A Modern Approach to Secondary Storage for Federal Agencies

CTG FEDERAL

COHESITY

Federal IT environments are extraordinarily complex, expensive, stovepiped, and time-consuming to manage and maintain — and that applies as well to their data backup and recovery systems.

Many agencies have acquired many tools from a myriad of vendors over the years, resulting in a complex patchwork of point products for target storage, backup software, media servers, proxies, replication, and disaster recovery.

Adding to this complexity is the move by many agencies toward Software-as-a-Service (SaaS) solutions and multi-cloud environments. Consequently, many agencies are seeing their data increasingly scattered across a multitude of legacy and cloud systems. This fragmentation degrades performance, increases costs, and hampers scalability. Moreover, it introduces greater risk and inefficiency for agencies in three important ways:

DATA MANAGEMENT IS IMPAIRED.
Having data scattered across so many environments means the task of accessing, storing, backing up, and recovering that data is made far more complicated, time-consuming, risky, and costly than it should be.

SECURITY IS WEAKENED.
This is because data fragmentation expands attack surfaces and undermines effective data back-up and recovery.

AGENCIES CANNOT EFFECTIVELY EXPLOIT THEIR DATA ASSETS.
Agencies struggle at simply knowing what data they have and where to find it, let alone being able to access and analyze it. This problem of so-called "dark data" hinders the ability of agencies to exploit their data as a strategic asset. They are less able to identify trends, spot inefficiencies, deliver improved customer experiences, and gain business intelligence. And even though dark data is seldom, if ever used, it still consumes enormous storage and backup resources.

The Benefits of Cohesity

FLEXIBILITY
Cohesity offers one unified platform that does it all — from basic target storage for your current backup software to enterprise-wide backup, recovery, replication, disaster recovery, cloud protection and migration. It can be deployed modularly, without disrupting current processes, so your agency can leverage its capabilities on day one and then add other capabilities as needed.

SIMPLICITY
The platform consolidates all secondary storage — legacy backup, servers, storage appliances, secondary file storage, and database backup storage silos — and simplifies management with fast, effective data search, analytics, and native cloud integration.

INTEROPERABILITY
Cohesity is storage and software vendor agnostic. It performs native built-in backups while also integrating seamlessly with all other data protection solutions.

Even More Value When Paired with the Cloud

BACKUP
Backup and restore anything from on-premises to cloud to SaaS apps and data.

LONG-TERM RETENTION
Use cloud to archive data and reduce reliance on tape.

STORAGE TIERING
Save money by creating tiers of storage in public cloud while retaining ability to retrieve data to on-premises when necessary.

DISASTER RECOVERY
Enable cloud failover and failback with automation and orchestration of workloads over hybrid cloud.

AGILE DEV/TEST
Spin up VMs in the public cloud for dev/test. Cohesity SnapTree makes your data more productive by providing unlimited instant snapshots and zero-cost clones to accelerate application development.

CTG Federal and Cohesity for Better Data Storage and Management

CTG Federal, a small business that serves dozens of agencies across federal civilian, defense, and intelligence sectors, has teamed up with Cohesity, which offers a revolutionary new approach to backup and recovery, archiving, files, objects, test/dev, and analytics. Together, the two firms are delivering an innovative storage platform that solves the problem of data fragmentation at federal agencies.

Cohesity: A Radically Efficient and Intelligent Approach to Secondary Storage

Cohesity is a turn-key, enterprise-scale, secondary storage platform that represents a more efficient and intelligent storage solution and is already in use at more than 150 federal organizations. The platform delivers a fully integrated, end-to-end data protection environment that helps federal agencies meet mission requirements and solve challenges around data protection, storage, and disaster-recovery replication.

Cohesity modernizes backup and recovery by consolidating all secondary data and management across the organization into a single scaled-out, globally de-duplicated fabric. This not only dramatically simplifies operations and saves money, but also lays the foundation for further modernization, consolidation, cloud migration, archiving, in-place analytics, and Google-like discovery — all from a next-generation, software-defined platform.

