Solution brief

NASUNI

Nasuni for the energy industry



Supporting massive CAD files, seismic data, and remote locations

Businesses in the energy industry that produce or supply renewables or non-renewables operate in a vastly distributed and hostile global environment. Volatility in the political, economic, environmental, and social spheres put pressure and risk on the entire supply chain, creating a perfect storm of business uncertainty.Cyber attacks are perpetually looking for vulnerabilities in IT defenses. The fundamental inability to store and share ever-increasing seismic data, 3D CAD renderings, and interpretation models across remote locations impacts the overall time-to-energy.

Reducing the time to generate energy is of tremendous strategic importance, particularly for upstream exploration and production firms. Companies rely on sophisticated modeling and interpretation of massive seismic data that can take 12-18 months to acquire, process, and interpret. However, 80% of that time may be wasted wrestling with data management.

Nasuni and the OSDU forum

With the OSDU Forum and OSDU Data Platform gaining momentum, Nasuni's energy customers (many of whom are leading members of OSDU) are excited by the impact that platform is providing across the industry. Nasuni has joined more than 250+ members, including Microsoft and IBM, to build a vibrant open ecosystem to unlock the value of seismic data to make smarter decisions faster. Other factors that can impede the interpretation process include:

- Data access: Geoscientists are unavailable
 at the right location for the right project
- **Data sovereignty:** Legislation requiring data to be maintained within national borders
- Data storage: If the seismic data is stored on outdated or unreliable storage media, it may be difficult to access or retrieve the data when needed
- **Data security:** If the seismic data is not properly secured, there is a risk of unauthorized access or ransomware, which can impact interpretation efforts

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We had been working for five or six years to bring all of Western Europe into the Azure cloud. The challenge was bringing the file server also to the cloud. Finally we solved it with Nasuni."

Malcolm Brown, Global IT Manager, Geoactive

Nasuni hybrid cloud storage for the energy industry

Nasuni eliminates critical aspects of the energy industry's supply chain risk with a modern file storage platform built for the cloud that removes dependencies on vulnerable NAS and file servers in both data centers and remote, inhospitable locations. Nasuni enables operators and service providers is consolidate all business and CAD file data, including extensive seismic and modeling data.

Once a firm's data files are consolidated in a single, global file system, tremendous benefits are unlocked that cannot be achieved by other means. Nasuni Hybrid Cloud Storage reduces costs, breaks down data silos, streamlines data management, protects against ransomware, and inspires innovation.

Reduced costs

By eliminating legacy on-premises infrastructure needed for file servers, backup, and DR, Nasuni can provide up to 70% or more savings over traditional architectures and reduce data center footprint by up to 90%. Using cost-effective cloud object storage instead of tiering to the cloud, Nasuni costs significantly less than other cloud storage solutions.

Consolidated file data

Nasuni provides the largest energy firms with a single, global file system accessible to one or hundreds of physical sites. Employees of all levels can access the system directly. Data can be accessed from regional, secure cloud object storage, such as Amazon S3, Microsoft Azure Blob, or Google Cloud instead of multiple, on-premises file servers or NAS devices.

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The users in the US who are using the UK VMs were impressed with how quick it was to pull up the images they needed, because some of the CAD drawings are quite large."

Michael Norman, Infrastructure Engineer, Penspen

Streamlined data management

Data managers spend 40% of their time managing data and storage capacity, which often requires moving massive files from one storage container to another due to volume limits. Nasuni streamlines this workflow because there are no volume limits, and the need to move large files around is eliminated.

Remote data access

Nasuni provides access and performance at remote exploration sites and drilling fields limited to Line of Sight (LoS) and 4GLTE connections using lightweight edge caching appliances. This allows demanding geo-seismic applications for seismic interpretation, post-processed data management, and storage of large files to be accessed anywhere in the world.

Built-in data security and ransomware protection

Nasuni Continuous File Versioning® enables files to be restored rapidly from the cloud to virtually any point in time, significantly improving RTOs and RPOs. Ransomware edge detection and mitigation stops cyberattacks quickly. Nasuni can recover a million files in less than a minute (even from a ransomware attack), which is impossible with traditional backup.

Optimized cloud VDI

Modern VDI and Digital Workspace technology from vendors like VMware, Citrix, AWS, Microsoft, and Workspot offers an alternative that no longer requires geoscientists to physically sit at highpowered workstations to analyze and model seismic data. Nasuni is essential to multi-region VDI deployments because it synchronizes user profiles and file data between VDI sites and caches them in the same data centers as the desktops to provide optimal file access.

Al innovation

Once data has migrated to the cloud, energy providers can harness the latest AI/ML cloud services by Amazon Web Services or Microsoft Azure for innovative data analysis. While the industry at large is still in the early stages of understanding the potential of AI/ML, an exciting new era of being able to access petabytes of seismic data in a single, global repository is here.

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Penspen's shift to Nasuni delivered real value as we transitioned our entire global workforce to a working-from-home model without having to worry about disrupting project delivery, global collaboration or productivity."

Michael Norman, Infrastructure Engineer, Penspen



LEARN MORE

To learn more about how Nasuni is helping the energy industry improve "Time to Oil" visit <u>www.nasuni.com/industries/oil-and-gas</u>

NASUNI

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Nasuni is a scalable data platform for enterprises facing an explosion of unstructured data in an AI world, eliminating the choice between expensive tinkering or an overwhelming transformation of your entire data infrastructure.

The Nasuni File Data Platform delivers effortless scale in hybrid cloud environments, enables control at the network edge, and meets the modern enterprise expectation for protected, insight- and Al-ready data. It simplifies file data management while increasing access and performance.

Consolidate data, cut costs, and empower users – all while transforming your data from obstacle into opportunity.