.

Many IT professionals switched to SCVMM because it's packaged with Microsoft System Center, and they assume it will meet their cloud management needs. But it doesn't take long before the limitations become clear:

- Initial configuration of SCVMM is overly complex.
- SCVMM requires multiple additional tools to perform basic management tasks.
- These additional tools come with separate consoles and interfaces, making it a challenge to navigate through tasks like template creation.
- It lacks the amenities to help you effectively manage the life cycle of your VMs, including creation, production and retirement.



In the long run, SCVMM requires more human resources for cloud management than necessary.

Virtualization Management done better:

Whatever solution you choose in place of SCVMM should encompass the following:

- It should be easy to deploy and use, with few configuration requirements.
- It *should* simplify management of your entire virtual environment by allowing you easy access to various functions from a single console.
- It should have an interface that's clear, intuitive and consistent, paving the way for successful task completion.
- It should have the tools you need to successfully oversee, implement, operate
 and maintain your virtual machines over the course of their existence. Costefficient tools that allow for creating and moving virtual machines, cloning,
 administering updates, creating templates and monitoring performance should
 also be included.
- It *should* seamlessly scale for complex environments, including multiple remote data centers, multi-domain environments and multi-workgroup organizations.

The right virtualization management tool should come complete with the advanced management capabilities that your organization needs—period.



Virtualization Done Right With 5nine

5nine Manager Datacenter was designed to help organizations with large, distributed environments of 10,000+ VMs reap the benefits of virtualization— without the limitations that are common to other solutions. Centralized monitoring, single-management console, intuitive design and superior backup and disaster recovery capabilities are cost-effective and time-saving building blocks that will allow you to efficiently manage your Microsoft Hyper-V private and hybrid clouds. And migration from SCVMM to 5nine Manager Datacenter is easier than you think.

If you'd like to learn more about 5nine Manager Datacenter and how it can help your organization achieve the full benefits of virtualization, we'd love to hear from you. Our mission is your success with the Microsoft Cloud Platform!



