

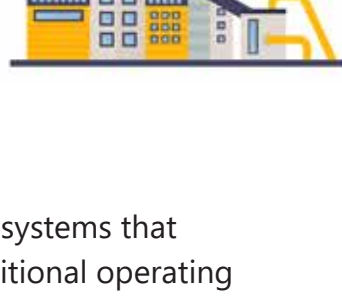
Accelerate Oil & Gas Time-to-value with High Performance Data in Azure



In the Oil & Gas industry, the faster you can get decisions made, the faster you can get to revenue. Putting your data in Azure NetApp Files, you get agility, performance, and availability critical to your HPC workloads, even when analyzing data from remote parts of the world.

Get up to 5x performance for your Oil & Gas and reservoir simulation workloads in Azure vs. on-premises

20% to 30% of oil and gas companies have begun developing more aggressive ambitions based on disruptive business models.



Siloed legacy systems that underpin traditional operating models are incapable of enabling essential digital capabilities.ⁱ

Problem

“It can take us years and millions of dollars from initial discovery before we are realizing revenue. Our goal is to reduce our time-to-market in half. We run massive workloads — exabytes of data — across our reservoir simulation and performance systems, geology and modeling, and our field management solutions. We need high-performance capabilities to eliminate the decision delays we experience today.”

Solution

With Azure NetApp Files, you will transform operations by delivering better performance even for upstream applications. With high-performance compute and real-time access to massive amounts of seismic data, well data, and maps, you can accelerate insights to optimize production, reduce environmental risks, and enhance safety.



Build resiliency with ultra-low latency, high performance, and 99.99% uptime — anywhere

According to Deloitte, building resiliency into operations is one of the most important strategies for oil and gas companies in today's uncertain world.ⁱⁱ

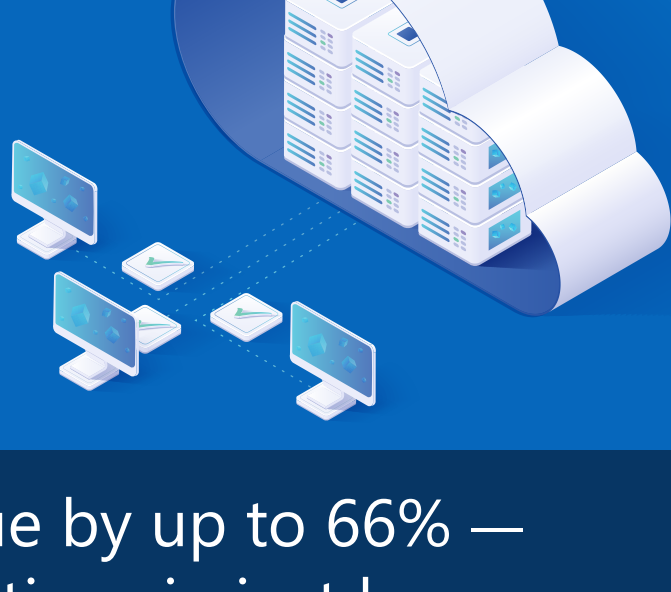


Problem

“Future-proofing our Oil & Gas organization to respond to changing market conditions means being able to react responsibly as industry dynamics fluctuate. We cannot turn oilfields on and off overnight but we can make better decisions when we can access and deliver information at 10x the speed.”

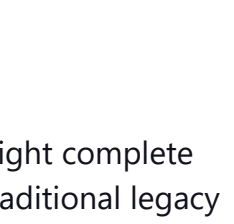
Solution

With Azure NetApp Files, you gain ultra-high throughput plus sub-millisecond latency for your heavy workloads in geo-diverse locations. Our 99.99% uptime guarantee delivers the availability you need. We offer global region support, with new locations being added all the time.



