School district ensures business continuity

Birmingham Public Schools stays focused on education with Dell data protection solutions implemented by Dell partner Avalon Technologies

Customer profile

Birmingham
PUBLIC SCHOOLS Achievement
Character
Community

Company	Birmingham Public Schools
Industry	Education
Country	United States
Employees	1,163 employees and 8,400 students
Website	www.birmingham .k12.mi.us

Business need

To provide quality education, protect student data and control costs, Birmingham Public Schools needed to replace its tape-based backup solution with scalable, comprehensive data protection.

Solution

The district adopted Dell data protection solutions as part of a move to a comprehensive Dell infrastructure, managed by Dell partner Avalon Technologies. BPS dramatically reduced backup windows, storage requirements and recovery time while enabling business continuity.

Benefits

- Ensured uninterrupted education by enabling business continuity
- Improved learning workflows by slashing file recovery time from hours to minutes
- Controlled costs by reducing backup storage requirements by 80% through compression and deduplication
- Simplified management with a single console for the integrated solutions

Solutions at a glance

- Data protection

"With our Dell software and hardware solutions and the support of Avalon Technologies, our technology just works, so we're able to meet the needs of students and teachers on a daily basis."

Kevin Galbraith,
Executive Director of Technology, Birmingham Public Schools

Michigan's Birmingham Public Schools (BPS) is committed to providing the best education possible to its 8,400 students in 17 schools. Accordingly, the district seeks out ways to use technology to enhance student learning. To ensure it had the proper infrastructure, including world-class data protection, BPS turned to Dell and Dell partner Avalon Technologies.

> "We find that when we use Dell products and leverage our experience, we get unparalleled results."
>
> *Kyle Scharoll, Solutions Manager, Avalon Technology*

Tape-based backup lacks scalability
BPS takes its responsibility to protect student data very seriously. But as data volumes grew, its tape-based backup solution was becoming unworkable. Backups took too long and consumed more and more space, increasing costs. Moreover, recovering an accidentally deleted file took hours — potentially disrupting the district's educational mission.

"Since backup tapes were kept offsite, recovering a file meant an employee had to drive across town, retrieve tapes from a secured locked vault, bring them back to our offices, load them back into the server and then search for the file that had been deleted," explains Kevin Galbraith, executive director of technology at BPS. "We wanted to be able to recover files much quicker to better serve our students and teachers."

To address these concerns, the district knew it needed a data protection solution that would reduce backup windows and storage requirements, enable quick recovery, and scale to handle projected data growth.

Looking for a complete, end-to-end solution
However, the district recognized that data protection was only one piece of a much larger puzzle — building a comprehensive infrastructure that would support education-enabling technologies into the future. It set to doing its homework, researching a range of solutions on the market, as well as reviewing recommendations from industry experts like Gartner.

BPS decided it wanted a single source for as much of the solution as possible, including hardware, software and training, and laid out its requirements in a carefully crafted request for proposal (RFP). The most impressive respondent by far was Avalon Technologies, an IT consulting and implementation services company that uses Dell hardware and software solutions exclusively.

"The Birmingham schools had many needs as part of the project. Some of the overarching themes of the project were strengthening their business continuity posture, strengthening their backup posture, and also enhancing their flexibility and manageability in the environment," notes Kyle Scharoll, solutions manager at Avalon Technologies. "In fact, the scope of the Birmingham Public Schools' RFP was so vast that many of our competitors weren't equipped to even respond to it."

Products & Services

Hardware
DR4100 Disk Backup Appliance

Software
NetVault Backup

Avalon Technologies, however, was familiar with the challenge and had the solutions in hand. "Today, our customers are frustrated with the lack of a cohesive solution," says Brian Flynn, president and CEO, Avalon Technologies. "With our partnership with Dell, we can deliver a comprehensive solution to solving their problems."

"We find that when we use Dell products and leverage our experience, we get unparalleled results," adds Scharoll. "Dell has solutions for most any problem that you're going to run into out in the IT world. That's why not only are we exclusively Dell, but we pride ourselves in being very well versed with the Dell products."

In fact, Avalon Technologies was able to not only satisfy but actually exceed the district's requirements with a combination of Dell hardware and software, including Dell Compellent storage, Dell networking solutions and Dell OpenManage systems management and IT operation solutions, along with two solutions to address the district's data protection requirements: the DR4100 Disk Backup Appliance and NetVault Backup.

"We recommended NetVault Backup because it is a highly versatile backup product in comparison with many of the other competitors on the marketplace," says Scharoll. "It integrates tightly with Dell's backup and deduplication appliances, and encompasses solutions for many different products in the IT landscape, such as VMware, SQL, Oracle and things of that nature."

Storage needs down by 80 percent, and recovery time cut from hours to minutes

With the Dell data protection solutions in place, Birmingham Public Schools has been able to meet its backup goals. NetVault Backup makes backups quick and easy, and the DR4100 has greatly reduced backup storage requirements.

"We needed a solution that deduplicated and compressed the data as part of our backup," explains Galbraith. "And that's something that NetVault and the DR4100s do very, very well. In fact, NetVault and the DR4100s have reduced our backup storage requirements by 80 percent while making the process of backing up our data much simpler and faster."

Moreover, recovery time has been slashed from hours to minutes, so teachers and students can stay focused on learning. "NetVault Backup not only meets all of our needs but exceeds them," says Galbraith. "It enables us to be much more nimble and agile in responding to the requests that we receive. We are able to recover files in minutes rather than hours, so our students and teachers can stay focused on teaching and learning."

Plus, the close integration between the solutions makes them exceptionally easy to use. "The DR4100s and NetVault software provide us a single pane of glass for management and ease of use for my staff," says Galbraith.

Moving from data recovery to business continuity

Most importantly, BPS is now proactively positioned for business continuity, rather than reactive recovery.

"We have a Dell Compellent storage area network (SAN) on our primary site in our network operation center, and a secondary Dell Compellent SAN in our district administration office," explains Galbraith. "Those two SANs are constantly mirroring their data, so if our primary SAN goes down, our secondary SAN fails over automatically, and business operates without anyone even realizing there's been a loss of connection. We have a DR4100 backing up our secondary SAN, and a second DR4100 in another building, serving as a third disaster recovery site."

With the Dell solutions in place, Birmingham Public Schools now has the infrastructure it needs to meet the needs of its teachers and students, today and into the future.

"In education, technology should not drive the curriculum; the curriculum should drive the technology," says Galbraith. "In fact, one of our goals is to make sure that technology is invisible. With our Dell software and hardware solutions and the support of Avalon Technologies, our technology just works, so we're able to meet the needs of students and teachers on a daily basis."

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