



# CUSTOMER SUCCESS



## Macy's Northwest Fashions a Best-Selling Solution to Protecting Vital Advertising Data with BakBone's NetVault for Mac Backup and Recovery Software

### FAST FACTS

#### Customer

Macy's Northwest,  
[www.macys.com](http://www.macys.com)

#### Industry Retail

#### Challenge

Ongoing focus on digital workflow of all marketing and advertising data created surge of business-critical data

#### Benefit

Comprehensive, scalable best-of-class backup and recovery for Apple environment meets growing requirements


#### Solution

BakBone NetVault for Mac

"NetVault for Mac provides the extra measure of protection we were seeking, reinforced by BakBone's focus on building best-in-class Apple business solutions."

— Uwe Nausner Director of Technology Macy's Northwest

#### The Company

Macy's Northwest, one of five regional Macy's divisions nationwide that serve both major metropolitan areas and local communities, has stores and merchandise tailored to meet the diverse needs of Pacific Northwest consumers. With a  century of heritage, Seattle-based Macy's Northwest has 60 stores located primarily throughout Washington. Groups of smaller stores are located in Idaho, Montana, Oregon and Wyoming.

Under the leadership of Federated Department Stores, Macy's parent company, the department store chain has grown into a widely recognized and revered national brand that also accommodates local tastes and preferences. To that end, the marketing department at Macy's Northwest customizes its advertising, direct mail, catalogs and other promotional materials to meet its residents' unique interests. The 120-person marketing department produces roughly 2,500 pages of direct mail and 1,700 newspaper ads each year. Macy's Northwest is one of the largest advertisers in the region, spending approximately \$50 million in broadcast and print advertising on an annual basis.

According to Uwe Nausner, director of technology for Macy's Northwest, a decision to employ state-of-the-art computing, networking and storage technology has led to the adoption of digital workflows that lower costs while increasing productivity. "Wherever possible, we rely on high-end servers, reliable hardware and leading-edge solutions for automating and streamlining our internal creative and production processes," he says. "Apple technology plays a major role in our increasing reliance on server-driven workflow."

Nausner's five-person IT team supports more than a hundred Macintosh workstations, including iMacs and Power Mac G4 and G5 machines. "We've standardized on Apple Macintosh desktops because of superior graphics capabilities and unprecedented hardware reliability," explains Nausner. "We've also installed a variety of rock-solid Xserve G5 servers and well-designed Xserve RAID drives as part of our core technology foundation."

Of the department's 35 servers, 25 are based on Mac OS X while the remaining ones run on Sun Solaris, Linux and PC-based OS platforms. Over

time, the department's focus on digital workflows caused the team to reassess its current storage and data protection solutions.

#### The Challenge

A steady increase in storage went hand-in-hand with greater reliance on digital workflows at Macy's Northwest. "Individual files were getting larger and larger as we were able to produce higher-resolution graphics images," recalls Nausner. "We automated so many previously manual steps in the production process that the need to safeguard our digital data began growing exponentially."

For example, Macy's Northwest became the first region in the department store chain—and possibly one of the first groups in the retail industry—to switch exclusively to digital photography, even for on-location photo shoots. While this move meant the region saved the department chain more than a \$1 million annually in fixed-asset costs by eliminating film and film scanning expenses, the all-digital move spurred a surge in storage requirements. Moving away from film ultimately lowered the number of total shots required for a particular shoot, but it also added up to about 23,000 digital photos that had to be stored annually by the department. "Our storage needs started doubling every year," notes Nausner. "Five years ago, we had 100 gigabytes of storage. Today, we have more than 10 terabytes of business-critical data."

To better support the burgeoning digital data, Macy's Northwest upgraded its networking infrastructure and added a QLogic Storage Area Network (SAN). Next the team assessed the value of its stored data and digital images, the efficiency of its current backup operations and most importantly, the speed and ease with which critical data could be recovered. "We realized the value of our data could be measured in millions of dollars," says Nausner. "If we lost our digital images and couldn't restore them quickly, we'd miss crucial catalog and ad production deadlines that could cost the company substantial revenue from lost sales."

Traditionally, backup and recovery was a fairly manual operation, involving swapping out tapes several times a day in order to complete an incremental backup with additional baby-sitting during weekly full backups. Incremental backups took about six hours to complete while at least 18 hours were needed to conduct a full backup. In the event that data needed to be restored, the process was even more laborious and time consuming. Restoring data from tape could take up to 24 hours and a complete system re-build could require a week, which was an unacceptable delay. "If we had a catastrophic data loss, our production work would come to a screeching halt," notes Nausner.

