



MSP Guide to Building a
Managed Storage Service



Executive Summary

A managed storage service affords MSPs the opportunity to enter a new and exploding segment of the managed services business. As IT complexity increases, companies are turning to MSPs to manage the growth and deployment of their storage needs, both on-premises and in the cloud.

This new class of managed storage service provides MSPs with many value propositions:

- Major differentiation against incumbents offering only “break-fix” services
- Untapped new revenue streams with little competition
- Market entry and upsell opportunities for both new and established MSPs

For a new market entrant, a managed storage service brings significant differentiation against traditional MSPs and hosting operators who focus on network and server-centric offerings. Yet some MSPs overlook storage as they see it as a “different animal.” In response, the storage vendor community has recently offered MSPs incentives to adopt managed storage options.

This paper summarizes the market opportunity and describes an effective three-tiered service model. It defines offerings for both price-driven customers and those who would embrace premium services. It also shows how customer visibility into storage availability, capacity, and performance enables rapid market share growth.

It also references the benefit of offering a managed storage service based on the ScienceLogic monitoring platform.

Strategic Value to the MSP

Introducing a managed storage service provides MSPs with strategic value. Not only does it create a new revenue stream from new and existing customers, it also positions the MSP as a trusted adviser to the customer.

For an **incumbent managed storage provider**, this differentiated service avoids margin erosion by adding value instead of cutting price. It pulls through professional services and consulting services, as well as hardware upsell opportunities. It also goes a long way to cementing the MSP’s relationship with storage vendors.

Note to the Reader

This document is an excerpt from a more comprehensive white paper that ScienceLogic makes available to its MSP customers. To learn more, please submit a request via our MSP JumpStart form at www.sciencelogic.com/jumpstart and a ScienceLogic representative will contact you.

“...a managed storage service brings significant differentiation against traditional MSPs and hosting operators who focus on network and server-centric offerings.”

For an **established MSP**, introducing a managed storage offering provides an opportunity to upsell and cross-sell services to their customers. The relationship between the MSP and their customer becomes more “sticky” and relevant. And again, it establishes the MSP as a trusted advisor.

For **new market entrant MSPs** entering the storage market for the first time, they can now capture new customers quickly with something competitors don’t offer. This creates strong differentiation against traditional MSPs due to enhanced visibility of performance, availability, and capacity. And it strengthens their relationship with multiple storage vendors.

“...capture new customers quickly with something competitors don’t offer.”

Enterprise Value Proposition for a Managed Storage Service

From the perspective of the customer, a managed storage service offering solves multiple problems:

- Offloads manual repetitive tasks to an MSP and frees up time for more strategic projects
- Reduces cost by eliminating the need for an internal storage administrator
- Simplifies staff responsibilities and shifts them from full-time to part-time (or to a lower skill level)
- Fills a gap in staff skills as storage complexity increases
- Moves storage-related costs to an OpEx model instead of CapEx
- Increases accountability and quantifies performance expectations (“one throat to choke”)
- Increases flexibility to add and drop capacity quickly, without drag on staffing and ramp time

When sold in accordance with the model described in this paper, the overall value of a managed storage service provides additional benefit:

- Enhanced real-time visibility into storage performance and capacity
- Higher storage system availability and performance due to greater accountability and stricter SLAs
- Advanced warning of performance and capacity bottlenecks and constraints
- Better information for more robust and reliable capacity planning
- On-demand access to storage-literate staff resources and expertise

This enhanced definition of a managed storage service provides market differentiation. It allows new MSP entrants to capture market share from incumbent service providers who provide only basic 24x7 monitoring with “break/fix” management support.

Managed Storage Service Overview

A three-tiered managed storage service enables MSPs to offer Bronze, Silver, and Gold level premium services. It addresses a range of price points and attracts a broad level of customer interest. It appeals to both the price-sensitive customer and the more resource-constrained large enterprise, who may be willing to consider a managed service approach.

“[A managed storage service] allows new MSP entrants to capture market share from incumbent service providers who provide only basic 24x7 monitoring with ‘break/fix’ management support.”

