Reduce cloud infrastructure TCO with better than on-premises performance **NetApp** | **Microsoft** Azure





In the world of Electronic Design Automation (EDA), time is money.

Azure NetApp Files provides the high performance and sub-millisecond latency critical to your file-based HPC workloads. We'll increase your productivity while reducing your OpEx, TTM, and TCO.

Run the most demanding high-performance environments at warp speed¹



70% of organizations face challenges in moving their enterprise applications into the cloud.² High performance is the key factor in your decision to migrate design and simulation workflows to the cloud.

Problem

"We operate with extremely high file counts, massive amounts of write-intensive files, and heavy metadata loads. High performance and high security are mandatory for our business to succeed."



Solution

Solution

Azure NetApp Files delivers on-premises or better performance, combined with sub-millisecond latency and the flexibility and reliability of running in the Azure cloud. Performance scales with the allocated capacity, up to 4.5GiBps per volume, to ensure that storage performance is no longer the bottleneck.

Save on licensing costs – run in a centralized environment





Tens of Millions – Large semiconductor firms can spend this annually on licensing: one of the key cost drivers in electronics design.³

Problem

"Expensive, by-the-minute licensing costs for our applications means we need high performance to accelerate our compilation and simulation times. Licensing costs can vastly exceed the cost of the hardware they run on – in our case by as much as 8X. Centralizing without needing to build our own NFS filer would be ideal."

Solution

Run your most intensive applications in Azure with Azure NetApp Files to maximize your design rollout speeds and minimize your licensing fees. Meet your file system storage requirements without expensive and difficult code changes. Centralization enables global data access, and dual protocol volume support allows concurrent access by Linux and Windows users, making EDA workflows accessible to more team members. Built-in cross-region replication allows you to put your data where your engineers are located, which increases productivity as well as providing increased security and disaster recovery capabilities.

Control cost by scaling up – and down – when needed



Gartner research has found that focusing on efficient use of [public] cloud services brings immediate and tangible financial benefits.⁴

Problem

"We need to be able to scale up very quickly and very significantly during burst phases like design and simulation. We need to be able to scale as jobs complete to avoid unnecessary costs."

Solution

Azure NetApp Files provides capacity scaling and three tiers of service, easily allowing dynamic performance shifts from Standard to Premium to Ultra on-demand. Spin up to deliver in just hours what would have taken days on-premises. Gain access to high-quality cloud storage exactly when you need it. No need to borrow capacity from other groups in your organization to scale up.



A major semiconductor manufacturer chooses Azure NetApp Files to simplify its HPC migration to Azure



The business challenge:

This manufacturer's business is becoming more complicated and more expensive by the minute. Continuous innovation results in more products, more complexity, and ever more data. Not to mention more expense. Their EDA spend is one of their highest costs, and they are not alone. In aggregate, EDA spend in the public cloud is increasing and predicted to reach \$643M by 2023.⁵

This company was increasingly turning to the cloud to save on infrastructure and operating costs. But a major stumbling block had been their mountains of file-based data: millions upon millions of files.

What they needed:

This manufacturer needed to run their silicon

design and process development workloads in Azure to meet their requirements to reduce costs with on-demand scalability. They could not afford to choose between performance and scalability. In addition, they needed global availability and high reliability.

What they got:

Our customer selected Azure NetApp Files to remove their cloud performance bottleneck and migrate their workloads to Azure. Azure NetApp Files is delivering:

- ultra-high performance and sub-millisecond latency
- ability to scale both capacity and performance tiers on-demand
- security benefits of 99.99% guaranteed uptime and cross-region replication

Azure NetApp Files solved our customer's cloud storage woes, reduced their costs, simplified their operations, and accelerated their time-to-market.

"We're a long-time customer, and huge fan, of NetApp for many of our business-critical applications requiring file-based storage. Azure NetApp Files is both straightforward to use and cost effective."

Run your EDA applications faster in Azure than on-premises

Contact Sales to register and get all the benefits of Azure NetApp Files working for you.

Get Started Today



¹ https://www.merriam-webster.com/dictionary/warp%20speed

- ² https://www.statista.com/statistics/511283/worldwide-survey-cloud-computing-risks/
- ³ https://www.hpcwire.com/solution_content/ibm/electronics-eda/are-your-software-licenses-impeding-your-productivity/
- ⁴ https://www.gartner.com/en/documents/3982411/how-to-manage-and-optimize-costs-of-public-cloud-iaas-an
 ⁵ https://www.statista.com/statistics/1116179/hpc-spending-in-public-clouds-by-application/

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