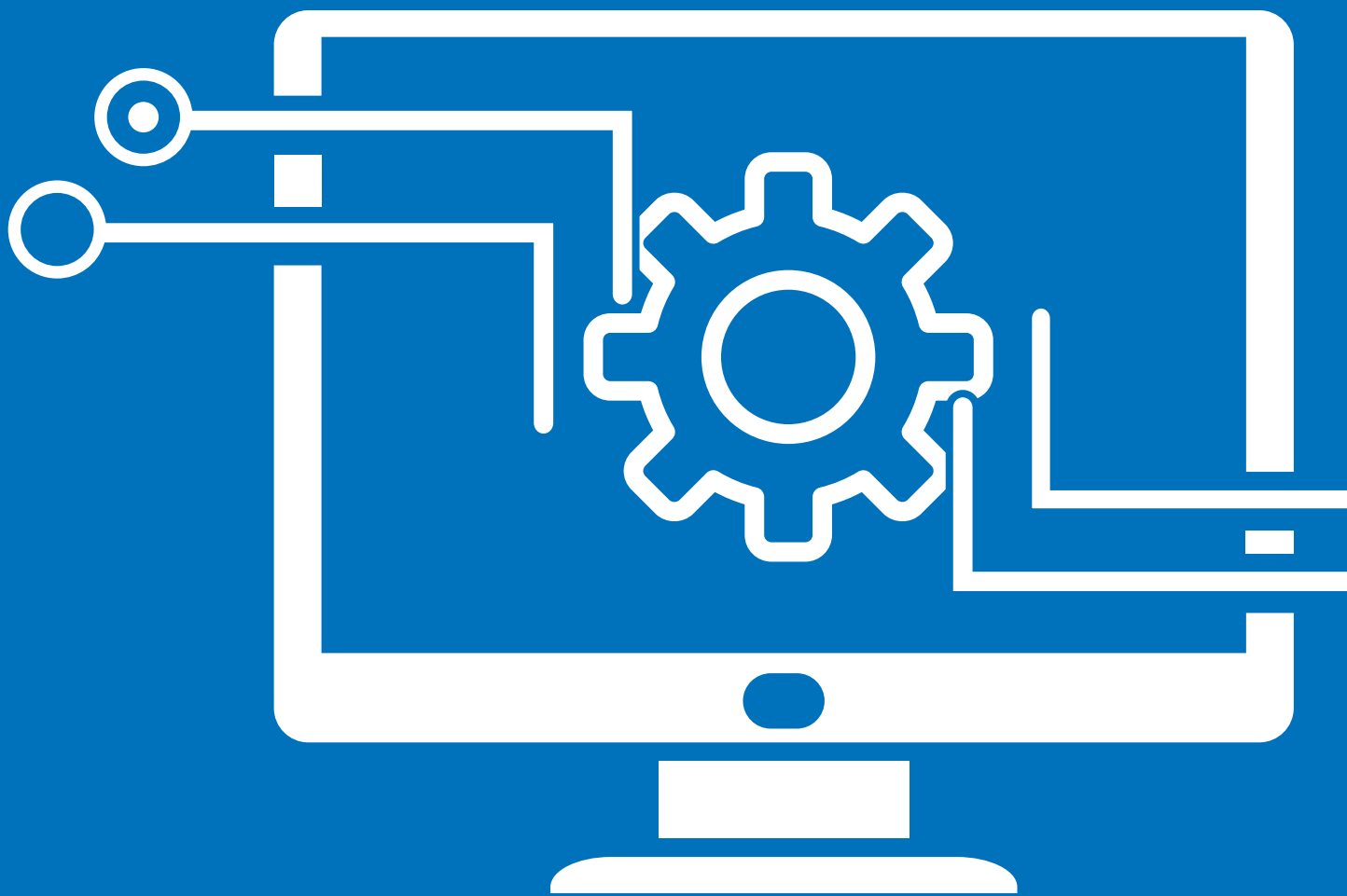


HOW REAL USERS BENEFIT FROM NETAPP ONCOMMAND INSIGHT

PeerPaper Report



TIPS AND ADVICE FROM ENTERPRISE USERS

ABSTRACT

Infrastructure managers today are confronting the challenge of delivering services from multiple, interdependent vendor systems to a diverse clientele. NetApp OnCommand Insight (OCI), a platform for IT Infrastructure Management, offers a data-driven, analytical solution. This paper explores how real users of OCI have put the platform to work in their own unique environments based on experiences described on IT Central Station. It highlights the use cases and advantages of OCI in a production setting.

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INTRODUCTION

Managing infrastructure in a modern enterprise typically involves staying on top of performance and capacity across multiple systems and vendor solutions. The environment is also likely to be more and more virtualized and moving toward hybrid public/private cloud architectures. Under these circumstances, it can be a challenge to deliver consistent, SLA-compliant services to clients.

NetApp OnCommand Insight (OCI) offers a data-driven, analytical solution. A platform for IT Infrastructure Management, OCI enables IT managers to monitor performance, track utilization and predict future capacity needs in a multi-vendor, virtualized and hybrid cloud environment. This paper explores how real users of OCI have put the platform to work in their own unique environments based on experiences described on IT Central Station. It highlights the use cases and advantages of OCI in a production setting.

Uses of Netapp OnCommand Insight (OCI)

IT Central Station members employ OCI in a range of infrastructure management use cases. A [Staff Engineer](#) at a tech company reported, “Mostly I want to know about our datacenter’s situation.” A [Storage Engineer](#) at a tech services company¹ described his use case by saying, “Functionally we’re able to use it to troubleshoot pretty quickly.” A [Senior Data Protection Specialist](#) at a comms service provider said, “We use it for troubleshooting and to identify the root cause of problems. We also use it for proof of concept and comparisons. It gives us the ability to report on all our storage environment. It gives us a way to monitor, visualize, and pinpoint problems.”

He added, “We can focus on and project usage growth. We can also monitor and measure performance of all the stores. We can compare, use it for capacity planning, forecasting, present usage.” Similarly, a [Systems Administrator](#) at a real estate/law firm expressed appreciation for OCI’s ability to help him with performance monitoring and “monitoring events happening within the cluster.” Figure 1 offers a simple reference architecture to show how OCI works.

