

# A Global File System for Cloud VDI Deployments

## Seamless File Services for Distributed Users and Sites in a Post-COVID World

### The Future Is Remote

As social distancing becomes the norm, enterprises are scrambling to ensure business continuity amid the Covid-19 pandemic. Companies are shifting resources to less affected regions while more than 80% of employees are working from home or branch offices. The impact of this "shock therapy" on enterprise work models is likely to last long after the virus comes under control.

With no choice but to work remotely, organizations have experienced first-hand the advantages that this model offers in terms of business continuity, productivity and operational efficiency. They have also discovered that remote work gives them access to a larger talent pool without geographical restrictions.

Buoyed by the results, it is expected that the majority of enterprises will permanently adopt remote work models going forward, supported by advanced IT solutions for video conferencing, remote data access from any device/location, real-time collaboration and remote IT services.

### Bringing Data Closer to Your VDI Users

Large organizations use Virtual Desktop Infrastructure (VDI) technology for its proven security and maintenance benefits. VDI solutions (e.g., Citrix XenDesktop, VMWare Horizon) can be deployed behind the corporate firewall, or in the cloud (e.g., Amazon Workspaces, VMWare Workspace One, Microsoft WVD) as Desktop as a Service (DaaS).

In order to reap the benefits of VDI and DaaS, which allows employees to work from any location on any internet-enabled device, enterprises need to overcome the impact of network latency on user experience. For desktop performance, multiple VDI clusters need to be deployed close to users in branch offices. Since these clusters are connected to the corporate backbone network, they provide a high-speed user experience.

The second key component for user experience is file access. To ensure a "local" file access experience, users' home and project folders need to be close to the VDI cluster to reduce round trip latency (which can reach 80 ms for distributed organizations in the US).

### CTERA VDI Solution: Universal File Access with Low Latency User Experience

CTERA offers a Global File System that enables storing the user profiles, home folders and projects close to the VDI clusters, so users can work productively from home or any other location with low latency access. Analogous to a cellular network for storage, the global file system lets users go anywhere they want, connect to the closest VDI Point of Presence, and work normally with immediate access to all the files they need.

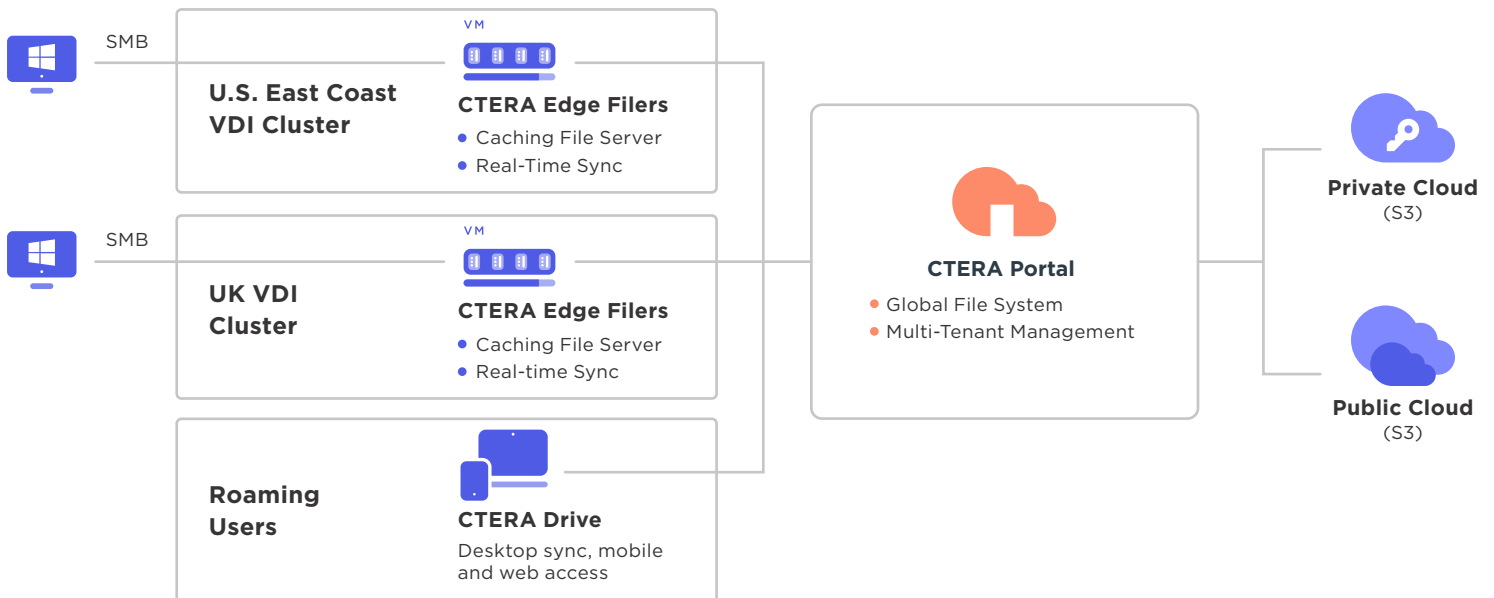
### Ideal for Working from Home

Using the CTERA Global File System in conjunction with VDI helps optimize work from home scenarios by enabling users to freely access data and collaborate from any venue. Due to the asymmetric internet connection in most homes, non-VDI solutions are likely to encounter problems due to slow upload speeds. VDI, on the other hand, provides fast connectivity for reading and writing files as it is directly connected to the datacenter.

## How It Works

CTERA stores all folders in a single global namespace for desktop and VDI users. Edge Filers are deployed near the VDI cluster at the edge of the cloud (i.e., adjacent to each remote branch office) to ensure no more than 15 ms latency from the VDI desktop. The Edge Filer exposes home folders as a network drive that is cached to the cloud, while "old" files are tiered to the cloud rather than using virtual desktop storage. All files are synchronized and backed up to the cloud, ensuring business continuity and facilitating global collaboration.

Additionally, roaming users can install the CTERA Drive app for secure access to their work files from their laptops, mobile devices, or a web interface. Their VDIs can run on the same machine where their home folders reside for a zero-latency user experience.



## Customer Spotlight: Top-5 Credit Card Company

This customer sought to replace its legacy NAS with a secure desktop drive service with a single global namespace for desktop and VDI users. It deployed CTERA's platform to support file services for 100,000+ users with VDI support, 2-factor and multi-factor authentication. By shifting file storage from SSD to object storage, storage costs were slashed by 90%. Following the Covid-19 outbreak, the company moved to a 100% remote work model in one day.

## Global and Secure Remote Access to All Your Files

- **Business continuity:** Ensure operations aren't impacted by office or travel restrictions
- **Keep data close to users:** Files, home folders and projects instantly accessible to users from any location
- **Optimal user experience:** Negligible latency via backbone networking between VDI clusters and edge caching
- **Modern collaboration:** Sync and share files across every VDI cluster for efficient collaboration across distributed teams
- **"Follow the sun" work models:** Global file sharing enable teams to conduct 24x7 engineering and other projects
- **Flatten your global operation:** VDI clusters and file storage at the edge cloud allow users to roam between offices or work from home as if they were in their base office