



REVIEWER'S GUIDE

Storage Resource Monitor

About this Document

Welcome to SolarWinds Storage Resource Monitor (SRM) Reviewer's Guide. This guide presents information that will help you evaluate SolarWinds SRM comprehensive fault and performance management platform.

This guide assumes that reviewers are already familiar with basic array, storage, and virtualization concepts.

CONTACT INFORMATION

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Introduction

SolarWinds® Storage Resource Monitor (SRM) is a comprehensive storage management platform that allows users to view current and historical statistics and availability of the storage infrastructure from any web browser. SolarWinds SRM monitors, collects, and analyzes data from SAN and NAS arrays to provide administrators with a comprehensive view of storage capacity, allocation, usage, and performance.

Unlike traditional storage resource management solutions that can be difficult to deploy, cumbersome to use, and expensive, SRM has been architected to assure ease of use and functional depth at a reasonable price.

SRM uses several different methods to collect data about the health and performance of the storage infrastructure, including SMI-S, SNMP, API, Telnet/SSH®, and CIFS/NFS. As SRM learns about the storage infrastructure, it stores this data within a database and provides a user-friendly web interface for accessing the data.

SRM enables users to quickly detect, diagnose, and resolve storage performance problems and outages. Out of the box, it offers storage-centric views that are designed to deliver the critical information administrators need for day-to-day operations, as well as capacity analysis, planning, and forecasting. SRM is easy to use and maintain, meaning users will spend more time actually managing the infrastructure, not supporting SRM.

SOLARWINDS STORAGE RESOURCE MONITOR PACKAGING AND PRICING

STORAGE RESOURCE MONITOR TIER*	PRICE (USD)**
SRM25	\$2,935
SRM50	\$4,395
SRM150	\$8,895
SRM300	\$13,295
SRM500	\$18,295
SRM1000	\$30,995
SRM1500	\$37,995
SRM3000	\$53,995
SRM5000	\$74,995
>5000 disk	Contact Us

*SolarWinds Storage Resource Monitor is licensed by the total number of physical disks in the arrays it monitors. The license includes monitoring of physical and virtual servers.

**All prices include one year of support and maintenance, and are as of January 1, 2018. SolarWinds reserves the right to change prices.

Preparing for the Review and Installation

SYSTEM REQUIREMENTS:

MINIMUM HARDWARE	
Operating System	<ul style="list-style-type: none"> » Windows Server® 2012, 2012 R2 » Windows Server 2016
Database	<ul style="list-style-type: none"> » SQL Server® 2012, 2012 SP1, 2012 SP2, or 2012 SP3 » SQL Server 2014, or 2014 SP1 » SQL Server 2016
Web Server	<ul style="list-style-type: none"> » Microsoft® Internet Information Services (IIS™), version 7.5 or later
.NET Framework	<ul style="list-style-type: none"> » .NET 4.5 SP1 is required » Compatible with 4.6.1 » SolarWinds recommends using .NET 4.5.2.
CPU	2.0GHz, Dual processor and Dual core is recommended
Memory	8GB
Hard Drive	100GB

SOFTWARE	SUPPORTED
Web Console Browser	<ul style="list-style-type: none"> » Microsoft Internet Explorer® version 11 or later with Active scripting » Microsoft Edge® » Firefox® 45.0 or later (Toolset Integration is not supported on Firefox) » Chrome® 49.0 or later » Safari® for iPhone®

Using SolarWinds Storage Resource Monitor

SolarWinds Storage Resource Monitor includes the following features:

Orion Platform Integration

SolarWinds SRM brings storage monitoring to the Orion® Platform. SRM Orion Module with native Orion support collects storage resource data to provide greater context into overall storage performance, allowing IT pros access to status, customizable UI dashboards, streamlined permissions, custom properties, alerting, role-based access control, and more.

Performance and Data Metric Correlation

Using the PerfStack™ dashboard, you can view cross-stack performance data and metrics across your virtualization, storage, applications, systems, and networks systems, allowing for quicker problem identification.

End-to-End Visibility

Visibility is key to managing today's complex environments, and with the SRM Orion Module, users can have quick visibility of their infrastructure and how it connects together. Integration with other application stack SolarWinds products like Virtualization Manager and Server & Application Monitor allows for end-to-end relationship mapping from application and virtualization through storage. This helps with quick diagnosis of bottlenecks, identification of resource hogs, and proper allocation and management of storage. In addition, it eliminates the need to step through multiple vendor-specific tools to understand how the environment is connected (VM, array, application, etc.), and to diagnose bottlenecks.

User-Defined LUN Grouping

LUN grouping capabilities allow for more information related to specific LUN groups to be easily accessible. For example, IT pros can create a new LUN group for the Exchange® environment servers, easily view LUN group information in the console, and leverage the groups for reporting.

