

EMC VIPR SRM

Visualize, Analyze, Optimize Your Storage

ESSENTIALS

VISUALIZE

- View relationships and topologies from application to storage array
- Correlate application health with storage key performance indicators (KPIs)

ANALYZE

- Gain insight into block, file, and object capacity utilization across multivendor, traditional and software-defined storage environments
- Validate configuration compliance

OPTIMIZE

- Align application workloads to the right tier of storage
- Streamline capacity planning via automated trends analysis
- Increase cost transparency through multitenant, chargeback or show-back reporting

CONTROL STORAGE COSTS

According to leading industry analyst estimates, the data managed by enterprises is expected to grow to over 40ZB by 2020. Today's datacenters must be architected for web-scale and capable of managing billions of users and millions of applications. They must be designed for speed, agility, mobility and growth. Rapid data growth combined with increased service level expectations introduces new management challenges for traditional storage environments. EMC ViPR Controller enables IT to create a web scale infrastructure leveraging existing storage investments. ViPR SRM is a comprehensive monitoring and reporting solution that helps IT visualize, analyze, and optimize today's storage investments while providing a management framework that supports investments in software-defined storage.

VISUALIZE

ViPR SRM was built to manage the complexity of growing, heavily virtualized storage environments. With ViPR SRM, you obtain detailed relationship and topology views from the application, to the virtual or physical host, down to the LUN to identify service dependencies. You can view performance trends across the data path and identify hosts competing for resources. ViPR SRM enables you to understand and manage the impact that storage has on your applications. With this improved insight, you can optimize storage resources to control the cost of rapid data growth.

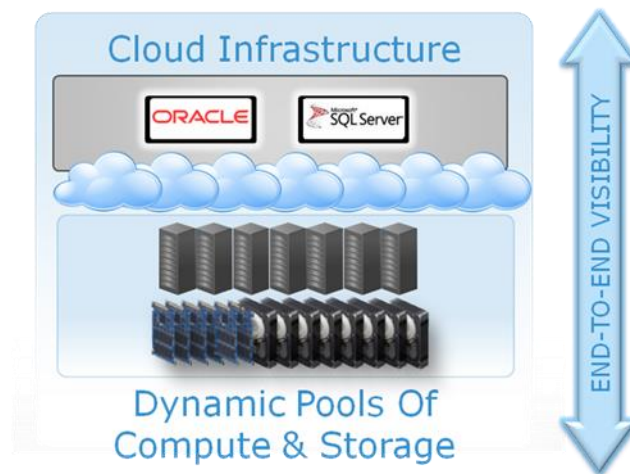


Figure 1: Visualize Infrastructure performance, health, availability and configuration.

REDEFINE

DATA SHEET

EMC²

ANALYZE

ViPR SRM helps you analyze health, configurations and capacity growth. You can quickly spot SLA problems through custom dashboards and reports that meet the needs of a wide range of users and roles. With ViPR SRM you can also track block, file and object capacity consumption across your data centers with built in views to help you understand who is using capacity, how much they are using, and when more will be required.

Service Level	Service Level Usable (GB)	Service Level Used (GB)	Service Level Free (GB)	Service Level Used Trend	% Service Level Used
Platinum	26.23	26.23		25.78	100.00
Silver	15.00	7.50	7.50	7.50	50.00
Bronze	9,635.26	9,635.26		35,190.31	100.00
System Resource	752.23	752.23	0.00	752.23	100.00
FAST VP	12,073.55	12,073.55		12,071.36	100.00
Other	176,418.17	157,184.13	19,234.04	157,176.62	89.10
Pool Contributor	21,412.20	0.00	0.00	0.00	0.00
Gold	491.27	491.27		4,334.78	100.00

Figure 2: Analyze capacity utilization by service level.

You can also continuously validate compliance with your design best practices and the EMC Support Matrix to ensure your environment is always configured right to meet service level requirements. And, you can define service levels and track consumption by disk technology, RAID type, array model, FAST policy or VMAX³ Service Level Objective to understand where and how capacity is being consumed.