Another challenge with its current mode of backup and recovery was limited Macintosh support, which became a mounting problem when Mac OS X emerged as the pervasive computing platform. Macy's Northwest had used EMC Dantz Retrospect as well as FlashNet from U.K.-based Software Generation Ltd. (SGL). Both software solutions didn't provide server-level support or could protect Apple clients only, which limited the department's ability to scale its growing Apple enterprise.

Additionally, FlashNet wasn't compatible with the new SAN, preventing the team from leveraging fast and cost-effective SAN-attached RAID systems. As a result, the team set out to find a more efficient and effective method for safeguarding business-critical data while ensuring rapid data recovery.

#### The Solution:

With enterprise-class backup and recovery functionality and complete Macintosh compatibility topping the list, the tech team at Macy's Northwest embarked on an evaluation of viable alternatives. Among the other selection criteria was the ability to quickly backup and restore mission-critical information while expediting incremental and full backups. They also wanted to take advantage of RAID technology to lower costs and accelerate backup and restore efforts. Cross-platform support was another important consideration, especially since Macy's Northwest used its Sun Solaris servers as a primary storage platform.

For that reason, the team had installed Veritas but found it too costly and inadequate in the long run to support its heavy Macintosh concentration. In seeking a new solution, the team wanted software that was compatible with both Mac servers and clients for the greatest levels of flexibility and scalability.

In January 2004, Nausner and several members of the IT team visited BakBone Software's booth at MacWorld. They were impressed by the company's early commitment to Apple and obvious understanding of the Macintosh platform. They also found BakBone's overall modular software architecture appealing because it would enable them to scale as their needs increased. Company executives provided a NetVault for Mac product roadmap that included server-level support and plans to launch a customized product suite for Mac OS X server v10.4 "Tiger." The team also found BakBone's licensing favorable for Macy's projected growth path and continuing need for an extensible solution.

Equally appealing was BakBone's virtual disk library (VDL) disk-to-disk backup capability. VDL is a built-in tape emulation feature that gives disk storage the "look and feel" of a tape library with the added benefits of greater speeds and reduced costs. Macy's Northwest wanted to leverage VDL technology on its Xserve RAID drives for managing high-capacity, data-intensive graphics applications.

The fact that BakBone demonstrated strong heterogeneous platform support for backing up and restoring the department's mixed Apple and Sun environment clinched the deal in favor of NetVault. In early 2005, Macy's Northwest implemented NetVault, driven in part by a growing awareness of how critical the division's data and digital workflows were to the

region's continuing success. "Protecting our storage-intensive digital media became a corporate imperative," says Nausner. "Only BakBone Software had an enterprise-class solution that was optimized and fully interoperable with Apple's Xserve G5, Xserve RAID and Xsan product lines.

#### The Benefits:

The automated NetVault for Mac installation was rapid and trouble-free. "The consensus was the software was extremely easy to set up and operate," adds Nausner. "NetVault for Mac is completely intuitive—we were up and running with no learning curve whatsoever." Policy-based job management eased overall administration considerably, alleviating the previous strain on the IT staff while enabling them to focus on more strategic technology initiatives.

"BakBone shares Apple's legacy of developing high-end functionality that is simple and straightforward to use," notes Nausner. Automated backups save substantial time while eliminating the need to baby-sit the process. Consequently, the IT team now focuses on more meaningful initiatives such as archiving and continuing improvements to the region's digital workflow. In addition to reducing administrative time and effort, NetVault has slashed backup and recovery time significantly on both Apple and Sun platforms.

Using BakBone's VDL plug-in, Macy's Northwest conducts nightly backups on RAID drives with a much smaller backup window. "Backups are now 10 times faster with BakBone NetVault for Mac," Nausner explains. "What used to take 20 hours to backup now can be completed in two hours." Restores also have been greatly improved. "If an end user accidentally deletes an original graphics file or loses data, we can restore it in minutes instead of days," adds Nausner. "BakBone's VDL technology enables us to leverage the latest RAID technology for the fastest possible backups and restores of our critical marketing data."

Seamless integration with both the Sun environment and the department's QLogic SAN is another decided plus. BakBone's comprehensive SAN support and enterprise scaling simplify resource sharing while leveraging existing investments in storage networking technology. According to Nausner, BakBone also shares Macy's commitment to Apple as a powerful enterprise technology foundation. "Apple will continue to play an integral role in our delivery of digital marketing and advertising data," he explains. "NetVault for Mac provides the extra measure of protection we were seeking, reinforced by BakBone's focus on building best-in-class Apple business solutions."

To that end, Nausner anticipates BakBone's NetVault for Mac will gain traction throughout other Macy's regions as data volumes continue to increase at a rapid pace. "Currently other Macy's regions are looking to bolster their backup and recovery operations," concludes Nausner. "Clearly, BakBone's NetVault for Mac provides the most comprehensive Apple data protection on the market."



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