



U.S. Army Command Speeds Access to Five Years of Critical Command Data with Network Appliance™, Overtone Software, and FCN Solution

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ROSE DUBOSE
Senior Technical Advisor
Army Military Surface Deployment and Distribution Command

Key Highlights

- **INDUSTRY**
Federal/military
- **LOCATION**
Ft. Eustis, Virginia
- **KEY BUSINESS CHALLENGES**
Expedite data access
Protect Exchange and laptop data
Improve archive access
Comply with federal regulations
Ensure scalability with low TCO
- **KEY SOLUTION COMPONENTS**
NetApp clustered FAS systems
NetApp NearStore® systems
NetApp SnapMirror® software
NetApp SnapRestore® software
Overtone Software ManageTone Lifecycle Suite software
SyncSort Backup Express
FCN professional services
- **KEY BUSINESS BENEFITS**
Readily available data, 24x7
Automated, transparent backups
Fast access to five years of data
Ability to meet SOX requirements
Three-tier ILM for low-TCO growth

The Customer

The U.S. Army's Military Surface Deployment and Distribution Command (SDDC, www.sddc.army.mil) operates global ports and manages the movement of troops and equipment to meet national security objectives in peace and war. As of January 2005, the command had moved more than 66,000 containers of sustainment to support Operations Enduring Freedom and Iraqi Freedom. SDDC actively supports peacekeeping operations and relief efforts following natural disasters such as hurricanes Andrew, George, and Mitch and the 2004 tsunami in Asia.

The Challenge: Eliminate Paper Archives and Cumbersome Tape Backups

SDDC generates substantial volumes of data as it coordinates surface distribution and deployment operations for U.S. forces around the globe. The command's top priority is to ensure ready access to current data for in-transit visibility and years of historical contracts, invoices, and other materials for reference.

“Inaccessible data can potentially jeopardize global operations, and recovering it was invariably time-consuming and painful,” explains Rose Dubose, senior technical advisor at SDDC. “At one point we had a question about a \$50 million invoice that was several years old. Finding the relevant documentation required manually searching through dozens of boxes that had already been moved to storage.”

In 2003, the command launched a project to eliminate paper archives and began digitizing five years' worth of paper-based records. “Considering the storage required for that process, as well as standard storage for user data and Exchange mail stores backup, we expected capacity requirements to at least double every year,” continues Dubose. “We recognized that it would be too costly to maintain sufficient capacity on high-performance primary storage, but increasing our reliance on tape was not a feasible solution.”

SDDC also needed a more reliable backup approach. “One of our users accidentally deleted a large Exchange file folder,” relates Dubose. “It took more than a week to recover the data from tape. That event was a wakeup call.”

The Solution: FCN Professional Services, NetApp Storage, and Overtone Software Lifecycle Suite Software

FCN, Incorporated, an experienced and long-time service provider to the federal government, worked with the SDDC team to implement a more expedient and cost-effective data lifecycle management solution. The team leveraged tools such as Overtone Software ManageReports to inventory, analyze, and classify data. The information review revealed that as much as 60% of the data on expensive primary storage had not been accessed in the past 90 days.

CUSTOMER SUCCESS STORY

Network Appliance storage solutions offer customers seamless data management, simplified backup and recovery, and effortless remote office access to data at the lowest total cost of ownership.

Armed with this knowledge, FCN worked with the SDDC team to design and deploy a three-tiered architecture that automatically moves infrequently accessed or aged data off primary storage to nearline storage using Overtone Software's ManageTone Lifecycle Suite. ManageTone then integrates with SDDC's backup solution, Syncsort Backup Express, to move data older than five years to tape.

Clustered NetApp fabric-attached storage (FAS) systems serve as primary storage for all of the agency's personal desktops, which include each user's files and Exchange inbox. Each user might have as many as 3000 e-mail messages in an inbox at any given time, and a year's worth of Exchange data could be as large as 3GB. NetApp FAS systems also store all daily backups of data from personal desktops, and operations data is backed up nightly from NetApp storage systems at each of seven SDDC water ports and two headquarters sites.

SDDC leverages NetApp Snapshot™ technology and SnapMirror and SnapRestore software to provide rapid local and remote data backup, recovery, and rollback protection without impacting end users.

