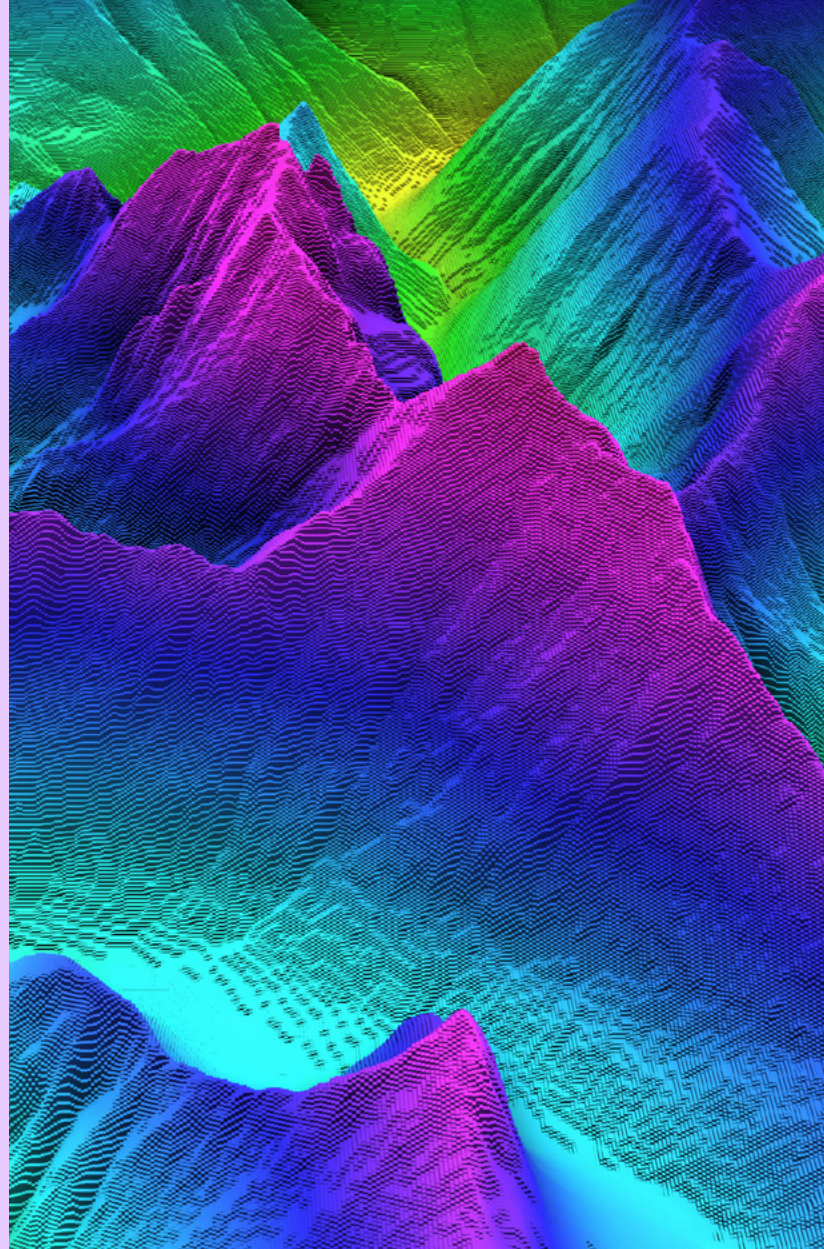


SOLUTION BRIEF

Seismic data streaming for the OSDU Data Platform

Stream seismic data to any application, from anywhere





Seismic data with seismic requirements

The oil and gas industry is leading the cloud adoption charge, with customers rapidly migrating their business applications. But there are still a number of unresolved issues. For instance, certain workflows and applications require specialized IT infrastructure that offers high-performance computing, storage, or networking.

Cloud solutions often strengthen these capabilities, but there are certain workloads that simply aren't suited to migration. For example, with seismic data processing and interpretation, customers have to build bespoke higher-performance IT architectures on premises or in colocation facilities, instead of using generic cloud services.

Seismic data is one of the largest data volumes that oil and gas companies manage. This volume can be a problem when each vendor application needs the data to be in proprietary formats, with derivative volumes of attributes and filters precalculated and stored separately. It also means that subsets need to be created and locally hosted for optimal performance and user experience.

To date, users have been copying data as they see fit. But these copies lack metadata information about why they were created, resulting in a lack of auditability and loss of understanding of original data truth. This lack makes it impossible to ensure governance and compliance. What's more, these copies need to be stored and backed up, causing costs to spike and making data management more complex.

The OSDU Forum has developed OpenVDS (Volume Data Store), an industry standard for storing seismic data in one common format. However, managing these single volume copies has proven expensive even within public cloud services. They also don't provide coverage or meet data sovereignty requirements for all locations that oil and gas companies may operate in.

The solution

The NetApp® seismic data streaming service for the OSDU Data Platform offers tuned storage, compute, and networking for handling seismic data interpretation and processing. You can leverage and live stream seismic data in a singular industry standard data format (OpenVDS) to any end user, application, and location, all while meeting data sovereignty requirements and maintaining the original version of truth. Whether you're in the North America, Europe, Asia-Pacific, or the Middle East, NetApp has you covered.