Severity	BreachName	Device	Device Type	Affected Objects	Policy	Rule	Creation Time	Last Modified Time	State
CRITICAL	Number of masked volumes exceeds limit	linbge084.lss.emc.com	Hypervisor		Host Configuration	Maximum Number of Volumes Masked to Host Port	2013/11/29 03:27:32 EST	2013/11/29 03:27:32 EST	ACTIVE
MAJOR	Base Connectivity Interoperability for Hosts	linbge078.lss.emc.com	Hypervisor		EMC Support Matrix	Base Connectivity Interoperability for Hosts	2013/11/29 03:38:34 EST	2013/12/02 00:00:29 EST	ACTIVE
MAJOR	Switched Fabric Topology Interoperability	2028000DEC493F41	Fabric		Switched Fabric topology	Switched Fabric Topology Interoperability	2013/12/02 07:06:47 EST	2013/12/02 07:06:47 EST	ACTIVE
MAJOR	Base Connectivity Interoperability for Hosts	linbge016.lss.emc.com	Hypervisor		EMC Support Matrix	Base Connectivity Interoperability for Hosts	2013/11/29 03:38:34 EST	2013/12/02 00:00:30 EST	ACTIVE
MAJOR	Unsupported array software	APM00112801750-via-IPv4	Array		Duplicate Policy	Duplicate Rule	2013/12/02 00:11:36 EST	2013/12/02 00:11:36 EST	ACTIVE

Figure 3: Continuously validate compliance to best practices and the EMC Support Matrix.

OPTIMIZE

ViPR SRM helps you optimize capacity and improve productivity to get the most out of your investments in block, file and object storage. It shows historical workloads and response times to determine if you have selected the right storage tier. It tracks capacity use by service level, FAST policy or VMAX³ Service Level Objective allowing you to create show back or chargeback reports to align application requirements with costs. It analyzes relationships between primary storage and replicas to identify the total capacity used to support an application. And, it tracks consumption of thin pools and storage groups to

predict when more capacity will be required. This allows storage teams to make greater use of thin provisioning to improve utilization. Detailed capacity reporting improves planning to enhance purchasing processes and reduce costs. Armed with this information, you can optimize your storage environment to improve your ROI.

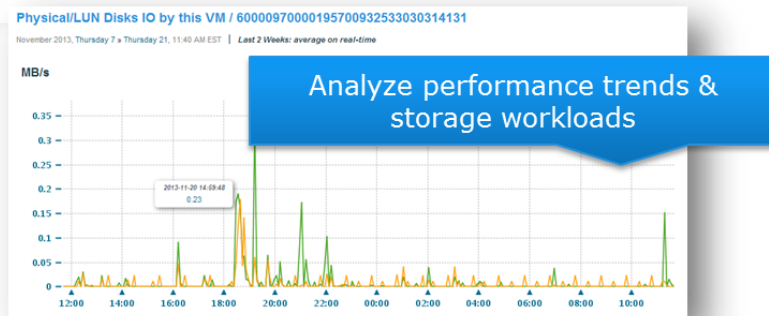


Figure 4: Analyze performance trends and storage workloads.



ViPR SRM offers a multi-tenant, browser based interface that allows you to stay productive even while away from the office with access anywhere and on any device. You can even download our app from the Apple App Store to stay connected.

Figure 5: Stay connected with mobile access.

TAKE THE NEXT STEP

Contact your EMC sales representative or authorized reseller to learn more about how EMC ViPR SRM can benefit your organization.

Also see our solutions in the [EMC Store](#).

CONTACT US

To learn how EMC products, services, and solutions can help solve your business and IT challenges, [contact](#) your local representative or authorized reseller—or visit us at www.EMC.com

EMC², EMC, the EMC logo, and ViPR are registered trademarks or trademarks of EMC Corporation in the United States and other countries. All other trademarks used herein are the property of their respective owners. © Copyright 2013, 2014 EMC Corporation. All rights reserved. Published in the USA. 12/14 Data Sheet H12350.3