Accelerate time-to-value by up to 66% — run month-long simulations in just hours

An oil company often spends 3-10 years, at a cost of 1-2 billion dollars of risk, before the first well is drilled.ⁱⁱⁱ



Reservoir engineers might complete one run per day in a traditional legacy environment. With cloud they can complete hundreds of runs per day.^{iv}

Problem

“We need to lower our overall cost and risk profile for exploration, and reduce the time it takes to get to a decision.”

Solution

With Azure NetApp Files, you can accelerate your time-to-value — sometimes by a matter of years. You'll get the environments you need without adding management complexity. Dynamically adjust performance tiers for both Linux and Windows files to scale up and out as needed throughout the data lifecycle.



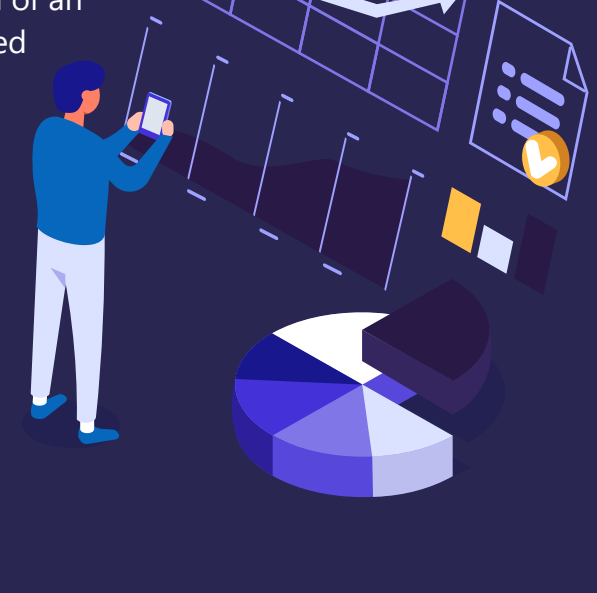
Customer Story: Repsol

“Azure NetApp Files was a lifesaver for storage. We have seen amazing performance increases. For simulations that took over a month to run, now are taking a few hours ... Azure NetApp Files literally saved our cloud project.”

Juan Pedro Bretti Mandarano,
Digital Transformation, Senior Engineer, Repsol

The Business Challenge

An Oil & Gas company with 25,000 employees and production of an average of 715,000 barrels of oil equivalent a day, Madrid-based Repsol prides itself on innovation. Their Oil & Gas modeling initiative was one of 150 digital transformation projects, with a total expected return of €1 Billion FCF by 2022.



What They Needed

Repsol migrated the Oil & Gas modeling to Azure only to discover it was far too slow to be implemented into production. By isolating compute, graphics, storage, and network, they found it was storage that was killing them. They needed to eliminate the latency between storage and compute.

What They Got

With Azure NetApp Files, Repsol gained faster than on-premises performance with sub-millisecond latency. During initial testing, a report that normally took 30 days was completed in 24 hours — so fast that the engineer thought the application had crashed.

Repsol is moving additional HPC applications into Azure NetApp Files, and looks forward to providing access to their global workforce via multiple devices, increasing productivity and security.



Enabling Cloud Migration by Solving the High Performance & Low Latency Conundrum:

“Moving Oil & Gas modeling applications into Azure would be something very new for our industry. In fact, we weren't aware of anyone else who had successfully done this yet. The need for low latency and high performance for these applications had effectively locked them on-premises.”

Juan Pedro Bretti Mandarano,
Digital Transformation, Senior Engineer, Repsol

Run your HPC workloads faster in Azure than on-premises

[Book an architectural design session](#)

ⁱ <https://www.gartner.com/smarterwithgartner/10-oil-and-gas-trends-to-watch>

ⁱⁱ <https://www2.deloitte.com/ly/en/pages/about-deloitte/articles/stay-calm-be-prepared/building-resilience.html>

ⁱⁱⁱ Financial Times. <https://www.ft.com/content/19234982-0cbb-11e8-8eb7-42f857ea9f09>

^{iv} <https://customers.microsoft.com/en-us/story/768495-repsol-energy-azure>