# EMC Centera Content-Addressed Storage System for Midsize Enterprises

## Making Archiving Simple for Midsize Enterprises

**The Big Picture**

- Lower-capacity, lower-priced EMC Centera entry point

- Ease of configuration and management

- Increased flexibility (rack-mountable in industry-standard enclosures)

- Self-configuring, self-managing, and self-healing functions

### Enterprise Archiving at a Midsize Price

Take advantage of EMC® Centera® best-of-breed archiving technology to better manage fixed content within your organization. The EMC Centera system for midsize enterprises offers a rackable option and can be easily integrated with existing SAN or NAS environments. EMC Centera archives enable management of more content with fewer staff at lower cost. Its content-addressed storage technology overcomes current archival media limitations and facilitates compliance with records retention and preservation requirements. With its redundant array of independent nodes (RAIN) architecture, EMC Centera offers no single-points-of-failure, continuous data integrity checking/repairing, non-disruptive repair, phone-home capability, and dual AC power sourcing.

This entry-point EMC Centera configuration enables midsize enterprise organizations to realize all the benefits of EMC Centera—including online access with assured content authenticity and ease of archive access, management, and maintenance—with a superior total cost of ownership (TCO). In addition, it is available in a rack-mountable configuration allowing installation in an EMC cabinet or other EIA RS-310 industry-standard rack, offering active archiving in a midsize configuration.

### EMC Centera for Active Archiving of Fixed Content

EMC Centera is a networked storage system specifically designed to store and provide fast, easy access to fixed content (information in its final form). It is the first solution to offer online availability with long-term retention and assured integrity for this fastest-growing category of information. Integrated with either an in-house-developed application or one from an expanding group of industry-focused EMC partners, EMC Centera is for businesses that store expanding amounts of fixed content. EMC Centera greatly simplifies the task of managing, sharing, and protecting large-scale fixed content repositories, enabling businesses to use this traditionally offline information to cost-

effectively support new sources of revenue generation, expanded business models, and increased service levels to users and customers. EMC Centera features WORM (write once, read many) attributes of non-rewritability and non-eraseability with disk performance and a total cost of ownership (TCO) superior to other archiving approaches.

Fixed content takes many forms, such as critical business, legal, and reference documents; medical images and records; e-mail attachments; check images; broadcast content; and satellite imagery; among many others. Unlike databases or files, which change and are updated constantly, the value of fixed content stems from the combined attributes of authenticity, long life, scale, and accessibility. Existing storage architectures were not optimized for this new combination of requirements.

Once relegated to storage archives or file cabinets, fixed content is being driven online, fueled by regulatory requirements, digitization across virtually all industries, and the desire to leverage this content into new services and revenue streams. Just as the growth of applications such as computer-aided design (CAD) and the explosion of the Web drove the emergence of NAS to share file-based information, the need to archive, manage, and access large quantities of fixed content has given rise to a new category of networked storage—content-addressed storage (CAS).

EMC Centera content-addressed storage, as part of an integrated backup/recovery and archive strategy, ensures protection of archived content while helping to meet or reduce the demands of existing backup processes by moving fixed content off existing SAN and NAS devices and into the archive before performing backup.

## Unified Archives with Content-Addressed Storage

Content-addressed storage offers a significant new approach to managing and consolidating information—perfectly suited to the needs of fixed content. Content addressing eliminates the need for applications to understand and manage the physical location of information on storage media. Instead, addresses are calculated based on the content itself, and serve as a unique claim check that applications can use to find and retrieve stored objects. This claim check not only simplifies the task of managing huge numbers of objects, it also ensures absolute authenticity of the content itself.
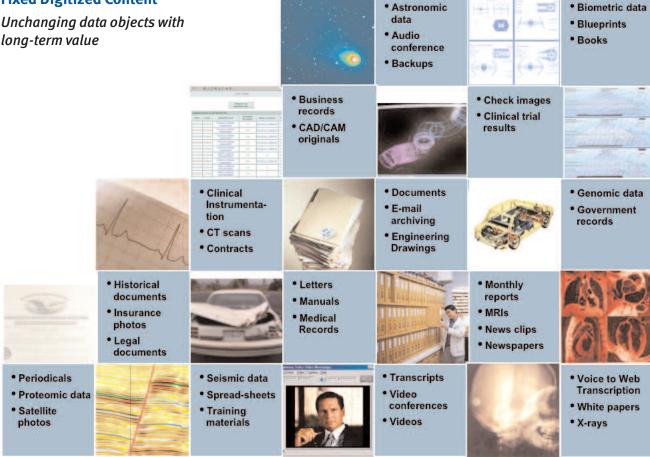
EMC Centera is the world's first CAS solution designed from the outset to store and provide simple, scalable, and secure access to fixed content. EMC Centera's CentraStar® software operating environment employs an innovative content-addressing system to simplify management, ensure content uniqueness, and deliver the scalability needed for terabyte-to-petabyte-level fixed-content requirements. And the EMC Centera system accomplishes this while ensuring dramatically lower overall management costs.