Storage Capacity, Usage, and Forecasting in a Single Pane of Glass

SRM allows users to manage an environment composed of multiple vendors by quickly and easily pulling data from multiple arrays into a single report that shows capacity, allocation, usage, and forecasting at all levels of the storage environment, including raw capacity, RAIDed, LUN, datastore, and file system. With this cross-platform solution, IT pros are able to address questions about how much storage they have, how fast it is growing, and who uses it the most.

Storage Performance

With the advent of server virtualization, the performance of arrays is critical, as their capacity (storage and I/O) is shared, and problems in one area affect others. With SRM, users gain both visibility and the ability to go deep into the array, analyze the performance at every level (array, controller, RAID group, LUN, and disk), and quickly identify problems and bottlenecks in the environment. If you have a server, host, or VM that is hogging the storage bandwidth, not only can users find it immediately, but they can also see what else the problem will impact, and identify available capacity to leverage for a quick migration.

Dashboards and Drill Downs

All of the data is summarized in easy-to-understand views, with the ability to drill down to the details in a single click. For example, storage arrays users can get a single summary view of capacity, usage, allocation, and growth, but still quickly drill down to any array, and then down to the array components. Users can also quickly identify the busiest objects in an environment (LUNs, RAID groups, etc.) to know where bottlenecks are and what other parts of the environment they will affect.

Grouping, Reporting, and Alerting

All this data is available through the GUI, but there is also a sophisticated grouping and reporting engine in the background that allows users to slice and dice the data to meet their needs. Groups of devices or objects are leveraged in the reporting engine for chargeback reports, quota reports, or SLA reports. The alerting engine also allows users to be alerted on the metrics that mean the most to users—full file systems, busy LUNs, or failing backups.

Scalable and Extensible

SRM can scale to large environments in a single pane of glass, supporting thousands of physical disks in the array, while still being able to alert and report on the infrastructure quickly.

Broad Vendor Support

SRM is vendor and platform-neutral, supporting a wide variety of array and switch vendors and manufacturers, including:

STORAGE ARRAYS SUPPORT:
STORAGE RESOURCE MONITOR
ORION MODULE

STORAGE RESOURCE MONITOR
PROFILER MODULE

EMC:

- » EMC® CLARiiON®
- » EMC VNX®
- » EMC Celerra®
- » EMC Symmetrix®
- » EMC Isilon®
- » EMC Symmetrix VMAX®, VMAXe®, DMX
- » EMC XtremIO®
- » VMAX3 (Flash Family)

Dell:

- » Dell® EqualLogic®
- » Dell PowerVault® MD3xxx
- » Dell Compellent®

NetApp:

- » NetApp® E-series
- » NetApp Filers (OnTAP 7-mode)
- » NetApp Filers (Clustered Data OnTAP (CDOT))

NetApp:

- » NetApp AFF
- » NetApp EF

Hitachi Data Systems:

- » Hitachi Data Systems® AMS
- » Hitachi Data Systems USP, USPV, VSP
- » Hitachi Data Systems HUS 100 Block-side, HUS VM Block-side

IBM:

- » IBM® N series
- » IBM DS3xxx, 4xxx, 5xxx
- » IBM Spectrum™ Virtualize (Vxxx and SVC)
- » IBM FlashSystem A9000/A9000R

IBM:

- » IBM DS6xxx, DS8xxx
- » IBM (ESS) Enterprise Storage Server
- » IBM Spectrum Accelerate (XIV)

HP:

- » HP® StoreServe® 3PAR
- » HP MSA/P2xxx
- » HP StorageWorks® XP
- » HP Nimble Storage AF & CS Series

HP:

- » HP StoreVirtual®/LeftHand™ P4xxx
- » HP StorageWorks EVA

Other Vendors:

- » Dot Hill® Assured SAN® 4xxx/5xxx
- » Pure Storage®
- » INFINIDAT® InfiniBox™

Other Vendors:

- » Oracle®/SUN®: StorageTek® 2xxx & 6xxx, Virtual Storage Manager 99xx Series, Flex
- » Oracle/Pillar
- » Xiotech®: Emprise 7000, Magnitude 3D 3xxx and 4xxr
- » ONStor®

ABOUT SOLARWINDS

SolarWinds provides powerful and affordable IT management software to customers worldwide, from Fortune 500® enterprises to small businesses, managed service providers (MSPs), government agencies, and educational institutions. We are committed to focusing exclusively on IT, MSP, and DevOps professionals, and strive to eliminate the complexity that our customers have been forced to accept from traditional enterprise software vendors. Regardless of where the IT asset or user sits, SolarWinds delivers products that are easy to find, buy, use, maintain, and scale while providing the power to address key areas of the infrastructure from on-premises to the cloud. This focus and commitment to excellence in end-to-end hybrid IT performance management has established SolarWinds as the worldwide leader in both network management software and MSP solutions, and is driving similar growth across the full spectrum of IT management software. Our solutions are rooted in our deep connection to our user base, which interacts in our THWACK® online community to solve problems, share technology and best practices, and directly participate in our product development process. Learn more today at www.solarwinds.com.

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