

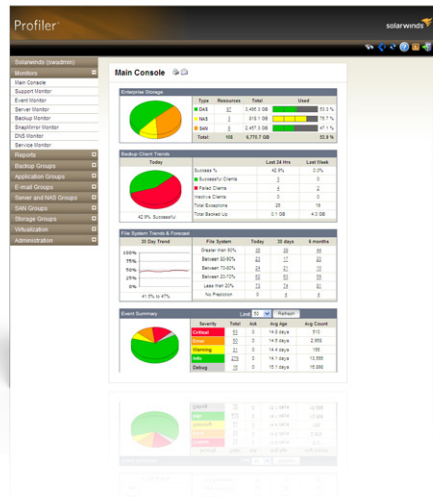
Storage Profiler for EMC® Symmetrix®

POWERFUL, AFFORDABLE STORAGE MANAGEMENT

GET BETTER INSIGHT INTO YOUR EMC® SYMMETRIX® ENVIRONMENT:

- Overview of disk drives on the Symmetrix disk array:
 - Size, model & manufacturer
 - Operational status
- Basic storage pools or RAID group assets:
 - Models each storage pool or RAID group
 - Depicts pool size, remaining space, & RAID type
- Advanced storage pool assets:
 - Each storage pool
 - Number of LUNs
 - Space consumed
 - Pool remaining managed & total managed space
- Basic LUN assets:
 - Overview of size of LUNs
 - RAID type
 - Associated storage pool ID
- Basic LUN path mapping:
 - Map from a bound LUN to its FC HBA port
- Advanced LUN path mapping:
 - Map LUN from storage processor to host initiator port
 - Depicts end-to-end path from LUN to host
- Array & LUN statistics:
 - Read, write, & total I/Os
 - Kbytes read, written, & transferred
- Automated report generation & delivery:
 - 50+ off-the-shelf reports
 - Quick & easy control of custom report generation
 - Detailed & configurable report delivery mechanism
- Additional Features:
 - Fibre Channel switch monitoring & reporting
 - HBA reporting & monitoring
 - Host-based storage usage
 - File analysis & data classification
 - Threshold alerting based on usage
- Lightweight ILM
- Custom Grouping

View the Health of Your Entire Storage Network Through a Single Pane of Glass!



Until now, you've had limited options for storage performance management. You could cobble together vendor-specific monitoring consoles and forget about real-time, consolidated access to performance and usage data for all of the devices in your storage network. Or you could drop a bundle for more comprehensive data storage management software and then spend even more for the small army of consultants required for deployment.

But now there's a better way — the SolarWinds way! We've simplified how companies manage network performance and now we are doing the same for information and storage management. Storage Profiler is the only intuitive, web-based application that combines storage monitoring, reporting, alerting,

and forecasting across the entire multi-vendor storage stack for DAS, NAS, and SAN systems. Storage Profiler unifies the view from all layers in the stack — from the user, all the way through to the disk — making administration more efficient, mitigating risks, and optimizing what you've got to work with.

Now you can easily and affordably gain valuable insight into storage utilization across your entire enterprise, identify the impact of a failure, and trend and forecast for storage capacity planning and business continuity decisions — all from a single pane-of-glass view!

Storage Profiler Highlights:

- **Combines storage monitoring, reporting, alerting, and forecasting** across the entire multi-vendor storage stack
- **Delivers real-time, agentless DAS, NAS, and SAN monitoring** and generates policy-based alerts on status and usage thresholds
- **Provides comprehensive storage reporting capabilities** across multi-vendor storage environments and at-a-glance insight into the health and usage of your SAN array
- **Automates the collection and presentation of storage forecasting data** and tracks performance over time to identify hot spots, peak hours, and potential outages
- **Maps applications and logical connections to the physical infrastructure** in order to provide a complete view into the performance and usage of your IT infrastructure
- **Automates the movement or deletion of unwanted files** to free-up disk space and reclaim the content of your storage devices

Storage Profiler Features

End-to-End Mapping

Storage Profiler gives you a unified monitoring view of all the layers in your storage stack — from the user to the disk. This end-to-end mapping and visibility makes administration more efficient, and also mitigates risks, while optimizing what you've got to work with. When used with Virtual & Server Profiler, the two products collectively provide the ability to map physical and logical storage to the guest OS, applications, and virtualized environment, and provide an end-to-end view into:

- Storage
- Fibre Channel switches
- HBAs on VMware® ESX servers
- Virtual machine guests
- VMware ESX hosts or any other physical server
- VMware ESX datastores

Storage Monitoring & Alerting

Storage Profiler delivers monitoring data on volumes, RAID groups/storage pools, disks, initiator, target ports, operational status for the array, processors, and all the associations between each entity. With its powerful monitoring capabilities, Storage Profiler helps you manage space consumption on RAID groups, map storage volumes back to the host, and understand how these volumes are load balanced across each storage processor on the array. This gives you valuable insight into storage health across the enterprise, so that you can identify the impact of a failure.

