

**CASE STUDY** 

Boreus offers businesses a full array of managed hybrid cloud services—from 24/7 operations to managed Kubernetes clusters. An aging storage environment drove the company to explore new solutions that could better support backup services for customers. Quantum ActiveScale Object Storage helped Boreus accelerate backups, prepare for future growth, increase flexibility, generate new insights, and simplify management.

Organizations in publishing, healthcare, e-commerce, and tourism trust Boreus to manage systems that hold their critical data. To help protect that data from loss and improve business continuity, Boreus offers optional backup and restore services. "We can back up everything from physical and virtual servers to cloud-based environments," says Thomas Sobirei, storage and data protection engineer at Boreus.

The company uses a Commvault solution to orchestrate backups and restores. Until recently, the Commvault MediaAgents were connected to direct-attached storage, but the Boreus team needed





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### Thomas Sobirei

Storage and Data Protection Engineer, Boreus





## SOLUTION OVERVIEW

- Quantum ActiveScale<sup>™</sup>
   Object Storage
- Commvault Backup and Recovery
- VMware ESXi on Dell PowerEdge Servers
- Extreme Networks Switch Infrastructure
- Amazon Web Services

### **KEY BENEFITS**

- Accelerated backups and restores, providing more responsive services for customers.
- Reduced capacity requirements, increased scalability for fast-rising volumes of customers' data.
- Enhanced storage flexibility by supporting the Amazon S3 protocol.
- Simplified backup storage management streamlining administrative tasks.
- Gained new monitoring capabilities, enabling the team to track usage and improve planning.
- Increased the company's competitive edge for backup services by providing a more efficient, cost-effective offering.

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Storage and Data Protection Engineer, Boreus

to make a change. "The direct-attached storage systems were a few years old and reaching their capacity limits," says Sobirei. "It was taking longer to complete backups and restores. We needed a scalable solution that could speed up those processes."

Simplifying management was another key goal. "Managing direct-attached storage systems with multiple file systems was too complicated," says Sobirei. "We wanted to simplify management of our backup storage so our team could focus on other tasks."

# Discovering the Advantages of Object Storage

When examining both networkattached storage (NAS) solutions and object storage, the Boreus team found some important differences. "One of our primary considerations was price," says Sobirei. "Object storage is much more cost-effective than NAS. For example, ActiveScale was about 25% less than competing NAS solutions." One reason NAS solutions were more expensive was because they included deduplication capabilities, which would have been redundant in the Boreus environment. "Although we weren't yet using deduplication, Commvault already offered that capability, so it didn't make sense to pay for it again with a new NAS solution."

Object storage systems also offered simpler management. "We knew that the right object storage solution would be much easier than NAS to integrate with the Commvault system," says Sobirei. "It was clear that object storage would be the better way to go for our needs."

# Selecting ActiveScale Object Storage for Backup Services

As the Boreus team explored new solutions, Quantum ActiveScale stood out among the pack. "We evaluated several object storage solutions, but Quantum ActiveScale was the only one that offered replication to \$3 storage systems like AWS," says

Sobirei. "That capability provides us with the flexibility to support S3-enabled apps and workflows."

Straightforward implementation was another advantage. "Installing ActiveScale was easy. We pulled each system out of the box, racked it up, and in a half hour, it was finished. We were really surprised," says Sobirei. "We had an engineer ready, but we didn't need him. It was very simple to get it up and running."

A call with another ActiveScale customer helped solidify the decision. "We were ready to make a purchase, but we wanted to make sure that ActiveScale would be fully compatible with Commvault and would support Amazon S3 storage," says Sobirei. "The call with the Quantum reference gave us the confidence to move forward."

# Reducing Needed Storage Capacity, Accelerating Backups

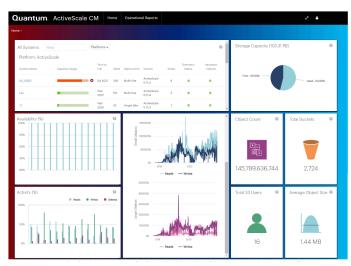
By using Commvault deduplication in conjunction with ActiveScale, Boreus has significantly reduced the storage capacity required to support its customers. "Now that we're using deduplication, we have reduced the storage capacity we need by 60 percent," says Sobirei. "We purchased 400 TB worth of storage across two ActiveScale systems, and we still have a lot of capacity free for the future."

Using ActiveScale with Commvault also helps accelerate nightly backups. "Because we're writing less data, we can do much faster backups—and more frequent backups—than before," says Sobirei. "Plus, with the increased storage bandwidth, we are able to easily handle the 100's of terabytes of backups we perform every month."

# Enhancing Storage Visibility and Improving Planning

The Boreus team is taking advantage of ActiveScale Cloud Management (CM) to monitor storage systems, track historical trends, and check service-level agreement metrics. "Previously, we had no history of how much storage we were using," says Sobirei. "Now we can see how much we've grown in the last year."

Those storage insights help with planning. Although Boreus should have sufficient capacity for some years, the company will eventually need to expand its backup environment as more customers use the backup service and protect more data. "With ActiveScale, we know when we'll need to add capacity—that's insight we didn't have before," says Sobirei.



ActiveScale Cloud Management (CM) is a cloud-based tool that receives telemetry data from ActiveScale systems to create standard and custom reports. Features include basic management, historical trends, capacity modeling, usage, and forecasting, to help identify conditions for preemptive action.

# Simplifying Ongoing Backup Infrastructure Management

ActiveScale has dramatically simplified backup storage administration, eliminating the complexity of the previous environment. "We spend zero time managing ActiveScale," says Sobirei. "We installed it, created S3 buckets, presented those buckets to Commvault, and that was it. There's really no management needed with ActiveScale—and that's what we wanted.

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With a simpler infrastructure, reduced management overhead, and less time dedicated to monitoring and maintenance, the Boreus team now has more time to further streamline the administrative tasks associated with its backup service. "We're trying to automate everything, like creating new backup sets," says Sobirei. "We really want to minimize the time we spend on backup infrastructure. With ActiveScale, we can focus on other things."

# ActiveScale Object Storage Data center 1 Data center 2 ActiveScale Object Storage Data center 1 ActiveScale Object Storage Data center 2 S3 replication

Boreus deployed a petabyte-scale ActiveScale system in each of two active data centers. Commvault media agents back up hundreds of virtual machines, physical servers, and NFS mounts (via NDMP) to the ActiveScale platform in the opposite data center. Data protection is further enhanced with native offsite replication of the backup data directly from the ActiveScale systems to the AWS public cloud.

## **ABOUT BOREUS**

Boreus GmbH is a leading managed hybrid cloud provider for publishing, healthcare, e-commerce, and tourism industries. As part of the parent company WIIT, Boreus is an ISO 27001-certified organization specialized in IT consulting, deployment, and 24/7 operational expertise. Boreus offers a wide variety of state-of-the-art computing technologies and services, including cloud computing, Kubernetes, DevOps practices, and cloud cost optimization.

# Quantum

Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit www.quantum.com.

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