

DXi-Series

## Consolidation and Deduplication Cut Backup Time by 50% and Provide Instant Restores at Half the Cost of Competitors

WorkForce Software is a leader in workforce management software. Over the last several years, the company's data volume grew so fast that it nearly outran its backup, which caused the company to rethink its backup and DR strategy. Workforce implemented a new consolidation strategy based on Quantum's DXi® deduplication appliances and remote replication that also included the elimination of tape backup in edge sites. This strategy cut backup times in half, provided instant file recovery, and dramatically freed up IT resources at remote sites—at half the cost of competitive offerings.

As the premier international provider of cloud-based workforce management software used by both public- and private-sector customers, WorkForce Software has an unusual set of data protection and compliance requirements: customer data has to be absolutely secure; disaster recovery protection and off-siting of data must be carried out daily; and data has to be retained for up to seven years. And in many cases, customer data must be kept within strict regional boundaries—for example, European Union customer data must be kept within EU member countries. When these requirements collided with the company's fast growth, its backup and data (DR) practices started to fall behind.

### DECENTRALIZED PROTECTION BECOMES UNTENABLE

"We had separate tape libraries set up in each of the regions we were serving, and different local teams managed the process," reports Rob Williams, WorkForce Software's senior backup administrator. "It was a real pain. There were different backup software apps and different hardware platforms. The only things that were consistent were the need to back up data every day and get it off-site, and the amount of admin time that it all took—which was way too much everywhere."

In the United States, the team had a legacy tape library that was running nearly around the clock backing up the core customer database, which grew

rapidly to over 15TB. Tapes were removed every day and taken to remote storage, eventually ending up in Iron Mountain.

"The team got it done," explains Williams, "but backup was always going on, and file recovery was a nightmare. We had to get the media back, which could take a day; then we had to find tape library resources to pull the data back—which meant that the backup schedule would fall farther behind—and we had to find enough disk space to rebuild the files. It was slow and ate up lots of admin hours."

### FINDING THE RIGHT DEDUPLICATION SOLUTION

Williams joined WorkForce Software to help the fast-growing company standardize and simplify the process for protecting customer data around the world. Using his experience with deduplication appliances and replication for DR recovery, Williams worked with the IT team at WorkForce Software to implement a new system that would meet their data backup needs.

"I looked at all the dedupe vendors, both software and hardware," he explains, "and I was impressed with what Quantum offered. The deduplication is great, the performance is fast, and the cost is literally half that of competitors that we evaluated. One of the features I like best is the DXi's capacity-on-demand scalability. It lets us buy a small unit that meets our

## WorkForce SOFTWARE

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### SOLUTION OVERVIEW

- Quantum DXi6900 and DXi4700 deduplication appliances
- Symantec NetBackup OpenStorage Technology

### KEY BENEFITS

- Backups are completed in less than half the time, ensuring all jobs are finished on schedule.
- Fully automated off-site protection reduces administration time and improves DR protection.
- Data is stored in regions and encrypted during replication to meet customer security requirements.
- Deduplication allows fast automated replication, even over low-bandwidth WANs.
- Low acquisition pricing and capacity-on-demand scalability deliver a complete solution at half the cost of competitors.
- Integration with NetBackup's OST reduces overhead and automates protection across sites.
- Restore times are significantly reduced thanks to native NFS copies on the DXi appliances—restores that used to take a day or more are now instantaneous.

## CASE STUDY

needs now but allows us to add more capacity in small increments as the data grows. Other vendors would have made us buy much more at the beginning—the cost savings are huge.”

The new system, which was implemented globally, puts two DXi appliances in each of the primary regions—currently, the United States, Europe, and Australia. In each case, the backup is written to the local DXi every day and immediately replicated to the DXi in the second regional location. Data is kept secure within each region, and both backup and DR protection are now based on disk and replication. The difference in processes and outcomes has been dramatic.