Agencies can use Cohesity to replace legacy backup and recovery solutions right out of the box, or they can integrate the vendor-agnostic platform seamlessly with other existing data protection solutions. For example, it can serve as a storage target for existing backup software today and then be expanded later to replace the backup software and serve as a cloud gateway.

Here is how Cohesity uniquely addresses the challenges — impaired data management, weakened security, and an inability to fully exploit data across the enterprise — that come from data fragmentation:

+ SIMPLIFIED MANAGEMENT
Cohesity provides complete backup across an agency's storage environment, regardless of how fragmented it may be, by consolidating all data into a single virtual place. The platform converges all data protection hardware and software onto a single architecture built upon Google-like web scale principles.

The platform automatically indexes data as it ingests it, along with the contents of the file system inside each file, application, and virtual machine

(VM). This indexing capability translates into rapid search and recovery, simplifying backup and restore. You can instantly search for any VM, file, or object touched by the Cohesity platform. The index is distributed across the entire cluster and served from the cluster's flash memory, which ensures instant access to data and instant mass restore for data recovery, whether it is a single file, one VM, or thousands of VMs across the enterprise.

The platform's archiving capabilities mean you can easily comply with data-retention requirements while saving money by storing data in less expensive tiers. Native integration with public cloud services include Amazon Web Services, Microsoft Azure, and Google Cloud Platform.

In short, pairing Cohesity with a public cloud service means you can take advantage of public cloud scalability and cost effectiveness while retaining control of your data. Although public clouds provide operational backups, they are not an archive. Cohesity archives those operational backups by storing the data in an approved write-once, read-many (WORM) format. You can archive data for long-term retention in the public cloud using object storage services, thereby reducing your dependence on tape. You can expand capacity by using cloud tiering for hot, warm, and cold data, and retrieving it to on-premises storage or applications as needed. You can also replicate into the cloud for disaster recovery and test/dev.

+ PATENTED SECURITY PROTECTIONS

Cohesity offers a comprehensive approach to preventing, detecting, and responding to cyberattacks, including ransomware attacks, to ensure zero data loss.

First, Cohesity protects data by eliminating silos and fragmentation that hackers can exploit and consolidating everything onto one platform. Also, Cohesity's indexing capability helps identify which data is being stored at which sites so that sensitive data — such as personally identifiable information (PII), personal health data, or classified data — is given appropriate protections. In addition, Cohesity helps prevent your backup storage from becoming an attack target. Using machine learning, it provides visibility and continuously monitors for any anomalies in the data.

If an attack occurs, Cohesity locates and deletes infected data across your agency's global footprint, including public clouds, to instantly bring back your data and apps, ensuring business continuity. Cohesity is uniquely capable of instantly recovering hundreds of VMs within minutes to bring your operations back online. Always-protected backups are available on-premises or in the cloud so your enterprise can return to business faster.

DHS's National Cybersecurity and Communications Integration Center (NCCIC) recommends frequent backups and verification as a best practice to fight ransomware. Cohesity continuously backs up and verifies secondary data and applications, both on premise and in the cloud, protecting both physical and virtual environments. Through its patented SnapTree technology, Cohesity writes time-based snapshots into internal views that are not accessible to processes and software. During data restore, Cohesity clones those snapshots. SnapTree ensures that attackers cannot get to the internal snapshots.

Meanwhile, global deduplication and compression significantly reduces storage needs. This enables Cohesity's instant mass restore capability to recover and power on hundreds of servers in minutes with zero data loss. Mass-restore also makes it possible to roll back to previous points in time to quickly identify when an attack took place. And Cohesity's global search capability enables investigators to easily identify the malicious ransomware code, helping to obtain forensic evidence of the cybercrime.

In addition, all data is encrypted, both at rest and in transit. Encryption can be granular, either cluster-wide, or at the viewbox level.