### *EMC Centera offers valuable benefits:*

- **Ease of Management:** EMC Centera technology greatly simplifies system planning and management of archives. With no RAID types to choose, LUNs to bind, or file systems to create, applications are released from the requirement to compensate for or manage the complexity of traditional storage topologies.

- **Speed of Access:** EMC Centera enables shared, networked, fast access to a single copy of fixed content at sub-second speeds, enhancing the value and usability of information previously stored in less-accessible forms.

- **Content Authentication:** Utilizing breakthrough C-Clip™ technology, any object presented to the system is stored in such a way that it is unchangeable and authenticated, transparent to the end-user application.

- **Non-Eraseability:** Configurable retention settings ensure data is not erased prior to the expiration of its defined retention period.

## Fixed Digitized Content

*Unchanging data objects with long-term value*



- Astronomic data
- Audio conference
- Backups
- Biometric data
- Blueprints
- Books
- Business records
- CAD/CAM originals
- Check images
- Clinical trial results
- Clinical Instrumentation
- CT scans
- Contracts
- Documents
- E-mail archiving
- Engineering Drawings
- Genomic data
- Government records
- Historical documents
- Insurance photos
- Legal documents
- Letters
- Manuals
- Medical Records
- Monthly reports
- MRIs
- News clips
- Newspapers
- Periodicals
- Proteomic data
- Satellite photos
- Seismic data
- Spread-sheets
- Training materials
- Transcripts
- Video conferences
- Videos
- Voice to Web Transcription
- White papers
- X-rays

EMC Centera's redundant array of independent nodes (RAIN) architecture and intelligent operating environment provide non-disruptive scalability; self-managing, self-healing, and auto-reconfiguration proficiency; and guaranteed authenticity of all fixed content objects.

- **Record-Level Content Management:** Content addressing allows retention protection and disposition of each individual data object, as opposed to managing retention/disposition at the platter or tape media level.

- **Efficient Storage Utilization:** EMC Centera uses a unique content-derived address that permits only one protected copy of content to be stored no matter how many times it is used. This significantly reduces the total number of copies of information stored and is a key factor in lowering the cost of storing and managing content.

- **Self-Healing:** EMC Centera continuously monitors the integrity of stored objects to detect/repair soft errors and automatically reconfigure the system and regenerate objects if necessary.

- **Business Continuity Protection:** EMC Centera can be configured to maintain duplicated copies of fixed content at a remote site, eliminating the possibility of a site disaster destroying all copies of information.

- **Easy Installation and Non-disruptive Upgrades:** A significant effect of EMC Centera's breakthrough technology is that systems can be installed in under an hour and upgrades managed without disrupting content access.

## EMC Solutions and Partner Solutions for EMC Centera

Integrated EMC Centera solutions for all of your archiving needs are available today. EMC offers unique solutions for e-mail and file systems archiving with attractive pricing to complement the EMC Centera for midsize enterprise configuration. EMC Centera is also endorsed by a large and increasing number of EMC partners integrating solutions across a variety of industries. Each partner adds its own application and industry-specific value to EMC Centera, tailoring the system for individual markets and requirements. A complete list of EMC Centera partners, their solutions, and information on how to become an EMC Centera partner is available on EMC's website at www.EMC.com/centerapartners.

See the Flash demonstration: EMC Centera for Midsize Enterprises at http://www.emc.com/products/systems/centera/centera_ms/index.jsp

## Take the Next Step

Discover how EMC Centera content-addressed storage can enable you to better store, protect, optimize, and leverage your fixed content data for your enterprise. To learn more, contact your local EMC sales representative or authorized value-added reseller, call us at 1-866-464-7381, or visit our website at www.EMC.com.

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