

Cisco Deploys Cohesity to Solve Internal Enterprise Data Management Gaps

**INDUSTRY**

Technology

USE CASE

Backup and Recovery

COHESITY PRODUCTS

DataPlatform, DataProtect, CloudArchive

CISCO PRODUCTS

Cohesity-certified Cisco UCS C-series

CHANNEL PARTNER

WWT

OVERVIEW

Few enterprises understand the data center like Cisco. Both as a technology provider and consumer, Cisco recognized the need for the best modern, integrated backup solution to reduce data center complexity and eliminate enterprise [mass data fragmentation](#). Cisco IT looked to the innovative joint solutions developed with Cohesity—a Cisco DevNet SolutionsPlus program partner—because they would most quickly reduce IT complexity and cost while also providing Cisco with better insights and value from data across its enterprise.

CHALLENGES

Modern backup and recovery became a high priority for Cisco IT because fragmented data silos were leading to increased mean-time-to-resolve (MTTR) for backup-related, high-priority issues, particularly for relational databases in Cisco IT's traditional infrastructure environment. Backup data went through multiple hops, including proxy servers, backup servers, custom script manipulation, and more—from multiple vendors—before being directed by orchestration software to storage hardware.

While Cisco IT had already invested in building a next-generation infrastructure platform—Cisco HyperFlex hyperconverged storage and networking services running on Cisco Unified Computing System (UCS)—the team sought a modern data management solution to further drive efficiency in its backup operations for hybrid cloud. The solution would need to effectively scale to support many petabytes of data. For Cisco IT, the objective was to eliminate point-product silos in the backup workflow, and to provide secure, reliable disaster recovery.

"Cohesity on Cisco UCS drives operational excellence. Its self-service capabilities coupled with a simplified and scale-out architecture make it easy to deploy backup services. The combined efficiency of Cohesity software and power of Cisco UCS provide an integrated solution that lowers costs, streamlines data management, and speeds deployment, propelling our Cisco-on-Cisco story forward as we navigate the effective management of unstructured data growth."

- CISCO IT TEAM

Cisco IT set both business and technical criteria for a new data management solution. The team sought to cut complexity and costs to ease data management, and to increase business value by gaining better insight into dark data as it aligned its infrastructure to industry transformations. Key required technical capabilities included enabling hyperscaler-like services within the Cisco internal private cloud; seamlessly integrating with Cisco UCS and Cisco HyperFlex; delivering self-service and automation on a converged platform; providing customized reporting to meet business needs and boost service levels; and proactive, automated product support using dial-home/call-home features.

SOLUTION

Like many of its customers, Cisco chose the combined power of Cohesity [DataPlatform](#) and Cohesity DataProtect software on Cisco UCS servers for simpler, more efficient [data management](#). Today, Cisco IT is able to greatly simplify maintenance and operations through data optimization and workflow automation as well as enable real-time insights into backup progress. A consolidated view of backups for reporting boosts service-level agreement (SLA) tracking for backups.

The new architecture speeds backups by reducing hops from source systems to target storage from many to one. It uses Cisco UCS C240s to host the backup cluster because these systems have NVMe caching capabilities that increase performance compared to SSD cache. Currently, Cisco has backed up part of its file system and database workloads. With erasure coding, Cisco IT protects against node and disk failures while automatic data rebuilding allows the team to support future hardware upgrades without the need for downtime, thereby increasing customer satisfaction.

In Cisco IT's traditional environment, relational database workloads and standard file system backups are protected by Cohesity. In Cisco IT's next-generation private cloud platform, an OpenStack-based environment, the Cohesity solution is offered as an end-to-end self-service backup offering for clients. For the private cloud platform, Cisco IT uses S3-compliant object storage. This on-premises long-term data retention solution with extensible APIs offers internal clients the opportunity to move data to object storage and keep it there for up to one year, if needed. Cohesity on Cisco UCS also lets Cisco IT easily configure backups to be compatible with leading public clouds. Together, these options deliver the ultimate client experience—providing the freedom to choose where to perform long-term backup.

Because Cohesity is provided as a self-service platform, it complements the Cisco DevOps operating model. Administrators no longer configure backups or open a case to recover a file; clients can do this independently using Cisco IT's cloud infrastructure—extending their self-help customer service mindset to enterprise backups.

RESULTS

Cisco eliminated multiple legacy backup and recovery products, simplified data management, and automated the deployment and recovery processes. Along with cutting costs, Cisco IT no longer needs to plan maintenance outages for adding or reducing capacity. Lifecycle management and refreshes are easier, too, with the ability to replace a few nodes at a time instead of requiring an outage window or a forklift upgrade.

In the Cohesity–Cisco UCS cluster, backup data is in one place and interconnected, streamlining data management with a single pane of glass for complete visibility that reduces operational overhead.

Cisco provides public cloud-like services for its own internal cloud, and backup-as-a-service to internal teams through the Cohesity platform. Cisco has realized many benefits with the joint Cisco–Cohesity solution including:

- Faster backups by eliminating multiple hops and disparate products
- Simpler data management for hybrid cloud, lowering IT burdens
- Seamless integration of Cohesity software with Cisco HyperFlex and Cisco UCS
- Significant cost savings using Cohesity in a Cisco Validated Design

ABOUT CISCO

Cisco (NASDAQ: CSCO) is the worldwide technology leader that has been making the Internet work since 1984. People, products, and partners from Cisco help society securely connect and seize tomorrow's digital opportunity today. [Cisco and Cohesity](#) offer integrated enterprise data management solutions. A Cisco Validated Design (CVD) provides expert guidance on how to back up primary data from Cisco HyperFlex clusters and do more with backup data on a Cisco UCS-based Cohesity platform—all as one unified architecture. Learn more at www.cohesity.com/cisco.