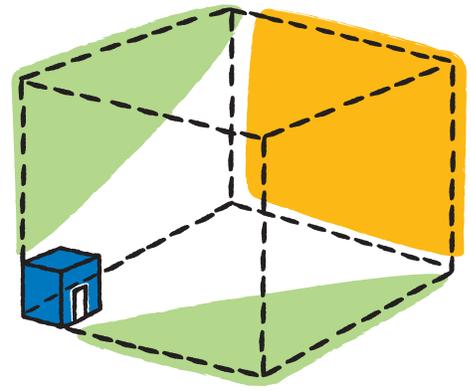




NetApp®



Datasheet

OnCommand Insight

Storage resource management that provides brokering and monitoring across private cloud, hyperscaler providers, service providers, and on-premises storage environments

KEY BENEFITS

Optimize Your Existing Resources

- Have true vendor independence.
- Identify misused, underused, or orphaned assets.
- Define policies and establish best practices.
- Avoid problems and meet service levels.

Make Better Decisions Based on Real-Time Data

- Resolve problems more quickly.
- Accurately plan future purchases.
- Avoid overspending and defer capital expenditures.

Accelerate IT Initiatives

- Better understand virtual environments.
- Validate changes to facilitate migration and consolidation.
- Manage risks and minimize downtime.
- Get on- and off-premises independence for hybrid cloud deployments.

The Challenge

Economic and competitive pressures are forcing IT teams to continually improve efficiency, reduce costs, and respond more quickly to business and mission needs. Shared IT infrastructure and the cloud are increasingly viewed as the only ways to sustain continued IT improvement, but the reality is that current data center infrastructure is a heterogeneous mix of server, network, and storage platforms. Some applications are virtualized while others are not, and data growth continues at alarming rates. Yet although Gartner predicts that storage capacity demands are growing around 50% per year, storage budgets are expected to grow at less than 10%.

How can you get to where you need to be when you're not able to identify and fully utilize the resources you already have? You need the right storage resource management tool from a partner who understands the challenges you face to make sense of your environment, rationalize your purchasing decisions, and take the pain out of technology transitions.

The Solution

NetApp® OnCommand® Insight is the answer. Part of the portfolio of NetApp OnCommand products that help you better manage your storage resources, OnCommand Insight provides you with a cross-domain view of performance metrics, including application performance, datastore performance, virtual machine performance, and storage infrastructure performance. OnCommand Insight analyzes tier assignments and lets you load-balance your entire application portfolio across the storage fabric. It allows you to improve application performance and drive up the efficiency levels of your existing storage resources so that you can maximize resource investment. OnCommand Insight lets you manage storage as an end-to-end service and to integrate storage into your entire IT service-delivery chain.

Get More from Your Existing Resources

OnCommand Insight provides flexible, efficient management for heterogeneous environments. Because it requires no agents, installation is straightforward and nondisruptive. Installed storage and SAN devices are continually discovered, and detailed

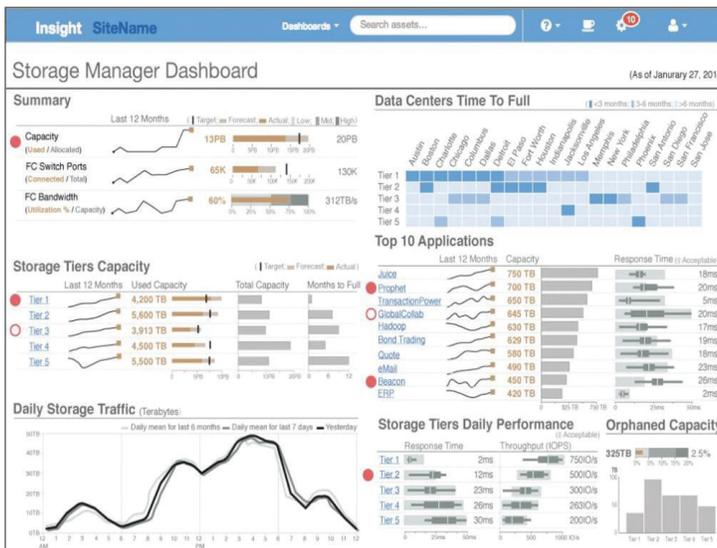


Figure 1) This out-of-the box dashboard is designed for storage managers and business analysts to use for application capacity planning and identifying cost-saving

information is collected for full visibility of your entire storage environment. You can quickly identify misused, misaligned, underused, or orphaned assets and reclaim them to fuel future expansion. When integrated into your daily operations, OnCommand Insight reduces service-delivery time and yields significant operational improvements. Your administrators focus less time on reactive troubleshooting and routine tasks and more time on business-critical projects.

OnCommand Insight's unique capability to understand an application's path to storage, combined with device performance information, results in unparalleled visibility into the cost efficiency of delivering storage service to an application. The result is lower capital costs through improved resource utilization and improved application performance by eliminating brownouts and outage risks.

OnCommand Insight detects vulnerabilities in and risks to your environment, so you avoid problems and meet key service levels for availability, performance, and utilization. All important aspects of your environment are monitored so that you get the most from your storage resources to maximize return on investment.

