

## Solution Brief

# Global File Cache

Consolidate distributed file servers into NetApp Cloud Volumes to decrease cost and risk while increasing business agility

### Challenges of Distributed Storage

- Are you managing islands of data in your branch offices?
- Are your users struggling with slow performance when they access files?
- Do you need a cost-effective approach to managing unstructured data to accommodate ever-growing datastores?
- Does the business environment require you to move your unstructured data workloads into the public cloud to take advantage of scale and flexibility?

**What if** you could consolidate all of your distributed file servers into a single, scalable cloud footprint, with the increased governance, control, and OPEX advantages without sacrificing edge performance?

**What if** you could enable a global VDI infrastructure that provides for regional workspaces close to the users, but leveraging a single, centralized datastore for a single point of control and audit?

**What if** you could offer true global collaboration on even the largest of files – including global locking for tight data consistency – without sacrificing performance?

NetApp Global File Cache helps organizations modernize their distributed storage on their journey into secure, scalable public cloud infrastructure. With this proven solution strategy, enterprises can centralize and consolidate unstructured data from file servers around the globe into a secure, scalable cloud footprint while taking advantage of a software fabric that caches active datasets locally in those distributed offices. As a result, business users have seamless access and optimal performance on a global scale, without affecting applications, workflow, or user experience.

### Factors Affecting the Distributed Enterprise

Today, one of the biggest challenges that organizations face is the excessive growth of unstructured data and the inability to centrally manage those datasets efficiently. Considering that 80% of unstructured data resides across more than one location, organizations struggle to manage these “islands” of data. The result is increasingly complex and costly IT management, as well as increased risk of either data loss or audit, compliance, and security breaches.

### NetApp Cloud Volumes with Global File Cache: The Next Step in Unstructured Data Management for the Distributed Enterprise

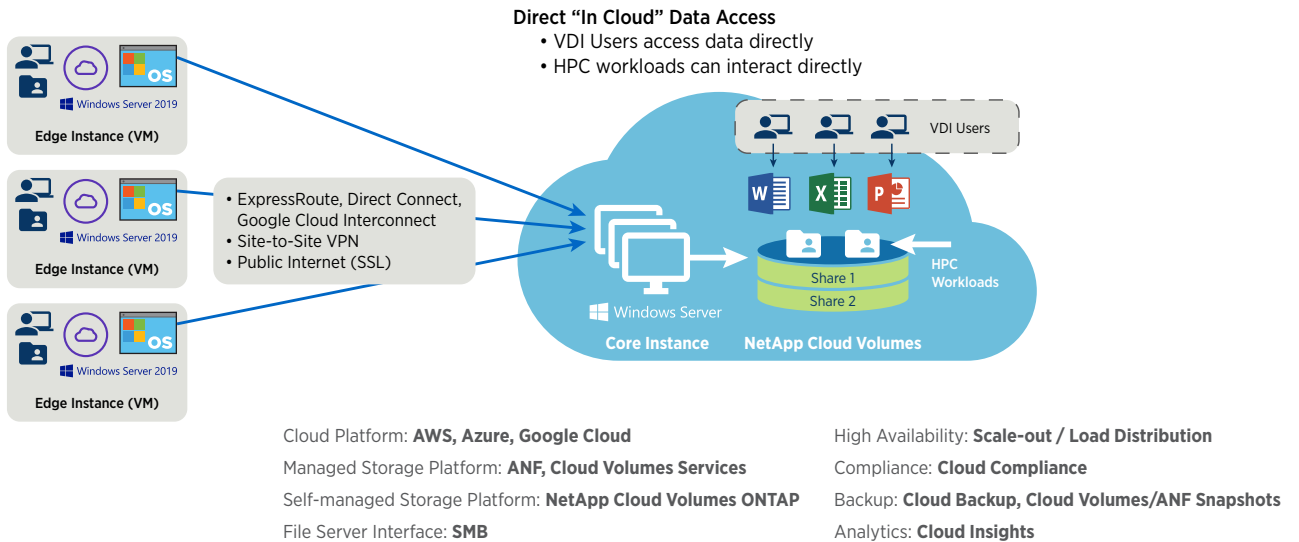
By using NetApp® Global File Cache intelligent file caching software with Cloud Volumes, you can do more than just control your data. You revolutionize the way your company manages unstructured data, both in its IT operations and in users' ability to access and use that data globally.

Currently, 85% of companies are in the process of adopting a cloud transformation strategy. They must address the spectrum of on-premises, hybrid, and public cloud services and associated storage technologies to host company data. NetApp recognizes the impact on the organization, end users, distributed IT strategy, and critical data management operations. To fit into your IT strategy, this capability is available in either a managed environment via NetApp Cloud Volumes Services (available in AWS and Google Cloud) or Azure NetApp files in Azure, or via a self-managed environment in the form of NetApp Cloud Volumes ONTAP® software (in all three hyperscalers).

The NetApp Global File Cache approach allows a scalable, flexible, and cost-effective solution strategy, addressing all layers of the enterprise from end users, to branch offices, to the scalable cloud infrastructure.

### Drastically reduce storage footprint

Consolidation with Global File Cache gives distributed branch offices total access to the entire directory structure, providing streamlined access to all company data while only active datasets are cached locally. Users have immediate access to all centralized data, which could be hundreds of terabytes or even petabytes of unstructured data. But only data that is relevant to users in that office is cached locally in the Global File Cache edge instance. Also, as the active dataset ages over time in any given location, the Global File Cache algorithms clear the least-recently-used (LRU) cached files from the local cache volume.



### Streamline and simplify distributed IT

Organizations that are trying to centralize and consolidate their branch office IT storage assets can realize significant cost savings by eliminating complexity, the need to perform backups, and risk. In each location, Global File Cache deploys transparently on a (virtual) Microsoft Windows Server instance, on traditional servers, or on virtualization platforms such as Microsoft Hyper-V or VMware vSphere, and provides visibility and access to the consolidated storage in the cloud. The solution allows enterprises to leverage other embedded services such as Microsoft Active Directory, DNS/DHCP, DNS, Microsoft Distributed File System (DFS) Namespaces, and Software Distribution Service in their streamlined and standardized branch office IT image.

### Industry standards maintained

Using the industry-standard SMB protocol, you can choose from several back-end storage platforms to store your unstructured data. You can then make that data accessible globally through the Global File Cache fabric, which provides a virtual file share and intelligent file cache at each edge location. Global File Cache integrates fully with security principles such as those used in Active Directory, access control lists (ACLs), NTFS permissions, and DFS Namespaces.

### Provide an optimal user experience

With Global File Cache intelligent file caching software, your distributed users get an optimal experience. By accessing and collaborating on data in real time—transparent to all client platforms—users will feel as if they're all working in the same office, anywhere in the world, regardless of bandwidth, latency, and distance.

### About NetApp

NetApp is the leader in cloud data services, empowering global organizations to change their world with data. Together with our partners, we are the only ones who can help you build your unique data fabric. Simplify hybrid multicloud and securely deliver the right data, services, and applications to the right people at the right time. Learn more at [www.cloud.netapp.com](http://www.cloud.netapp.com).