Microsoft

Accelerate high-performance computing workloads with Avere vFXT for Azure

As compute demand rises, on-premises resources can quickly become strained, bringing important work to a halt. While cloud infrastructure offers a potential solution, cloud storage uses an object-based interface for data access. That object model typically forced companies to choose one of two expensive paths: disruptive application rewrites or the traditional mode of scaling on-premises by adding servers and storage.

With Avere vFXT for Azure, a high-performance caching service from Microsoft, businesses can move excess capacity to Microsoft Azure without rewriting applications.

Tap Azure on demand to run high-performance file-based workloads

File-based high-performance computing (HPC) workloads impose unique requirements on compute, storage, and network resources. Until now, businesses with HPC workloads that wanted to gain scale and performance also needed to rewrite applications.

With Avere vFXT for Azure, you can run the most demanding, file-based workloads in Azure without rewriting applications. The Avere caching service minimizes latency between Azure compute and storage to deliver high-speed data access. As a result, you can move excess compute demand safely to Azure while leaving large datasets in your network-attached storage (NAS) or Azure Blob Storage for a cloud NAS solution.

HPC caching on-demand

Use Avere vFXT for Azure to run HPC workloads with low latency, and scale them to your needs using an intelligent cache to keep your data placement fast, flexible and efficient.

- **Performance:** Minimize storage latency for read-heavy environments with automatic identification and caching of hot data.
- **Flexibility:** Scale on-demand to support critical workloads.
- **Access:** Azure compute resources access storage from either on-premises NAS—network file system and Server Message Block workloads (NFS/SMB)—or Azure Blob Storage (REST).

Optimized for

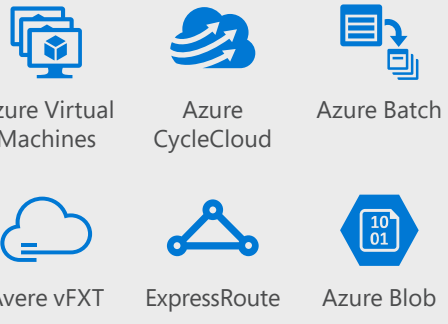
- Read-heavy workloads.
- Instance type E32s_v3
- Scalability wand capacity with clustering

Included

- Namespace functionality that presents a single, logical mount point.
- Simplified management tools.
- All Azure regions except sovereign locations.

Run high-performance workloads in Azure or across hybrid environment

Microsoft Azure is leading the way to HPC in the cloud with its broad array of HPC capabilities, including Avere vFXT for Azure. With Azure resources, you can augment existing compute capacity or run entire workloads. Find a wealth of services that optimize scalability and performance for unconstrained creativity and innovation.



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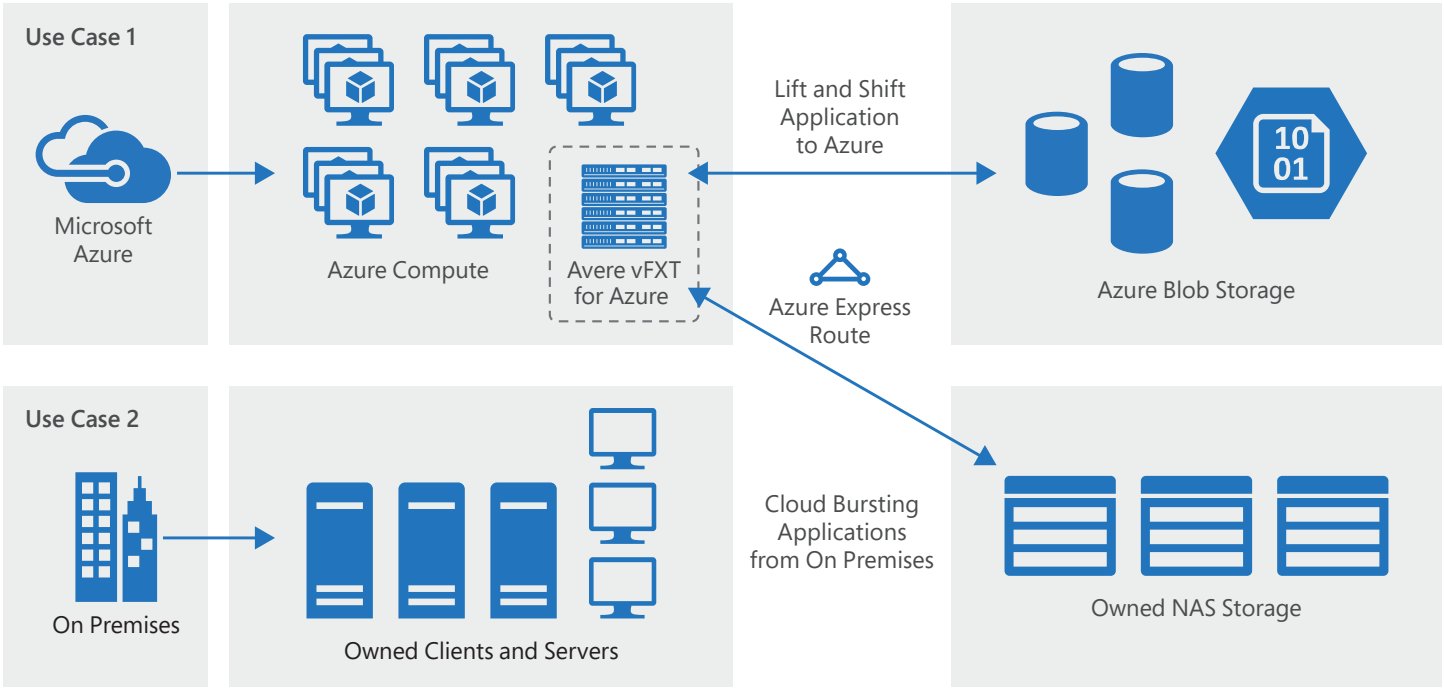
Use Case 1

Lift and shift to stop datacenter gridlock

Increasingly, organizations want to slash capital expenditures and take advantage of cloud innovations. Avere vFXT for Azure enables you to shift applications and workloads to run in Azure without rewrites.

How it works

1. Move data to Azure Blob Storage
2. Run workloads in Azure using Avere vFXT for Azure as a NAS front end.



Use Case 2

Use cloud bursting to handle peaks in compute demand

Use Avere vFXT for Azure to "burst" workloads to Azure. Your data remains on-premises in NAS, while active data is processed as needed by Azure Virtual Machines.

How it works

1. HPC workload compute nodes request data
2. Avere vFXT cluster pulls the active data over the network and caches the data on high-speed media in Azure while the job completes.

Specifications

Instance type	E32s_v3
CPU cores	32
DRAM	256 GB
Flash SSD capacity	4 TB
Maximum nodes per cluster	24
Maximum DRAM per cluster	6.1 TB
Maximum SSD per cluster	96 TB

Learn more at azure.microsoft.com

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