You define policies and establish best practices that include redundancy, sharing, and utilization. OnCommand Insight planning tools simulate changes

you intend to make, check for policy violations that could lead to service-quality issues or outages, and proactively identify problems so they can be corrected before they affect your operations.

Easily Determine What and When to Buy

OnCommand Insight tracks your storage utilization and provides trending information that shows you how much storage you have at each service level; it also accurately predicts how much you are likely to need in the next period. As a result, you can make more informed and timely business decisions based on real-time data, vastly improving capacity management. You buy what you need, when you need it—avoiding overspending and deferring capital expenses until they are absolutely necessary (see Figure 1).

Detailed business-level reporting gives you full cost awareness. You can immediately see how much storage each business unit or application used in each storage tier over a given period of time. Comprehensive information allows you to work with business units to make more intelligent decisions about how storage is being used. You quickly identify datasets that are misplaced and reduce the amount of expensive tier 1 storage you need. You can assign a value to each tier of storage to simplify the process of charging business units for resources used.

Take the Risk Out of Technology Transitions

Because OnCommand Insight maintains an internal representation of the physical and logical state of your entire storage environment, you can proactively model planned migrations and see what the impacts will be, based on your existing policies, before you make any changes. By using this "what-if" information, you can tailor a migration plan that takes into account storage services that need to be delivered during and after migration, reducing the risk of infrastructure changes.

Whether you are consolidating, virtualizing, or deploying cloud services, OnCommand Insight helps you minimize downtime and accelerate time to completion. This not only reduces the immediate costs associated with each transition, it also lets you fully utilize new resources more quickly for faster return on investment. As a result, your IT operations become more cost effective.

Four innovative capabilities

OnCommand Insight is composed of four distinct modules:

- **Insight Assure:** Complete monitoring, risk detection, and compliance auditing for complex environments
- **Insight Perform:** Highly scalable solution for a broad view of performance data and resource optimization
- **Insight Plan:** Global visibility of asset utilization to simplify purchasing decisions

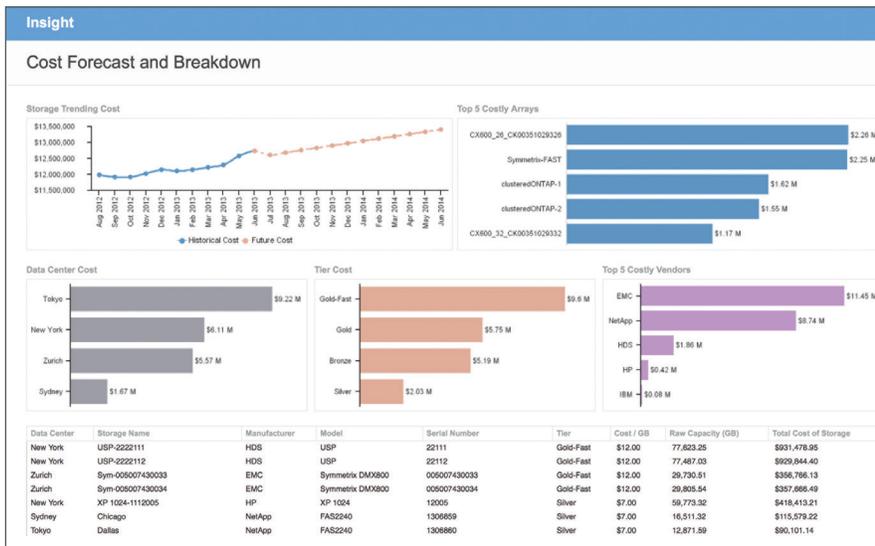


Figure 2) Report on capacity utilization and costs by application, business unit, data center, and so on for cost awareness or to enable chargeback for storage.

- **Insight Discover:** A single platform that identifies your entire inventory and integrates all the OnCommand Insight modules

Each of the OnCommand Insight modules can be used individually or in any combination to address your unique business needs and requirements. Whether you are introducing or expanding virtualization or moving to the cloud, OnCommand Insight can get the job done.

Discover, visualize, and monitor with the Insight Assure module

OnCommand Insight Assure offers powerful capabilities for visualizing and monitoring your storage, defining global policies, and simplifying management in complex virtualized environments. It provides full visibility into your storage environment, including host-to-storage access paths, storage availability, and change management. Insight Assure operates without agents in near real time, and it works with all major storage and SAN platforms and protocols.

Insight Assure identifies and correlates service paths that describe the relationship between a particular application and its data. It provides the information to proactively manage your storage services to increase service quality, prevent application failures, and improve recovery time. It reduces costs by improving utilization and decreasing the time and effort required for troubleshooting.

Insight Assure lets you define global, application, or host-based policies on parameters such as security, sharing, minimum sessions, and minimum connections, and to validate changes against the resulting service model.

Service-path awareness and VMware® vCenter™ integration give you cross-domain visibility from virtual machine (VM) to volume, allowing you to more easily manage both your storage and virtual server architectures and prevent VM sprawl. Insight Assure helps you identify and reclaim the orphaned storage that results when a VM is suspended or shut down and forgotten.