Tiered Managed Storage Service Features

Managed Service Feature	Bronze	Silver	Gold
MSP is responsible for acting on events and resolving problems	Optional (monitor-only)	X	X
Discover all storage system components at customer location or hosting center	X	X	X
Monitor storage system and component availability	X	X	X
<ul style="list-style-type: none"> • Whole disk system 		X	X
<ul style="list-style-type: none"> • Connectivity 	X	X	X
<ul style="list-style-type: none"> • CPU, controllers, fans, PSU 	X	X	X
<ul style="list-style-type: none"> • Physical disks 	X	X	X
Live event views via hosted monitoring platform	X	X	X
Availability dashboard via customer portal	X	X	X
Monitor storage system and component performance and capacity		X	X
<ul style="list-style-type: none"> • Disk I/O 		X	X
<ul style="list-style-type: none"> • Storage pool capacity 		X	X
<ul style="list-style-type: none"> • Disk latency 		X	X
<ul style="list-style-type: none"> • Storage pool latency 		X	X
<ul style="list-style-type: none"> • LUN I/O and latency 		X	X
<ul style="list-style-type: none"> • NAS FS I/O and latency 		X	X
<ul style="list-style-type: none"> • NAS capacity 		X	X
<ul style="list-style-type: none"> • Storage pool redundancy (RAID) 		X	X
<ul style="list-style-type: none"> • LUN disaster recovery monitoring 		X	X
<ul style="list-style-type: none"> • NAS disaster recovery monitoring 		X	X
Live performance dashboard via customer portal		X	X
Predictive capacity analytics and customized dashboards			X
<ul style="list-style-type: none"> • Capacity planning dashboard views 			X
<ul style="list-style-type: none"> • Storage array—live configuration map 			X
<ul style="list-style-type: none"> • Enhanced SLAs 			Optional
<ul style="list-style-type: none"> • On-site staffing and consulting 			Optional

Service Tier Descriptions

Bronze Tier

The entry-level service tier has the MSP monitoring availability and reporting back to the customer periodically. The customer does not see performance metrics. In the case of storage failure or lack of availability, the MSP begins an RMA process for break-fix support and notifies the customer.

The Bronze tier comprises the following service deliverables:

- The supply, installation, and commission of all storage devices (except where management is being added to an installed base of customer storage devices, or where storage is hosted)
- Monitoring of all storage units on a continuous 24x7 basis
- Break-Fix support and RMA process management on behalf of the customer
- Customer notification of storage device failure
- Monthly report on failures and RMA status
- Customer-facing portal delivers reports and enables trouble ticket entry and status

The MSP monitors the following device components and parameters, with monitoring results shown to internal and external users as follows:

Internal Operations View	Customer View
Whole Disk System*	Whole Disk System*
Physical Disks	
Controllers	
PSU & Fans	
Connectivity	
CPU	
Disk I/O	
Storage Pool Capacity	

*For "Whole Disk System" the monitoring platform should measure average CPU utilization and storage capacity across all disk nodes.

Silver Tier

In the Silver service tier, monitoring is focused on capacity and performance, as well as availability metrics. The MSP continues to manage all break-fix and RMA support issues.

This tier includes all the Bronze tier capabilities described previously, plus the following:

- Monthly or quarterly account reviews of capacity and performance issues
- Extended monitoring for all units on a continuous 24x7 basis
- Extensive visibility of performance, availability, and capacity metrics exposed to customers via live, customizable web-based dashboards
- Enhanced reporting that includes storage performance reports

The MSP monitors the following device components and parameters, with monitoring results shown to internal and external users as follows:

Internal Operations View	Customer View
Whole Disk System	Whole Disk System
Physical Disks	
Connectivity	Connectivity
CPU	
Controllers	
PSU & Fans	
Disk I/O	Disk I/O
Storage Pool Capacity	Storage Pool Capacity
Disk Latency	Disk Latency
Storage Pool Latency	Storage Pool Latency
LUN I/O and Latency	LUN I/O and Latency
NAS FS I/O and Latency	NAS FS I/O and Latency
NAS Capacity	NAS Capacity
Storage Pool Redundancy (RAID)	Storage Pool Redundancy (RAID)
LUN Disaster Recovery Mirroring	LUN Disaster Recovery Mirroring
NAS Disaster Recovery Mirroring	NAS Disaster Recovery Mirroring

