

# Getting a Grip on Storage



## Overview



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Simply put, enterprises spend a considerable amount of money and time to control and administer storage growth. Regardless of the industry, the amount of data that organizations store, administer and protect continues to be on an upward trajectory. As a result, the costs associated with managing storage are climbing as well. Despite this, many companies continue to use inefficient storage practices, noncompliant systems and wasteful provisioning of storage.

Unfortunately, there is a great deal of uncertainty and frustration about how best to move forward. For instance, complexity and overlap across environments lead to extended resolution time for migrations, outages and day-to-day management. As a result, some data center resource pools end up being overused and running out of capacity whereas others remain underutilized. Although having too much capacity on high-end storage reduces ROI, heterogeneous storage management

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requires too many tools. At the same time, enforcing compliance in this multivendor environment is challenging, and there is uncertainty about whether configurations are in compliance with industry regulations.

Add to this mix of challenges serious issues with reporting because it is difficult to get an end-to-end view of network topology. Specifically, manual capacity reporting is error-prone and undependable. As such, inadequate reporting and a lack of an end-to-end topology result in reactive management of capacity and performance-related issues. And the lack of management and usage reporting affects chargeback and recovery of unallocated charges.

But the worst of it is that costs are spiraling out of control. Keeping pace with storage growth requirements is an ongoing challenge. In addition, many organizations fall victim to high storage costs due to the combination of low utilization rates and high data growth.

## Solution Spotlight



To overcome all these storage pain points, organizations can look to storage resource optimization (SRO) to introduce best practices, improve procurement efficiency, enforce compliance and optimize provisioning.

Today's storage infrastructures consist of multiple sites using heterogeneous storage platforms from different vendors to deliver a wide variety of storage services. Each storage platform is chosen for its ability to handle specific workloads, each with its own unique set of APIs and management and monitoring tools. With this diversity comes the challenge of managing these storage silos efficiently. As the amount of data grows, it takes an increasingly large number of specialized IT administrators executing repetitive, serial and manual tasks to deliver static, slow-to-respond storage services. This in turn is driving end users toward Shadow IT services. Neither the manual process nor users taking matters into their own hands is a sustainable solution.

Utilizing a standard platform to visualize, analyze and optimize storage infrastructure helps everyone understand storage capacity and provides greater visibility and control through multivendor capacity, performance and configuration analysis for traditional, virtual and software-defined storage environments. A well-designed SRO solution lends insight into host-to-storage relationships and dependencies while also enabling end-to-end monitoring of storage services through analysis of real-time metrics for applications, hosts, switches and arrays.

While delivering a well-sscoped transformation blueprint identifying potential risks and benefits, SRO also enables the organization to analyze and solve performance issues within minutes or hours—not days or weeks. It provides dashboards across the heterogeneous storage landscape for better management and response. SRO also covers multiple storage systems and/or protocols from a wide variety of vendors.

Capgemini's SRO offering is an out-of-the-box, pay-as-you-go service for heterogeneous storage environments—there isn't anything like it available anywhere today.

## Why Capgemini?



Capgemini leverages the right tools, with highly skilled consultants utilizing proven systems and processes to deliver SRO. The tools enable organizations to capture end-to-end capacity, performance, configuration and compliance data from multivendor storage infrastructure components, and the Capgemini experts can analyze captured data and advise customers on how to address the pain points.

In just 12 months, Capgemini has deployed SRO solutions for more than 60 customers supported by 20 data centers in six countries, covering 25PB of storage.

These deployments have effectively enabled savings of \$3.87 million so far in 2015, with more than \$22 million savings forecast in the next four years.

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Using the right blend of SRO technologies, Capgemini's team includes a comprehensive unit of professionals including engagement managers, architects and subject matter experts specializing in the storage industry. They adhere to well-established systems and processes designed to facilitate the successful completion of every SRO engagement. The tools utilized include EMC's ViPR storage resource manager, which enables IT to visualize storage relationships, analyze configurations and capacity growth and optimize resources to improve return on investment in traditional and software-defined storage environments.

## What's Next



Get started today with Capgemini Storage Resource Optimization. This six-to-eight week consultancy program includes an overall assessment of your current storage environment, at the end of which you have the option to continue on a pay-as-you-go basis.

Working with Capgemini to establish SRO includes four distinct phases:

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| Design   | Capgemini works closely with your team to define the scope and conducts an SRO assessment including exploration of the specific business challenges your organization faces, to determine which improvements make the most sense. This assessment enables the creation of a design-and-deployment plan as well as any needed documentation. |
| Deploy   | Capgemini deploys the software and tools according to the design—on a physical or virtual infrastructure—to meet your preferences.  |
| Discover | Capgemini determines which applications, hosts, SAN switches and storage arrays best fit into the deployed software and collects metrics based on the scope and boundary agreement.   |
| Deliver  | Capgemini analyzes captured data and delivers detailed reports that ultimately address business challenges along with recommendations for further improvement.  |

Contact us at:  
[infra.global@capgemini.com](mailto:infra.global@capgemini.com)



## About Capgemini

With 180,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2014 global revenues of EUR 10.573 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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