Get ongoing compliance and advanced auditing

Insight Assure is designed to provide ongoing compliance for required IT audits. It offers comprehensive audit reports, including a detailed audit trail of all events and their impact. Change processes are automatically checked to minimize impact, while downtime and root-cause-analysis capabilities improve incident management.

Achieve optimum performance with the Insight Perform module

OnCommand Insight Perform helps you improve end-to-end performance from your VM environment through your storage network down to your disks. It gathers near-real-time VM, fabric, and storage performance data from your environment and maps it to applications,

hosts, and service paths. It lets you proactively perform load balancing on your VMs, servers, storage networks, or each storage device to avoid congestion or contention. This maximizes the ROI of your existing storage assets and defers new purchases. When workloads are balanced, you can safely increase resource utilization without risking application burnouts and unplanned outages.

With Insight Perform you can:

- Improve VM, server, array, switch, and fabric utilization without compromising performance.
- Detect multipath configuration errors through traffic analysis.
- Identify the best VM, host, array, and switch resources to allocate to a new application.
- Monitor storage response time and correlate it with individual application performance.
- Optimize storage allocation to accelerate application performance.
- Validate tiering allocations and determine that all datasets are on the optimal tier.

Plan globally for improved results

OnCommand Insight Plan helps you make better purchasing decisions and provision capacity more effectively from a global business perspective. An open, enterprise-class data warehouse lets you roll up data from multisite environments, gain global visibility across

**ONCOMMAND INSIGHT:
AGENTLESS, MULTIVENDOR, MULTIPROTOCOL**

PERFORM ASSURE PLAN

Performance Monitoring and Analytics	
Application to storage disk monitoring, threshold alerting, and root-cause analysis (VMware ESX®, datastore, volume, and disk performance)	•
Predict and alert on performance issues	•
Change, Configuration, and Compliance Management	
Discover, model, monitor, track, and validate configuration-related changes, including proactive change modeling	•
Create policies that automatically monitor for IT compliance with regulations, governance, and industry best practices	•
Storage service catalog for tiered storage	•
Capacity Management	
Capacity consumption, trending, forecasting, and efficiency	•
Showback/chargeback, cost analysis	•
Storage reclamation and reallocation	•
Canned and custom reporting (role-based tier management, business level by tenant, BU, project, application, and so on)	•
Insight Discover: a single platform that automatically inventories your environment and integrates the modules	

Table 1) OnCommand Insight is composed of four modules. Start with the Discover module and add on from there. Perform, Assure, and Plan are sold independently, so you can purchase based on your needs.

distributed infrastructures, and take advantage of detailed analysis and reporting capabilities. Relevant VM, storage system, and network switch information from multiple instances can be aggregated into a single view, giving you a global view of your asset usage.

Insight Plan offers visibility into global storage resource allocations, rule-based tier management, and business-level usage of resources by tenant, business unit, project, application, and other business-related analytics.

The data warehouse facilitates capacity-related reports such as chargeback, consumption analysis, and forecasting. Insight Plan includes many out-of-the-box reports. It also provides flexible report authoring, which allows you to create custom reports to support capacity planning, purchasing, storage-tier analysis, storage service catalogs, trending and historical usage, audit, chargeback, and more (see Figure 2).

Third-Party Integration

The data warehouse also facilitates integration and more rapid adoption of industry best practices such as ITIL and IT service management, the implemen-

tation of configuration management databases, better financial management, and cost transparency. It also supports other key data center service automation initiatives.

A standard set of REST APIs, which are accessible through the OnCommand Insight web UI, simplifies integration with NetApp and third-party software offerings. Common Access Card support is also included for secure authentication into OnCommand Insight and ActivClient™ computer systems.

Multivendor Storage Support for True Vendor Independence

OnCommand Insight provides operations, service quality, and cost management across NetApp platforms as well as those of other major storage vendors, including EMC, HDS, HP, and IBM. OnCommand Insight can also be used to monitor server virtualization, Fibre Channel switches, and Access Gateway/NPV.

Maximize Your Investment with NetApp Services

Engage with NetApp Services to quickly achieve the results you want from your OnCommand Insight software. Our

services experts use our extensive resources, tools, and best practices to deliver deep knowledge of key capabilities. We provide the specialized skills required to tailor configuration, integration, and reporting features to meet your specific business requirements. You get the reports and metrics you need in a format you understand to enable significant improvement in IT performance and planning.

Learn More About OnCommand Insight

Go to www.netapp.com/oncommand_insight to find out more about the entire OnCommand Insight product suite.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

www.netapp.com



© 2015 NetApp, Inc. All rights reserved. No portions of this document may be reproduced without prior written consent of NetApp, Inc. Specifications are subject to change without notice. NetApp, the NetApp logo, and OnCommand are trademarks or registered trademarks of NetApp, Inc. in the United States and/or other countries. VMware and ESX are registered trademarks and vCenter is a trademark of VMware, Inc. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. DS-3201-0215