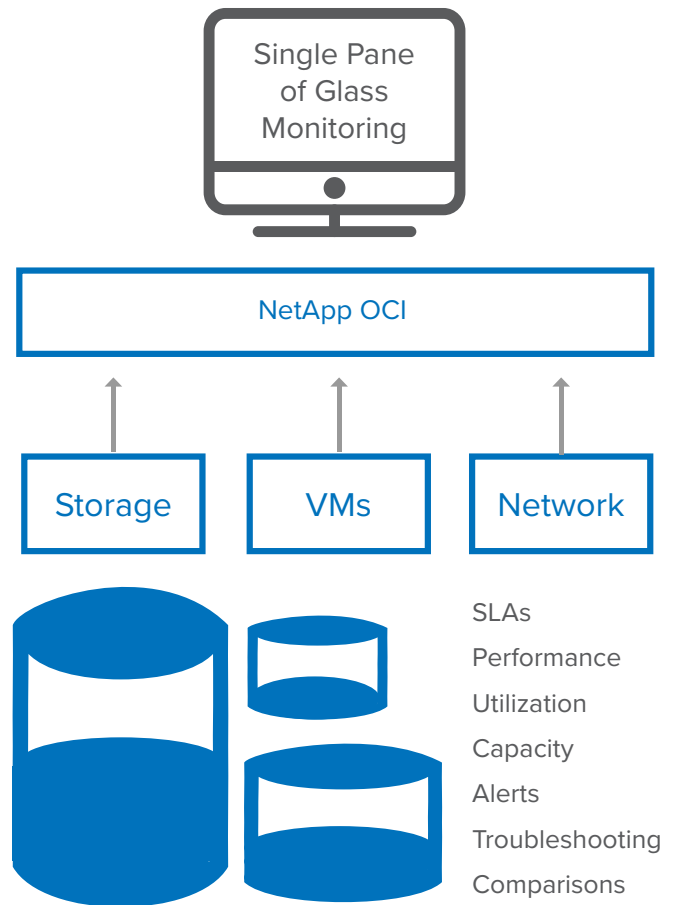


Figure 1 - OCI offers administrators a “single pane of glass” to monitor storage, VNs and network functions.

¹ Except where noted, all IT Central Station members cited in this paper work in organizations with more than 1,000 employees.

Advantages of Using NetApp OnCommand Insight (OCI)

OCI users on IT Central Station share how the platform offers advantages that transcend simple infrastructure monitoring. OCI advantages include centralized monitoring with visibility into systems from multiple vendors. OCI helps them meet Service Level Agreements (SLAs). It enables infrastructure managers to compare and contrast systems, using data analytics and visualization to pinpoint issues. Users can track utilization and plan for future capacity planning through the platform.

PROACTIVE MONITORING THROUGH A “SINGLE PANE OF GLASS”

OCI enables proactive, unified monitoring of many different infrastructure systems. As a [Storage Administrator](#) explained, “Since we have to monitor multiple systems, it gives us a single pane of glass to look at all of our environments. Also, to compare and contrast, if one environment is having some issues, we can judge it against the other environments to make sure everything is on par with one another.”

A [Senior Storage Architect](#) at a tech services company commented, “This is a very good tool to see everything on an overview: Where and what are the devices, how much storage you are using, and with what connectivity is being used. You will get a total view of your storage.” A [Storage Architect](#) at an energy/utilities company added, “It gives visibility to the VMs,” while the [Systems Administrator](#) at the real estate/law firm praised OCI’s ability to let him “see the real-time status of the systems.” OCI alerts him when there is an issue.

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We can analyze the arrays overall performance down to a LUN level, very quickly, with this product.”

Performance Monitoring and SLAs

Performance monitoring is arguably the most urgent need for infrastructure managers. After all, when performance lags, the phone starts to ring at the help desk. OCI supports this requirement well, according to IT Central Station members. A [Senior Storage Engineer](#) at a transportation company praised the performance data he gets from OCI. He said, “We can analyze the arrays overall performance down to a LUN level, very quickly, with this product.”

In this context, a [Data Manager](#) at a tech services company with over 500 employees stated how he valued having OCI do “performance monitoring of hundreds of switches and being able to see results in one dashboard.” A [Storage Administrator](#) commented, “In my role as an administrator, I’m primarily responsible for operational functionality, so I mostly use it to keep an eye on the system and make sure that we’re meeting our SLAs and we’re up and running.”

Multi-Vendor Monitoring

Most enterprises have hardware and solutions from more than one vendor. Having awareness of how all these varied systems are performing is a big plus for infrastructure managers. The [Senior Storage Engineer](#) at the transportation company benefited from OCI because, “It is uniquely valuable because it covers the entire industry, just not NetApp products, but also HPE and other vendors. We have a multi-vendor platform, so having a single solution to monitor all the platforms really helps us out a lot.” Figure 2 contrasts the use of multiple monitoring systems versus multi-vendor monitoring with OCI.

A [Senior Storage Engineer](#) at a healthcare company with over 500 employees concurred, noting, “The benefit is that it is not just the storage itself. It also covers our switches. It is multi-vendor, therefore we are not just talking about NetApp. We also have the ability to report on VMs, which is pretty important nowadays, because almost all our systems are VMs.” A [Storage Analyst](#) at a healthcare company noted, “It’s not vendor lock-in so I can collect data from different vendors, which is important for us. We are collecting data from Brocade, HP, NetApp, and EMC.”