SDDC has already moved over 1 million files to a NetApp NearStore system. Overtone Software ManageTone 2004

Lifecycle Suite software routinely analyzes information on the agency's NetApp FAS systems and local servers, classifying data according to SDDC-defined criteria such as content, file size, age, access history, and origin. When certain requirements are met, data is automatically migrated to a NearStore system, where the information remains available on demand.

Business Benefits: Fast Access, Compliance, and Low-TCO Scalability
 "Any DoD-sponsored movement, be it by truck, rail, or sea, requires SDDC management," notes Dubose. "We needed a solution that ensures critical information is instantly accessible—even if a user accidentally deletes a personal e-mail folder or if operations data has already been archived. Accessing data on the NearStore system is transparent to users, and recovering data from a Snapshot copy requires no special training or IT intervention.

NetApp offers affordable scalability to meet increasing data permanence requirements without compromising performance. "Having five years' worth of data online helps us comply with regulations such as Sarbanes-Oxley, which many of the commercial carriers we contract with are subject to. We can now retain all command e-mail and readily produce it if needed," says Dubose.

"In the past, keeping so much data online would have been prohibitively expensive—in just one year we would have had to double our primary storage. With the NetApp solution, all of our recent data is accessible, but our high-speed, prime storage real estate is reserved for the most current and frequently accessed data. Everything else is automatically transitioned to more economical second-tier storage.

"Digitizing just one year's worth of paper records eliminated more than one thousand record boxes and the labor-intensive job of sorting through them when we need information," says Dubose.

"Prior to implementing the new architecture," continues Dubose, "we had to dedicate a full-time network engineer to managing backups and helping people archive their data. NetApp, Overtone, and FCN have helped us eliminate both the costs and headaches of the entire data lifecycle process."

FCN continues to work in the classified SDDC environment to streamline processes and protect information that is vital to military operations worldwide. Most recently, FCN helped the agency leverage its NetApp and Overtone investment to automatically back up individual laptops—including the commander's—to NetApp storage on a daily basis.

"We are working to fine-tune processes and maximize resource utilization," concludes Dubose. "Since 1998, FCN has helped to keep our infrastructure current in support of critical SDDC operations."

Unleash the Power of Information
 See how Network Appliance can bring high-performance data management to your enterprise network. Visit our Web site at www.netapp.com and let us show you what "The evolution of storage™" can mean for your business.

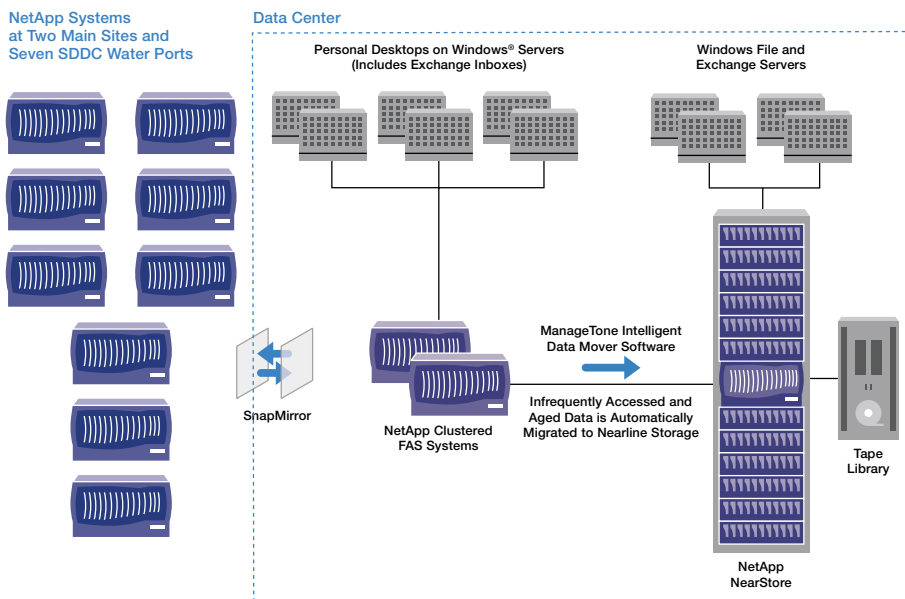


Figure 1) Army SDDC data lifecycle management architecture.



Network Appliance, Inc.
 495 East Java Drive
 Sunnyvale, CA 94089
www.netapp.com

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