White River Health System, a medical facility in Arkansas, counts 1,500 active users in multiple centers; its 235-bed, acute-care hospital, a 25-bed critical access hospital and 20 physician practice clinics. The IT team decided to address problems in the software it used for nightly backups.

**Challenge**

*Unreliable backup is as bad as no backup*

“We used several different products for server and app backups,” says Danny Kelley, director of Information Systems at White River Health System. “We had been looking for three main features in an enterprise solution; easier backup management, unification into a single point of storage and a transfer of knowledge so we could cross-train several users in our department.”

White River replaced aging hardware with HPE 3PAR V400 Storage System and HPE StoreOnce 4420 Backup appliances. During the refresh, White River’s long-term problems with nightly backups came up for discussion.
“We go home and sleep better at night knowing that we’ll go in to a successful Data Protector backup the next morning. We were spending way too much time on backups before. Now, we get an email once a day, look at it and know things are running smoothly. That’s how backup should be.”

— Danny Kelley, director of Information Systems, White River Health System

“We were using Acronis Backup and Recovery,” says Matt Stone, network administrator. “It worked well on a few servers, but once we began scheduling nightly backups on about 25 servers, we found that we couldn’t rely on it. Every night there were problems with some servers not being backed up, so every morning we had to check backup logs, track down which servers the software had missed and try to find out what went wrong. We never felt that we had an enterprise backup solution we could count on, yet we knew how important it is to have one.”

White River backs up about 1TB of data and applications each night: physician practice EMRs (a data repository of medical record archives), Microsoft® Exchange servers, its point of sale application, sleep studies and EEGs, along with the domain controllers and file servers on which its network depends.

The normally simple process of managing backup meant spending time on the phone with technical support, uninstalling the software, running a clean-up tool, reinstalling the software, then wondering whether it would work correctly. Troubleshooting backups also distracted the team from the normal IT tasks its members would rather have focused on, so the team made it a priority to find and implement a permanently satisfactory backup solution.

Solution

Switching to Hewlett Packard Enterprise in less than one month

Since the hardware upgrade, Kelley had been talking to Hewlett Packard Enterprise (HPE) about HPE Data Protector, its HPE backup and recovery software product for the enterprise. HPE pointed him to Alphaworks, a certified HPE Gold Partner, to meet with his team and demonstrate the product.

Because of concerns about compliance and business continuity, most organizations are hesitant to install new backup software, so it’s necessary to proceed carefully in this remove-and-replace engagement. The pre-sales team at HPE went through the proof-of-concept phase emphasizing the features that White River wanted in Data Protector, including granular restoration of individual messages and entire email boxes on Microsoft Exchange servers, as well as individual files on virtual machines. Alphaworks assisted with the sizing of the HPE 3PAR V400 and with connecting HPE Data Protector to StoreOnce.

In estimating its backup requirements, Kelley’s team thought it had ample capacity already on site, but they came up short. HPE and Alphaworks saw this and were able to bring in an HPE ProLiant DL380p Gen8 server to avoid any delay in implementation. Finally, Alphaworks trained Kelley’s team and then helped with setup and installation on the servers.
“It took only about one month from signing the contract to backing up in production with Data Protector,” says Kelley. “That’s very reasonable. Also, we had one point of contact at Alphaworks and another at Hewlett Packard Enterprise throughout the entire implementation. We could phone, exchange emails and get a direct answer without calling an 800-number, opening a support ticket and hoping to get a call back the way we did with our previous vendor. That single point of contact certainly sped up the implementation.”

**Benefit**

**From four hours per week to just a few minutes**

The HPE Data Protector-3PAR-StoreOnce combination has freed White River IT team from worrying about backups every morning when they arrive at the office. Instead, Kelley’s team simply reviews the brief email summary sent by Data Protector.

“We never got that before,” says Justin Ragsdale, systems analyst. “We used to have to check the servers each day to see what went wrong, then rearrange the rest of the day around troubleshooting the backups. In a good week, one without too many problems, we spent about four hours dealing with nightly backups. If there were problems, we might have to work on them for days. That was a huge drain on our productivity.”

The team spends four to five minutes per day checking the email reports on successful backups, indicated in green. The occasional red indicates that a file was open or in use, in which case Data Protector simply retries later, with no additional manual effort.

**Deduplication cuts storage needs almost in half**

HPE Data Protector stores the backup data to the HPE StoreOnce, which deduplicates the data before storing it. This has helped cut White River’s need for storage space by almost half.

“With our previous product, two weeks of backups occupied about 20TB,” says Stone. “With StoreOnce, we can hold four weeks of backups in 10 or 11TB. That’s 75 percent of storage capacity savings. StoreOnce runs a daily housekeeping task that includes federated deduplication. We haven’t had to configure anything: StoreOnce just takes care of it. And, the deduplication in hardware is much more efficient than in the backup software we used before.”

**Unexpected benefit in backing up workstations**

White River also uses HPE Data Protector to back up its PC servers and workstations, including virtual machines. This has proved a welcome feature that the IT team had not anticipated.
“With our previous product, two weeks of backups occupied about 20TB. With StoreOnce, we can hold four weeks of backups in 10 or 11TB. That’s 75 percent of storage capacity savings.”

— Matt Stone, network administrator, White River Health System

“Although we’d been backing up the servers with Data Protector for many months, we were still using the old backup product for all of our workstations,” says Ragsdale. “One morning, I was checking the PC backups and dealing with the usual problems and I decided to try backing a few of the machines up with Data Protector. It worked fine, so we began moving away from the old product completely.”

Kelley reflects on the business value that White River derives from Data Protector, 3PAR and StoreOnce: “Our CIO now knows we feel confident that our data is securely backed up. We’ve had to restore from backup and we’re comfortable with that part of the product too. We go home and sleep better at night knowing that we’ll go in to a successful Data Protector backup the next morning.

“We were spending way too much time on backups before. Now, we get an email once a day, look at it and know things are running smoothly. That’s how backup should be.”

Next steps

Now that his group has nightly backups under control, Kelley has started thinking about next steps. His wish list includes evaluating StoreOnce for use in disaster recovery and in White River’s offsite facility. He also envisions adding another 3PAR and servers to have a hot site.

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