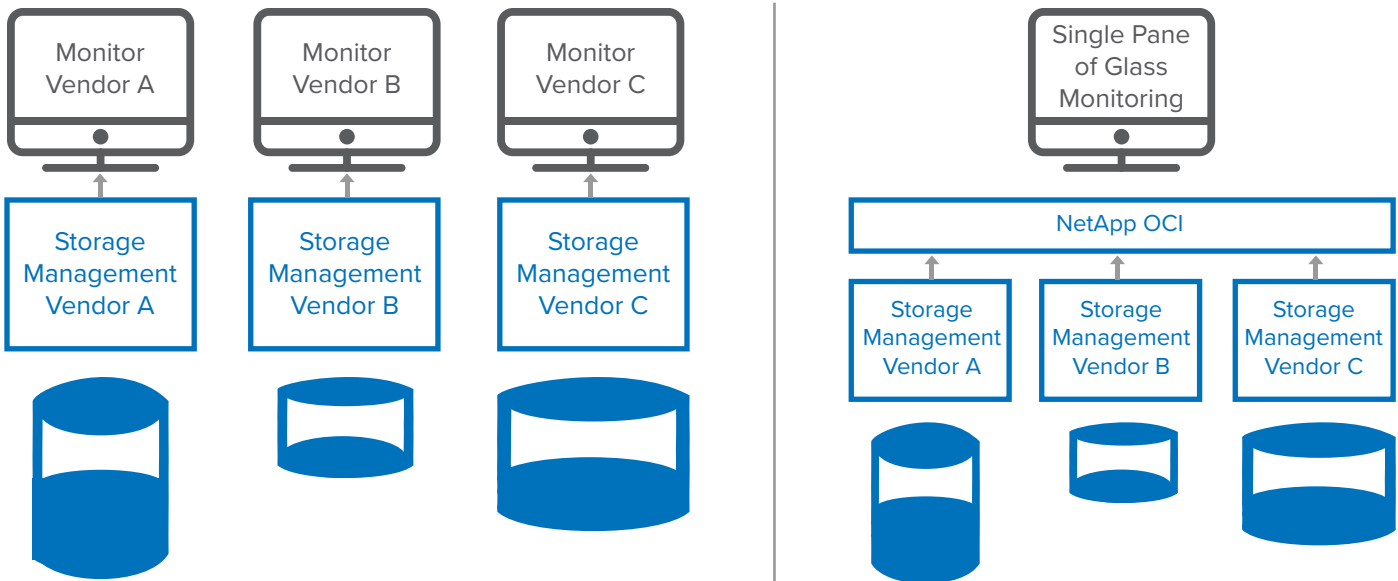


Figure 2 – Monitoring multiple vendor infrastructure systems versus multi-vendor monitoring with OCI.

Compare and Contrast Systems

How is one infrastructure component performing in comparison to another? This knowledge can be useful in determining where to route traffic and focus attention. The [Senior Data Protection Specialist](#) at the comms service provider explained how OCI helped him “monitor and measure performance of all the stores. We can compare, use it for capacity planning, forecasting, present usage. We can also compare performance over several years. Compare different products from different vendors and see how they perform against each other.”

The [Storage Administrator](#) also used OCI to “compare and contrast, if one environment is having some issues, we can judge it against the other environments to make sure everything is on par with one another.” On a related theme, a [Storage Admin](#) at a manufacturing company praised OCI’s ability to track the utilization of storage systems and see the throughput. He explained, “These are the most important metrics for having a working operating system and working storage system.”

TROUBLESHOOTING TO FIND IT FAILURES BEFORE THEY BECOME BIG PROBLEMS

Infrastructure managers are under pressure to react quickly to performance issues or better, avoid them altogether. Some hold that the best time to respond

to a performance problem is before it happens. The [Storage Analyst](#) at the healthcare company spoke to this issue, saying, “It [OCI] gives us a better view of into what is happening with the environment, like performance issues or predicting problems. This is the most important part for us. We can predict when storage will be out of space, so we can start buying before something bad happens.”