+ NO MORE 'DARK DATA'

Cohesity takes aim at the looming "dark data" problem, which refers to the rising volume of unstructured data sets that demand enormous resources yet continue to grow unchecked and remain unanalyzed. It occurs because enterprises use many different secondary storage solutions for different types of data. Cohesity offers a single, infinitely scalable, and intelligent platform to encompass data protection, archiving, DevOps, and analytics, which reduces storage needs and helps agencies identify and analyze the growing amount of dark data lurking across their enterprises.

Cohesity addresses the "dark data" problem in three ways. First, it manages and protects data seamlessly. Web-scale storage with converged data protection eliminates the needless complexity and overhead of multiple products and vendors. Second, it transforms secondary storage into active data for DevOps, with built-in copy data virtualization and public cloud integration to deliver simpler, more efficient data storage across the enterprise. And third, Cohesity delivers agencies immediate insights into their data types, usage, and performance to make rapid business analysis of "dark data" possible.

Cohesity: Now an AI-centric Backup Solution with Zero Trust Incorporations

Cohesity's platform now delivers secure, scalable, AI-powered data protection with:

- **Automated Backup & Recovery:** Reduces downtime and ensures mission continuity with instant mass restores.
- **Intelligent Cloud Archiving:** Integrates with FedRAMP-authorized AWS, Azure, and Google Cloud, plus other emerging federal cloud services.
- **Advanced Ransomware Defense:** Uses AI and machine learning to detect and recover from cyber threats in minutes.
- **Google-like Data Search:** Enables rapid file retrieval across all data silos.

Cybersecurity and Compliance Enhancements

With rising cybersecurity threats, Cohesity incorporates Zero Trust principles, immutable backups, AI-driven anomaly detection, and automated recovery. Its compliance with CISA, NIST 800-171, and DoD IL5 ensures agencies meet the latest security mandates.

- **Zero Trust Security:** Role-based access controls (RBAC), immutable snapshots, and AI-driven anomaly detection.
- **FIPS 140-3 & DoD IL5 Compliance:** Meets stringent security standards for federal agencies.
- **CISA & NIST Alignment:** Supports government-mandated cybersecurity frameworks and best practices.

Cohesity: The Solution To Federal Agency Storage Challenges

Cohesity is uniquely designed to modernize backup and recovery while also consolidating secondary storage workloads into a single, scaled-out, globally de-duplicated fabric across the organization. With Cohesity, agencies can eliminate secondary data sprawl, reduce the complexity of managing multiple solutions, increase efficiency, improve security, achieve better analytics, and save money.

Cohesity can be deployed either on−premises via x86 hardware, as software that leverages existing hardware, or through any preferred FedRAMP-approved cloud service provider.

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Many federal agencies already employ Cohesity for a wide array of use cases, including:

Serving as a centralized tool to simplify and modernize data backup management

Improving the performance of backup storage environments and adding instantaneous site recoveries

Eliminating or enhancing the use of tape or tape-less backups to maximize economics

Adding functionality to utilize FedRAMP public cloud services for long-term retention

About CTG Federal

CTG Federal, a Cohesive Technology Group company, is a small business that excels in servicing dozens of federal defense, intelligence, and civilian organizations with best-in-class information technology. Our experienced team of sales and engineering professionals design and deliver IT hardware and software solutions that save time and money for our customers. Headquartered in Virginia, we have dedicated resources in all regions across the continental United States.

Contracts

DUN & Bradstreet: 080932836
UEI: G2D4Q7UKR5P5
CAGE Code: 7ZHE9
NAICS Code(s): 541519

NASA SEWP V

Contract Number: NNG15SD12B
Group: Group B_Small Business

GSA Multiple Award Schedule (MAS)

Contract Number: 47QTCA25D003P

DOE ICPT

Contract Number: ICPT CISCO BOA 4I-30062-0008A

Dell Technologies ICPT Agreement

Contract Number: 4I-31841 Small Business

Horizon ELA
Contract Number: W519TC-25-D-A005

ITES-4H
Contract Number: W519TC25DA013

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(703) 278-3885
contact@ctgfederal.com
1818 Library Street, Suite 500
Reston, VA 20190

www.ctgfederal.com