Solution Brief:

# CTERA For Healthcare Imaging

## Accelerate Care, Improve Security, and Reduce IT Complexity

## Healthcare Imaging Is Pushing Storage to the Breaking Point

Medical imaging is one of the fastest-growing sources of data in the healthcare industry. Fields like digital pathology and radiology are generating huge volumes of unstructured image data. Those digital images must often be stored for several years to support follow-up care and meet regulatory retention requirements. This ballooning data, paired with the outdated infrastructure used to store it, is increasing costs and creating alarming security threats.

To manage these challenges, medical organizations are turning to smarter ways to store, access, and harness growing volumes of imaging data to support efforts such as:

- Adopting leading-edge imaging systems to manage and share images across departments and geographic locations.
- Training AI systems to improve diagnostic accuracy and detect abnormalities and diseases at earlier stages.
- Strengthening IT security and compliance to meet evolving HIPAA regulations and combat rising ransomware threats.

The healthcare sector has seen a

**300%**

increase in ransomware attacks since 2015.

However, organizations that rely on traditional NAS systems are hitting roadblocks in these efforts. Here's why:

**Data Overload.** A single high-resolution digital pathology slide can range in size from 2 to 4 GB. Labs producing 700 to 1,000 slides per day can generate as much as 3TB of new imaging data daily. Additionally, radiology PACS (Picture Archiving and Communication Systems) generate large volumes of DICOM (Digital Imaging and Communications in Medicine) data.

**Cold Storage Creep.** With traditional NAS, hot and cold data are treated equally and incur the same costs, regardless of how frequently they are accessed.

**Growing Security Concerns.** Healthcare organizations are among the top targets for cyber criminals. The sector has seen a **300% increase** in ransomware attacks since 2015. And these breaches go beyond data loss. They have been shown to negatively impact patient care.

**Information Silos.** Data is often isolated, forcing manual assembly of patient files and limiting the use of data for advanced analytics or data-powered diagnosis.

**Operational Complexity.** Each NAS system requires local maintenance monitoring for tasks such as data protection and disaster recovery.

**Limited Scalability.** Traditional NAS often requires over-purchasing in anticipation of projected storage growth.

As a result, healthcare IT teams that stick with the status quo face mounting costs and planning challenges, as well as rising security risks and increasing pressure from clinical stakeholders to deliver faster and more reliable access to imaging data.

# CTERA: Secure, Scalable Imaging Storage Built for Modern Healthcare Workflows

The CTERA Intelligent Data Platform empowers healthcare IT professionals to streamline imaging workflows and scale growth with confidence that data remains accessible and secure.

### Providing Clinicians with Faster, Easier Access to Imaging Data

With a distributed global file system, clinicians gain secure access to diagnostic data from any location, empowering:

- **Real-Time Collaboration.** Intelligent edge caching ensures fast and consistent access to imaging data, regardless of the site location, thereby eliminating the need for manual file transfers.
- **Better Clinical Workflows.** Rapid access to large imaging files reduces delays in diagnosis and supports coordinated care across specialties and locations.
- **Patient-Centric Experiences.** Streamlined workflows decrease wait times and improve healthcare outcomes.

### Built for IT Simplicity, Data Protection, and Growth

While clinicians depend on uninterrupted access to imaging files, IT teams bear the burden of managing the infrastructure that supports them. CTERA consolidates storage, backup, file sharing, and ransomware protection into a single platform, reducing costs, complexity, and risk across the organization.

Gain fast, secure access to medical files across distributed locations, including hospitals, clinics, and remote sites, using a global file system with local edge caching.

Trust immutable, ransomware-resistant storage and automated compliance controls that support regulatory and insurance requirements without adding manual overhead.

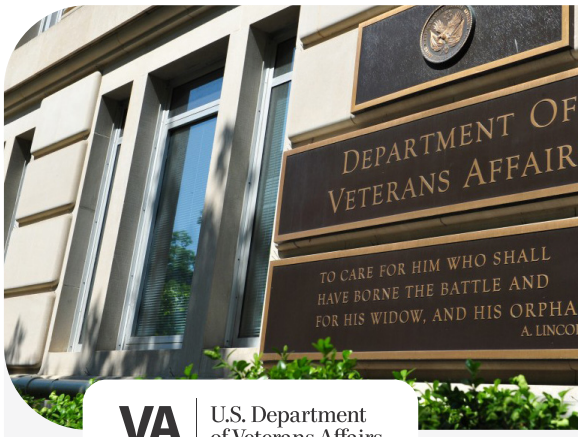
Confidently recover your data in the event of an outage or disaster. If a site or server becomes unavailable, all data is always accessible via the cloud and a new CTERA Edge Filer can be spun up in minutes.

Scale at your own pace without over-provisioning through a hybrid cloud architecture, which allows for near-limitless scaling by adding object storage as needed, without disruption or downtime. Additionally, elastic capacity enables you to scale down as needed.

Maintain fast local access to active files with intelligent edge caching, while policy-driven tiering offloads inactive data to cost-effective cloud storage.

Leverage an AI-ready data foundation that unifies file storage and simplifies access, helping healthcare organizations accelerate innovation and clinical research with AI and analytics.

Quickly deploy CTERA without disrupting the worker experience.




VA | U.S. Department of Veterans Affairs

## Take the Next Step

CTERA is already helping leading healthcare organizations, such as the **U.S. Department of Veterans Affairs**, to modernize their imaging infrastructure and scale to petabytes of secure, accessible clinical data.

LEARN MORE

## Ready to future-proof your organization?

See how CTERA can support your organization's mission to provide next-generation care.

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