### FASTER BACKUP AND INSTANTANEOUS RESTORES

“In the U.S., where the backups used to take 30 hours and were always overlapping, the daily backups are now completed in only 14 hours—including all the databases, records, and VMs,” reports Williams. “And that time now normally includes off-site DR protection as well because the data is replicated immediately. Data is encrypted during the replication process, so the security that our customers expect is taken care of. All of this happens automatically, without any admin engagement.

“We’re also getting very high deduplication rates, so we’ll be able to scale the DXi systems to provide our retention needs with only occasional use of tapes for specific customers. The high deduplication rates also mean we don’t need much network bandwidth—in one of the Australian offices, we replicate a 900GB database every day over a 2MB link. The whole system is great.”

When files have to be recovered, the benefit is even more dramatic.

“We set up two backup methods to make recovery really fast,” Williams explains. “One backup is written by NetBackup to the DXi in NBU’s own format, but we also write the database files directly to an NFS mount point on the DXi in native format. And the DXi replicates that copy to the DR site as well. So we can access the data directly from the DXi’s NFS disk share at either location. There’s no getting media. No rebuilding the system. No finding disk space. And no admin overhead—it’s just there. What used to take a day or more and hours of babysitting is instantaneous. The difference is like night and day.”

### INTEGRATION WITH NETBACKUP’S OST KEY TO AUTOMATION

One of the important features of the new system is the integration between DXi features and NetBackup’s OpenStorage Technology (OST) API, the standard backup software now used across all the WorkForce Software sites.

“It’s critical that our process be coordinated through NetBackup to minimize manual work and to be sure that all the backup catalogs are kept consistent at all the sites,” says Williams. “We use OST to take care of that management. NetBackup kicks off both duplication operations and replication jobs, so the master servers are all up-to-date automatically at both sites, while the data itself moves directly from one DXi to the other. It makes the process fast and automatic.”

The DXi management tools also play an important role in streamlining the WorkForce Software workflow.

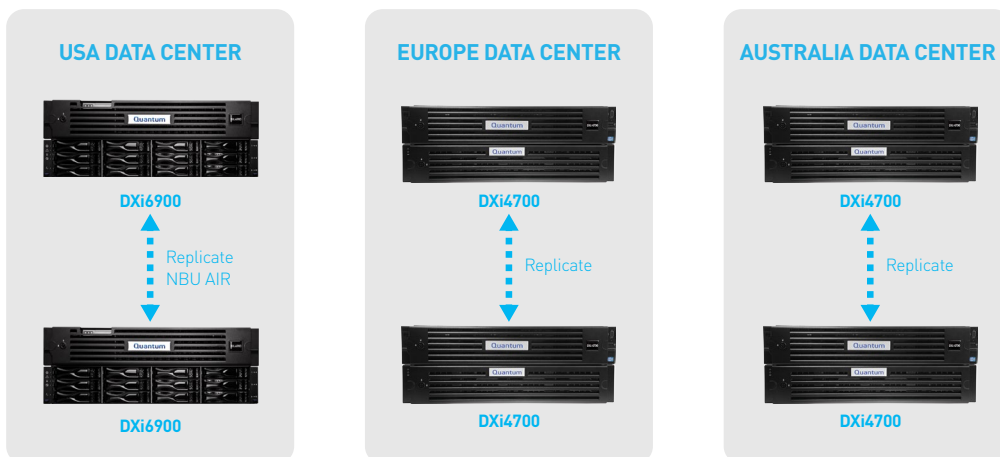
“Now I can monitor the backup and replication process for all the sites all over the world directly from my office and make sure that everything is working the way it should,” reports Williams.

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### ABOUT WORKFORCE SOFTWARE

WorkForce Software is the leader in workforce management software for organizations with complex policies and compliance concerns. Through its EmpCenter® workforce management suite, WorkForce Software enables organizations to fully automate time and attendance processes, effectively manage employee absence and leave, optimize staff scheduling, gain real-time visibility into labor costs and productivity, and mitigate the risks associated with employee fatigue. Hundreds of leading organizations rely on WorkForce Software solutions to streamline compliance, reduce labor costs, and provide more intuitive tools to their employees, and achieve strategic HR on a global basis.



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