The [Data Manager](#) at the tech services company further noted, “With the alerts of saturation of FC ports in their early states, we can proactively anticipate performance issues on the server or databases.” A [Storage Engineer](#) at a marketing services firm added, “Some of the most valuable ones [uses of OCI] are actually being able to pull statistics off of the devices within our enterprise and correlate them to predict trends which are happening.”

PERFORMANCE ANALYTICS THAT PINPOINTS ISSUES

OCI users praised the solution’s data analytics and visualization capabilities as a means to identify problematic performance issues quickly enough to react. For example, a [Systems Architect](#) at a financial services firm felt the most valuable feature of OCI was “the performance trending and the analytics that we have on that. We didn’t have good insight into what our systems were doing until we had that product.”

Data Visualization

A [Storage Architect](#) at a government agency with over 50 employees provided further insight, saying he valued “being able to immediately look at my data. See the sizing, where I’m at on different virtual machines.” He then added, “The biggest thing though, is just being able to get a visual, overall view of your environment to see if this node is being hammered or if this storage is filling up really fast. Just being able see it at a glance, when I come in in the morning, I’m drinking my coffee and say, ‘Oh, this place is about to fill up I need to move this.’ That’s key. That makes sure there are no ‘gotchas.’” The [Senior Data Protection Specialist](#) at the comms service provider agreed, noting, “It gives us a way to monitor, visualize, and pinpoint problems. We’re in telecommunications and media. I would say OCI is uniquely valuable to us because it gives us the data and it provides a more visual a way of evaluating our current storage environment.”

Faster Fix Issues/MTTR

Once there is a performance issue, the faster the Mean Time to Repair (MTTR), the better. Making quick repairs to infrastructure takes data on the exact nature of the problem. OCI provides this critical ingredient for fast restores. A [Storage Administrator](#) at an energy/utilities company affirmed this aspect of OCI, expressing gratitude that his OCI solution gave him “the data analytics for helping track down issues.” He then added, “It’s quicker to fix issues.”

OPTIMIZE INFRASTRUCTURE

IT Central Station members who use OCI find infrastructure optimization to be a significant advantage of the solution. As a [Storage And Backup Tools Manager](#) at a tech services company put it, “[We value] the single pane of glass for capacity management. Every customer has multiple vendors of storage, which allows us to bring those into a single report, deliver those, not just to engineers, but also to the operations level and business owners of those organizations as well, so they can make sound business and financial decisions.”

The [Senior Data Protection Specialist](#) at the comms service provider explained, “We can focus on and

project usage growth. We can also monitor and measure performance of all the stores. We can compare, use it for capacity planning, forecasting, present usage.” A [Technology Consultant](#) at a comms service provider expressed how valued “the ability to get reports out, to see what OCI is doing for us, and we can see what our capacity is.”

“

It’s given us a better concept of what we’ve got out there and where our hurt points are, where we need some more work in the different areas, where we might need to move volumes around to get better performance...”

He added, “It’s given us a better concept of what we’ve got out there and where our hurt points are, where we need some more work in the different areas, where we might need to move volumes around to get better performance, and also definitely to see where that capacity is, see if we need to add more storage.” The [Storage Analyst](#) at the healthcare company offered, “We can predict when storage will be out of space, so we can start buying before something bad happens.”

JUSTIFY IT COSTS THROUGH SHOWBACK/CHARGEBACK

Infrastructure managers often find themselves under the harsh glare of financial analysts. Infrastructure usually represents a serious capital expenditure (CapEx) as well as an ongoing operating expense (OpEx). As a result, users of OCI value its contributions to financial planning and chargebacks. The [Senior Storage Architect](#) at the tech services company valued OCI “because we can use it financially, we use it for inventory purposes.” A [SAN Administrator](#) at a manufacturing company added, “Primarily we use it for chargeback.” Chargebacks help defray the IT department’s investment in technology by allocating costs back to internal clients in proportion to usage.

