



## Customer Success Story

*"The growth of unstructured data had become a real issue for us. Users don't manage it. Group owners don't manage it. We had to find a way to start managing it, and the Acopia intelligent file virtualization solution provided the capabilities we needed to get it under control. I'm convinced we would have moved down this path [of deploying Acopia] even if we hadn't acquired the company."*

—Paul Petersen, Manager,  
Network Engineering

### Highlights

#### Industry

- Technology

#### Challenges

- Rapid data growth
- Out of space on existing NAS assets
- Unacceptably long backup windows

#### Solution

- Clustered F5 Acopia ARX1000 devices
- Tiering policy automates movement of files to appropriate storage tiers without impacting user access

#### Benefits

- 100% ROI within 4 months
- Freed up 80% of premium tier 1 storage capacity
- Lowered storage capacity costs by >75%
- Reduced backup windows from three days to three hours
- Reduced backup infrastructure and backup media costs
- Freed up IT staff resources

## F5 Networks Practices What It Preaches and Reins in Storage Growth with Intelligent File Virtualization

F5 Networks is the global leader in Application Delivery Networking. F5 provides solutions that make applications secure, fast and available for everyone.

### The Challenges

#### Rising Storage Costs and Ongoing Backup Headaches

Several strategic acquisitions and rapid growth in F5's core business had caused internal demand for storage capacity to skyrocket, and the company was running out of space on its high-end NetApp NAS system. The company was utilizing almost 99% of the 5TB system housing user and group data, Microsoft Exchange PST files, and customer support case information going back over six years.

As a result, the IT group was faced with a weekly flood of help desk tickets and calls from users running out of storage capacity. Administrators were spending several hours every week searching for files that were "safe" to delete in order to reclaim precious disk space.

"The first couple of times you send out notes requesting that people delete old or duplicate files, you do seem some results...but by the third week or so, most users will just start ignoring you. It's not a good long-term solution," said Paul Petersen, Manager, Network Engineering.

In addition, IT was burdened with a legacy file system layout that hindered its ability to perform backups efficiently. The weekly backup could take as long as three days and consume 30+ tapes, but IT could not reorganize its data without disrupting user access.

F5 initially considered purchasing more NetApp storage and using manual tools to migrate some its data onto the new storage. The IT group had two major objections to this approach:

- Cost. IT knew that much of F5's data, including files that were either infrequently used or not business critical, did not require the performance and availability offered by the tier 1 storage system.
- Operational disruption. The process of first migrating data and then reconfiguring login scripts and drive mappings would take the organization down for up to 24 hours.
- Inefficient backup. This approach did not address F5's growing backup inefficiencies but would in fact exacerbate the issue.

While the IT group was wrestling with its capacity problems, F5 acquired Acopia Networks. The fast-growing intelligent file virtualization company had an award-winning solution that was being embraced at leading companies around the world to solve the exact problems that were currently challenging F5's own IT organization.

### The Solution

#### Intelligent File Virtualization with F5 Acopia ARX

F5 deployed a pair of F5 Acopia ARX1000 intelligent file virtualization devices. Rather than expand its existing tier 1 storage capacity, IT purchased a less expensive 9TB HP storage system to act as a tier 2 storage repository for less frequently used data and employed the F5 Acopia ARX1000 devices to seamlessly manage the mixed-vendor storage environment.

With the flexibility provided by a global namespace, IT was able to design a virtual file system layout that was optimized for backups. IT then performed a "hot migration" using the F5 Acopia ARX devices and moved its data from the NetApp to the new HP system



during business hours. IT performed this migration completely transparent to its corporate users and received no reports of issues before, during or following the migration. Next, IT set up a tiering policy on the F5 Acopia ARX devices to automatically move all data that had been modified within the last 90 days—the most frequently used data—back to the NetApp system and retain older data on the HP system.

## The Results

### *Simplified Data Management Slashes Storage Costs, Reduces Backup Size*

F5 has realized several significant benefits with its tiered storage architecture:

- Improved utilization. F5 freed up almost 4TB on the NetApp NAS system for more business critical data.
- Lower storage costs. >75% cost savings by moving to a 2-tiered storage environment.
- Flexibility. F5 was able to redesign its file system layout non-disruptively and transparent to users. Storage can be shared between file shares and dynamically re-provisioned on demand.
- Huge backup savings. With dramatically less data to backup on a weekly basis and an optimized file system layout, F5's backup window has shrunk considerably, taking much less time and using far fewer tapes –a three hour backup window and 12 tapes per week vs. a three day backup window and 30 tapes per week used previously.
- Simplified storage management. With more capacity available on the high-end NetApp NAS system, less time is spent responding to help desk tickets from users running out of disk space. In addition, new storage can be seamlessly added to the virtual environment, allowing F5 to avoid out-of-space recurrences in the future.
- Return on investment (ROI). By allowing the use of lower-cost storage, reducing the consumption of backup media, and reducing the number of help desk calls received, the IT group estimated that they achieved 100% ROI within four months.

## Summary

### *F5 Experiences Customer Benefits of Intelligent File Virtualization Firsthand*

As a vendor of intelligent file virtualization solutions, F5 Networks is constantly working to help businesses understand how this approach to file storage management can deliver dramatic economic and management improvements. By deploying its own line of F5 Acopia ARX products, F5 is now experiencing those benefits firsthand. F5 was able to solve its capacity problems and optimize its backup processes while reducing its overall storage expenditures.

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*"When F5 Networks acquired Acopia, we realized this technology was exactly what we needed. Automatically tiering older or unused files off to lower-cost storage resolved our capacity and backup issues. We were even able to do the initial migration in the middle of the business day, without any disruptions to the users or applications. Plus, we don't need to spend the \$60,000 a quarter we had earmarked for new capacity to accommodate ongoing growth."*

—Paul Petersen, Manager, Network Engineering



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