Storage Profiler also enables you to quickly and easily configure a full range of custom and pre-defined alerts. From a single interface, you can easily set thresholds, alerts, filters, and notifications. These alerts help you recognize and correct issues before your users experience performance degradation or availability issues.

Add New Rule

- File Analysis Rules**
Define file analysis rules for getting detail file information.
- Windows Event Logs Rules**
Define the types of events you want to record and notify by severity.
- Threshold Rules**
Define thresholds on data metrics.
- Directory Analysis Rules**
Define directory analysis rules for getting detailed directory info.
- Scheduled Rules**
Define the rules which will execute the script based on a schedule.
- Asset Change Rule**
Define the rules for monitoring the Asset changes.
- Disk Rule**
Define the rules for monitoring the disk health.
- RAID Rule**
Define the rules for monitoring the RAID health.
- LUN Rule**
Define the rules for monitoring the LUN health.
- Volume Rule**
Define the rules for monitoring the volume health.

Automated Storage Capacity Planning

Storage Profiler automates the collection of forecasting data and makes it easy to view growth rates, project when capacity will be reached, and forecast costs and budgetary requirements. Additionally, Storage Profiler's centralized monitoring tracks performance over time to identify hot spots, peak hours, and potential outages, providing you with the information you need to avoid outages due to full disk errors.

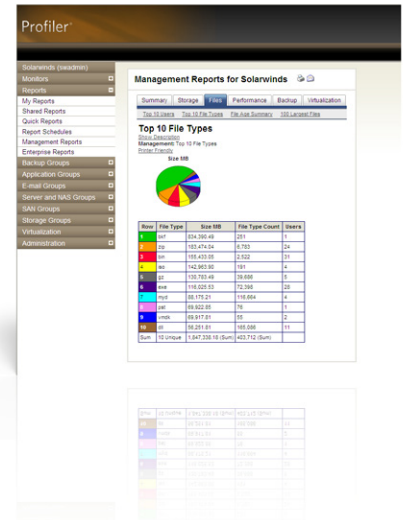
Storage Profiler also supports your tiered storage strategy by classifying data according to frequency of access, making it easy to determine which data should be stored on a top-tier storage device and which data can be moved to tape.

MODEL	MANAGES:
PL50	Up to 50 disks
PL150	Up to 150 disks
PL500	Up to 500 disks
PL1500	Up to 1500 disks
PL5000	Up to 5000 disks
PL15000	Up to 15,000 disks
PLX	Unlimited disks

Storage Data Classification

Storage Profiler provides complete file analysis and data classification (with drill-down capability), including automated usage trend reporting, storage capacity planning, and real-time storage monitoring. These capabilities can assist you in reducing operational expenses, maximizing storage investment, and lowering total cost of ownership.

With Storage Profiler, you can quickly build rules to identify specific files across the enterprise, obtain detailed information (host, path, owner, size, age), and take further action by sending this information to other applications via Profiler's self-contained reporting engine.



Multi-Vendor Storage Reporting

Storage Profiler's storage reporting console houses hundreds of pre-defined and fully customizable reports that provide in-depth information on every aspect of your multi-vendor storage environment, including domains, servers, volumes, files, and owners. A custom grouping feature even allows you to group storage, servers, and file systems into unique business-related entities for chargeback, division reporting, or geographic analysis.

Storage Profiler's reporting wizard simplifies creation of customized storage reports to meet the unique needs of your business. In addition, all reports can be automated, emailed, and published on a schedule and exported as HTML or CSV files for further customizing.

Storage Resource Management

Storage Profiler's native policy engine automates the movement or deletion of unwanted files to free-up disk space, reclaim the content of your storage devices, and optimize application performance. With Storage Profiler, you can save unneeded storage expenditures, alleviate burdensome management time, decrease total cost of ownership, and take credit for it with your boss!



Other Profiler Products:

- Virtual & Server Profiler
- Backup Profiler

SYSTEM REQUIREMENTS	
HARDWARE	MINIMUM REQUIREMENTS
Memory	2 GB
Hard Drive	50 GB
SOFTWARE	MINIMUM REQUIREMENTS
Operating System	Windows® 2003/2008 (32 & 64 bit); Redhat® Linux® or SUSE™; Solaris™ 10
Console	Internet Explorer®, Mozilla® Firefox®
TECHNOLOGY SUPPORT	
Storage Devices	EMC Symmetrix DMX arrays, as well as those from other leading vendors
Provider	EMC SMI-S Solution Enabler Provider 6.2.1 or greater