The NetApp solution dramatically reduces data volumes and the costs associated with managing them by removing the need for multiple formats, versions, and localized data copies. Superior performance enables new interpretation techniques and enhances the user's experience. Plus, with NetApp® Cloud Data Sense, data governance and file management policies are easier to enforce, and compliance is easier to maintain on an enterprise scale.

Key benefits

- Stream seismic data from our colocation partners' facilities to your offices in every country for a cloudlike service while meeting data sovereignty requirements.
- Select your storage performance tier:
 - NetApp® StorageGRID® SG6060 with spinning disks, our entry-level performance tier
 - NetApp® StorageGRID® SG6024 with SSD storage, our highest performance tier
- Use connectivity from our colocation partners' facilities to enable an ultra-low-cost cloud-based glacier storage tier for cost-effective longer-term archiving.
- Choose whether to leverage the Bluware FAST API to take advantage of available GPUs, as well to accelerate attribute calculations and compression/decompression.
- Benefit from superior performance at a lower cost, compared to existing public cloud options.
- Get access to better multisite file management, while maintaining a single truth copy of the data, including erasure coding capabilities.

Realize seismic data management efficiencies

The NetApp solution lets you livestream seismic data to any commercial or private application, anywhere in the world. And because it's based on OSDU OpenVDS data standards, only a single data source is required, created, and maintained, eliminating the need for localized copies.

Leverage global enterprise data governance

Our global colocation partner network helps you easily adhere to all data sovereignty and compliance requirements. In addition, the NetApp StorageGRID object-based storage solution provides centrally managed policies, which means that if a data copy is needed, its performance is consistent across data centers. And the StorageGRID policy manager enforces a singular, original source of truth for data governance.

Reduce TCO while improving experience

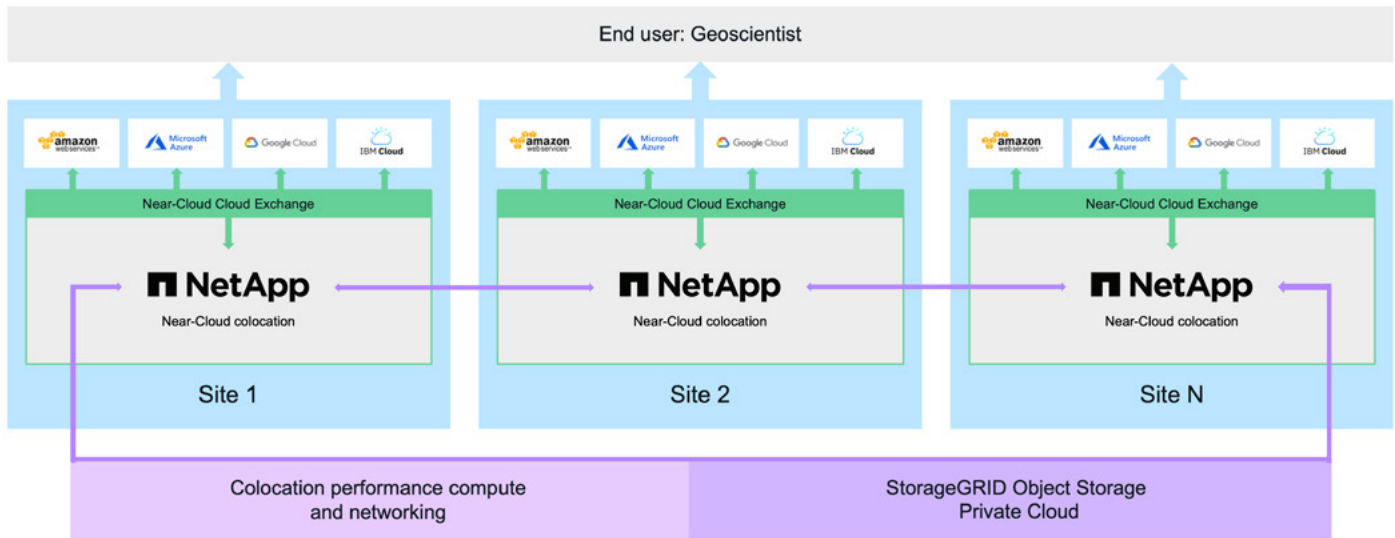
We can help you drive costs down by removing the need to create data copies or derivatives, reducing the storage volumes required, which we offer at a more affordable price point. Enhance your users' experience by taking advantage of the NetApp environment, which is highly tuned for performance, enabling new analytic approaches.

Relax with simple data sovereignty from our colocation partners

With the unique geographical positions of our colocation partner network's managed data centers, you can meet data sovereignty requirements with ease. You'll also benefit from superior performance at a lower cost because our service is based on locally hosted StorageGRID systems and connected to our partners' compute and high-speed global networks.

Realize carbon offsets with a more sustainable approach

By cutting down on redundant data copies, speeding data analysis tasks, and centralizing seismic data IT infrastructure into shared colocation facilities, you can benefit from proven reduced greenhouse gas emissions and a lower carbon footprint.



NetApp® solution components

- Cloud Data Sense
- Cloud Insights
- StorageGRID
- StorageGRID SG6060 and/or SF6024

Any questions? Reach out to your NetApp experts:



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About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. We bring the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center.

Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds. As a cloud-led, data-centric software company, only we can help build your unique data fabric, simplify, and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.