Gold Tier

The Gold tier of service includes all the functionality from the Bronze and Silver tiers and adds the following:

- Enhanced SLA on turnaround time for RMAs
- Enhanced SLA on storage performance, including latency
- To enforce the SLA, the internal MSP team would monitor LUN and NAS file system I/O and latency
- To understand when a storage system may be getting close to missing the SLA, the internal MSP team should monitor storage pool, individual disk I/O, and latency
- Optional on-site staffing for a variety of tasks on behalf of the customer, including storage system design, architecture planning, troubleshooting, and capacity planning

This third tier of service may not be available across all storage hardware due to lack of hardware functionality or monitoring visibility, depending on the level of instrumentation inside the storage device or the granularity of performance data exposed by a storage vendor's API. To deliver this enhanced level of service, the customer may need to upgrade his storage hardware, triggering an opportunity for hardware upsell or technology refresh.

Pricing Considerations

This document does not address pricing, which is difficult to assess in such a dynamic environment. However, MSPs have a couple options. First, they can price by dollars per month per terabyte of storage. Second, they can price by dollars per month per storage device, which may allow for greater pricing transparency. This is especially true when assuming management control of customer-provided storage assets.

When considering pricing and margins, it is critical to understand service delivery cost from both the bottom-up and top-down perspectives.

The **bottom-up analysis** should consider the following components, which coalesce to create a blended cost baseline for each customer:

- Monitoring platform and/or device license cost per logical or physical storage device
- Staffing cost for daily operational support, both administrative and escalated technical resources
- Service delivery cost in terms of help desk, portal, and IT support
- Account management support

The **top-down analysis** dictates that cost can be estimated based on total operations and service delivery expense in the following areas:

- Provisioning
- Operations—monitoring and troubleshooting
- Operations—storage device administration
- Management
- Delivery and customer support

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The ScienceLogic Monitoring Platform

The ScienceLogic platform is a multi-tenanted monitoring system built specifically for MSPs. It monitors their customer's entire network, systems, and storage infrastructure, whether on-premises, hosted by the MSP, or in the cloud. The ScienceLogic platform may monitor more than the storage infrastructure alone. It can form the basis of many services that MSPs offer their customers, such as managed server or hosted private cloud offerings.

For a managed storage service, the ScienceLogic platform is fully multi-tenanted. It automatically discovers all IT assets and delivers availability and performance metrics across the entire customer population. This includes the ability to receive and manage events and alarms via SNMP or other mechanisms, including vendor APIs. MSPs can leverage ScienceLogic on an internal operational basis or for individual customer consumption via live dashboards of historical service performance and storage element conditions.

The platform includes internal capability for runbook automation and ticketing, as well as reporting. It forms the basis for a highly efficient, integrated, and automated service delivery platform. ScienceLogic's REST API enables rapid integration with other management systems such as ticketing or orchestration tools. Advanced visualizations enable MSPs to roll out real-time dashboard views to customers. These dashboards provide status conditions and comprehensive views of storage performance and capacity. ScienceLogic dashboards provide major competitive differentiation in this category of service.

These capabilities are easy to expose securely to external customers on a selective basis—at no extra cost to the MSP. This enables MSPs to generate high-margin, premium service revenues from feature exposure to customers, with no incremental licensing or platform cost to the MSP.

From a system administration and support perspective, the ScienceLogic platform requires significantly less administrative effort. This is especially true when compared to traditional monitoring systems, many of which stitch together disparate modules that the vendor acquired or built separate from the core platform. The ScienceLogic platform is a single code base, built as a multi-tenant platform from the ground up. Thus, integrations and upgrades are much simpler and require far less professional services or effort to create and maintain.

For more information on ScienceLogic please visit our website at www.sciencelogic.com. Also, you can access similar MSP guides by requesting free access to our MSP JumpStart program.

