Fast, uncomplicated cloud data protection

Business needs
Moving to a cloud-first IT model, TRC Companies needed simpler, more reliable and higher-performing data protection for their SQL databases and other critical data, on-premises and in the cloud. Above all, they needed technology partners who could recognize and support the way they do business.

Business results
• Reduces backup and restore times to as much as ¼ the time of previous point solutions
• Lowers storage consumption and costs, thanks to 80x deduplication on-premises and 95x deduplication in the Azure cloud
• Provides an end-to-end disaster recovery solution on-premises and in the cloud

Solutions at a glance
• PowerProtect appliances
• Data Protection Suite
• PowerProtect DD Virtual Edition
• Microsoft Azure

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“Groundbreaker. Game changer. Innovator.” This is how TRC Companies characterizes their expertise in environmentally focused and digitally powered solutions. For more than 50 years, they have set the bar in consulting, construction, engineering and management services. TRC’s nearly 6,000 professionals serve public and private clients, guiding complex projects from conception to completion. And when TRC embarked on its journey to cloud-first, they chose to partner with Dell Technologies and Microsoft Azure, a clear case of foresight and follow-through.

Reliability and simplicity, conducive to a cloud-first future

After implementing a cloud solution company-wide, TRC found there was a need to refresh their on-premises data center as well. “Like most companies, we had a myriad of products,” says Rob Petrone, Vice President of IT at TRC. “We had a mix of four different backup solutions, each of a different age. It didn’t give us the redundancy we needed. And, as you can imagine, trying to keep up to date in meeting our business needs was not optimal for us as we thought about the future.”

Adds Matthew Taricani, Engineer of IT Operations for TRC, “The amount of staff hours that were wasted doing restores, jumping between the solutions to find what we needed in the recovery was just not conducive to what we wanted for the future of our company.”

To modernize, TRC chose a PowerProtect DD series appliance and Data Protection Suite, replicating to a PowerProtect DP series appliance, on-premises in their data center.

In looking for a modern data protection solution, “We did our homework,” says Petrone. “In addition to PowerProtect appliances, we looked at several competitors. “Many of those solutions lacked the ability to leverage native SQL processes to back up their data, as many of them wanted to leverage VSS or some sort of volume capture, which is not in line with our company processes.”

Significant improvements

“The data we were looking at to protect with DD series was primarily SQL databases, but we expanded that to Windows file systems, Windows volume snapshots, as well as protection of Hyper V clusters to protect Linux guest operating systems on them using the Hyper V cluster module,” says Taricani. “Add to that, our financial data is sitting within our data center, so it was critical to have a good solution as we looked forward.

“When we look at where we came from, to where we are with DD series, there are significant improvements to backup and restore times. Depending on the previous solution, both backup and restore now take as little as one-fourth the time. Avamar is able to restore directly from a device in a timely manner, versus trying to pull data from our previous solutions, which were cloud-based.”

In addition to their on-premises data protection, which includes replication to a DP4400 appliance, TRC leverages an Azure virtual environment for replication from their DD series.
“When we look at our data center, we’re at an 80x deduplication factor,” says Taricani. “When we look at our cloud tier, which is where our long-term storage is going to reside, we’re actually seeing a roughly 95x deduplication factor.” Petrone adds, “Dell data protection has helped us reduce our storage consumption, which has reduced cost significantly on the initial CAPEX investment, as well as the recurring investments with the cloud data.”

Following through – with the right partners

“Standardizing our backup platform within our data center with Dell data protection has improved our SQL recovery times,” Petrone reiterates. “It has also given us a site-wide disaster recovery solution that we didn’t have previously. And as a future state it will allow us to add the functionality to the cloud to give us end-to-end site replication from our on-premises environment to the cloud, but also recovery if there was a disaster within our data center. DD series significantly meets our mission, which is to optimize, keep it simple, have the right tools for the job. Not to mention safeguarding the company’s assets.

“And really, when we think about the future, the future state is cloud. We’ve been a cloud-first organization for the last few years. Starting a year ago, with remote work and the ‘new normal,’ we did two years of digital transformation in about three months. Where we’re going with this, DD series fits nicely. Today, while it’s an on-premises environment, our future state will be the cloud. Additionally, DD Boost gives us the functionality today to have some of the components already in place for that journey.”

To take the next step, TRC has recently added PowerProtect DD Virtual Edition (DDVE) to their Azure environment. “Most of our financial assets are on-premises today,” says Petrone. “But our focus is to utilize PowerProtect DD Virtual Edition in the cloud for the applications and data critical to our business.” As we think about Azure, it’s around agility. I’d rather have our people running the business than running the system.”

“The value in partnering with both Azure and Dell Technologies as our vendors of choice is, they’re bringing technologies that meet our requirements, they’re not just throwing fluff at us. We meet quarterly. We have touch points throughout the year. We rely on their guidance and support to make sure we have the right solutions as we’re thinking about the future state of TRC.”

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