Some IT Central Station members link OCI's depth of reporting with financial advantage, as a [Storage And Backup Tools Manager](#) at a tech services company explained. He said, "Every customer has multiple vendors of storage, which allows us to bring those into a single report, deliver those, not just to engineers, but also to the operations level and business owners of those organizations as well, so they can make sound business and financial decisions." The [Storage And Backup Tools Manager](#) at the tech services company noted, "There's also the reporting suite, and the extensibility of that is fantastic. As well as we can replicate charge reports, so when you go from account to account it's always the same data. You're not looking at form A here, and form B there. We can actually have a standard set of reports globally."

Implementation Advice

IT Central Station members offer advice on implementing OCI. The [Data Manager](#) at the tech services company recommended investing effort in the pre-installation stage. He said, "Spend a little more time in design in order to save next time when the infrastructure is active."

Some, like the [Storage And Backup Tools Manager](#) at the tech services company, found the setup process straightforward. The [Senior Storage Engineer](#) at the

transportation company echoed this sentiment, saying, "It beats HPE products hands down in terms of initial setup. We were able to bring the OnCommand up in three hours, whereas it took 60 hours to bring the HPE solution up. So, it was a pretty hands down win for NetApp."

Other users with more complex instances recommended engaging with professional services. For this reason, the [SAN Administrator](#) at the manufacturing company brought in Professional Services to "get it up and running for us." A [Storage Services Manager](#) at a financial services firm explained, "We have used tech support, and they are excellent. We have engineers set up for us and we have dedicated SEs, so they come and help us out instantaneously."

The [Storage Administrator](#) offered perspective, saying, "We chose NetApp because we look for a vendor who can provide value-added support, not just break and fix, but best practices, advice, roadmap information, information about other case studies from other customers in similar situations, and the ability to really help us (not just install the product), but to use the product and extract the maximum value out of it. Also, they really know our environment."

CONCLUSION

Managing infrastructure in today's virtualized, hybrid cloud environments presents managers with an array of challenges. There is constant pressure to comply with strict SLAs. Financial justification of infrastructure investments and OpEx is a given. Systems from multiple vendors must be efficient. Based on reviews by IT Central Station users, NetApp OCI provides infrastructure managers with a multi-faceted solution that gives them the ability to handle these challenges.

As real users of OCI report on IT Central Station, the platform lets them proactively monitor their infrastructures. It gives them the ability to stay on top of multiple vendor solutions and anticipate performance issues before they become problematic. Analytics and data visualization gives managers an intuitive, quick way to spot problems. MTTR speeds up with OCI. Infrastructure optimization becomes easier to achieve. OCI can be used for inventory and capacity planning as well as financial chargebacks. The effect of all of these capabilities is to endow infrastructure managers with a powerful toolset for delivering outstanding infrastructure performance to their clientele.

ABOUT IT CENTRAL STATION

User reviews, candid discussions, and more for enterprise technology professionals.

The Internet has completely changed the way we make buying decisions. We now use ratings and review sites to see what other real users think before we buy electronics, book a hotel, visit a doctor or choose a restaurant. But in the world of enterprise technology, most of the information online and in your inbox comes from vendors but what you really want is objective information from other users. IT Central Station provides technology professionals with a community platform to share information about enterprise solutions.

IT Central Station is committed to offering user-contributed information that is valuable, objective and relevant. We validate all reviewers with a triple authentication process, and protect your privacy by providing an environment where you can post anonymously and freely express your views. As a result, the community becomes a valuable resource, ensuring you get access to the right information and connect to the right people, whenever you need it.

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ABOUT NETAPP

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation, and optimize their operations.

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