MODERNIZING THE DATA CENTER WITH NEXT-GEN STORAGE

As organizations move to a cloud-ready services approach, next-gen storage offers significant benefits.

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A key operational challenge for IT leaders is to assemble the right mix of servers, storage and networks to effectively support their businesses and applications. In the past, the primary goals for storage were speed and low latencies. However, those standards have changed to accommodate new innovations, from cloud services and edge computing to microservices and containers.

Today, storage vendors emphasize the versatility of the platforms they employ on top of their own commodity storage. For example, platform features such as single-pane management and security analytics are critical to executives and IT leaders as they modernize their data centers and migrate to the cloud. To meet those cross-functional demands, next-gen storage is both multi-faceted and continuously evolving.

In this Q&A with Ingram Micro Technology Consultant Mark Miller, we explore the benefits of next-gen storage, look at common concerns about storage solutions and consider where next-gen storage is headed.

Q. What is next-gen storage and how is it evolving?
A. Next-gen storage primarily encompasses software-defined approaches and microservices. The transition is happening between the hardware vendors and new developers who play a key role in the data center space. The technologies we've relied on in the past (SCSI, SAS, SATA, etc.) are outdated and there's the advent of new ways to connect things, such as nonvolatile memory express (NVMe), which greatly accelerates data transfers. We're also connecting storage up to the memory bus and introducing persistent memory solutions for faster database and application performance use cases.
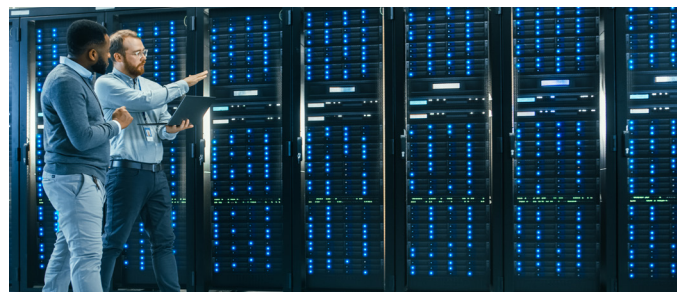
It's also about the modernization aspect, whether improving application performance or building out new solutions to make organizations more competitive. Certain aspects of next-gen storage are also helping to free up storage administrators and reduce the IT burden. For example, several storage vendors promote capabilities for more effective management. It's not so much the sprawl, it's the complexity of maintaining on-premises hardware and cloud-based storage along with ensuring security and ongoing modernization. Through more effective management, organizations can free up resources and focus on being more competitive.

Storage vendors are already delivering solutions that tie multiple clouds together, enabling data to move back and forth seamlessly from on-premises to the cloud. This is especially important when we consider application modernization and cloud-native apps. To that end, vendors are introducing support for containers to ensure that on-premises storage is cloud-ready. And then there's using storage as a new approach to bolster security in the data center.

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Q. How big of an IT lift is next-gen storage in terms of implementation, configuration and integration?
A. That's a very relevant topic. Sometimes organizations stress out that they don't have the right technical skills or the abilities to get where they want to go and provision the storage they need. However, most vendors offer some type of lab services where vendor can come in, set up the storage and provide knowledge transfer to bolster the skills of the end user.

Here at Ingram Micro, our Data Center Delta Force is made up of numerous subject matter experts who support the wide variety of next-gen storage vendors. We help navigate all the different solutions for our resellers so that our partners understand where to leverage these technologies. Storage vendors can provide additional software that functions as a single pane of glass to manage on-premises and cloud storage and everything in between.

The hottest way to buy next-gen storage solutions is to pay only for what you actually use. Companies can choose whether they want to own the equipment, allowing greater flexibility between op-ex and cap-ex. The other shift you see from a service model is vendor professionals who come on-site and custom deploy as well as maintain operations, upgrade the system and firmware, etc. For companies with limited IT staff and time, the cloud model and a services approach offer savings.

Q. What is the future of next-gen storage technology?
A. Storage is no longer going to be an entity by itself. It will be less about owning a storage array, and more about storage microservices that follow your applications around and service them. Companies will want to have the portability to move workloads in and out of the cloud as the business sees fit or burst into the cloud when necessary. On the other hand, multiple vendors are using predictive analytics to uncover cyber incidents and support cyber-resiliency in the data center.

Vendors are also formulating ways to create immutable replications and backups, which means they cannot be changed by any cyber actions or even human error if someone accidentally tries to delete storage volumes. C-Suite and IT leaders need to be aware that storage vendors are also looking at cyber resiliency as being a key aspect of next-gen storage solutions. So, the way things look today and how they'll look tomorrow will be completely different.

Next-Gen Storage Continues to Evolve
Companies across every business sector are increasingly dynamic and distributed. They're also accruing exponentially more data, requiring storage that's agile, responsive and scalable, whether it's on-premises or in the cloud. Ingram Micro provides direct access to thousands of providers so that organizations can leverage service providers and have time to focus on growing their businesses.

To learn more about how to modernize your storage resources, visit ingrammicro.com.

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