DELL Technologies

Easy to manage, all-in-one data protection

Customer profile

GLENCORE

Mining | Australia

Data#3

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Group IT Team Manager,
Glencore Coal Assets Australia

Business needs

With extensive operations across multiple sites and data growth of up to 25% a year, Glencore Coal Assets Australia sought to modernize with cost-effective, easy-to-manage data protection. They wanted to shrink the backup window and replace a legacy solution that risked a single point of failure with proven, reliable and high-performing data protection.

Business results

- 49:1 deduplication rate
- 100% backups completed in 8 hours, 99% in 4 hours
- 95-99% successful backups
- 1.5TB of data restored in 4 hours

Solutions at a glance

- Dell EMC PowerProtect appliances
- Dell EMC Data Protection Suite
- Dell EMC ECS Enterprise Object Storage

With extensive mining sites and operations across eastern Australia, Glencore Coal Assets Australia ('Glencore CAA') generates, keeps and uses a lot of data. Ben Egan, Group IT Team Manager for Glencore Coal Assets Australia, enumerates: "We've got about a thousand windows servers, SAP and SharePoint. We've got safety systems, training systems, and then traditional file servers and block storage; and Quintiq, our logistics and commercial system, which controls from pit to port, as we call it – from getting the coal out of the ground, onto the trains, and all the way to the port and sold. So that's quite an important piece."

With all this data to protect and a data growth rate of 20% to 25% annually, Glencore CAA set out to find an advanced data protection solution. "Backup window time was an issue," says Egan, "along with ease of management." Glencore CAA was running Veritas NetBackup media servers at each site, controlled by a single main server, putting their backups at the risk of a single point of failure. Added to these concerns, Glencore CAA wanted a more cost-effective solution.

"We're very Capex driven," says Egan. "Cost is a very big part of what we do, so any solution we looked at was going to be scrutinized from a cost perspective."

Better Prospects

Based on what Egan refers to as their "positive experience and relationship" with Dell, Glencore CAA included PowerProtect DP series appliances in their search for a better data protection solution. "We compared the PowerProtect DP series with NetBackup appliances," says Egan, and the DP series came out on top."

Glencore CAA worked with Data#3, a Dell Technologies Titanium Solutions Provider Partner, to vet the solution. Chris Perkins, Data#3 Account Manager, says, "This was the strongest partnership I've seen in a while. Quotes and information that would usually take 24 hours were turned around in only a couple of hours and then sent to the customer shortly thereafter. There were multiple discussions and meetings planned for quality assurance to help the customer understand the benefits and features of the new solution."

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Once the purchase decision was made, Data#3 worked closely with Dell to ensure a fast and smooth delivery, assigning a project manager to assist Dell with installation and implementation at the sites in the event of any challenges. The team met weekly to update Glencore CAA on progress.

Glencore CAA leveraged Dell Services’ partnership with Data#3 to deliver an outcome-based design, implementation, migration and early operational residency using a blend of resources. The assigned project manager worked closely with logistics and account stakeholders, as well as individual mine-site teams to ensure business continuity and that site operations were not impacted. Now, with a DP series appliance at each site, Glencore CAA no longer has a single point of failure to worry about. “Each DP series appliance can operate on its own,” says Egan. “It’s not reliant on anything else to run. With all of our sites, that was very attractive to us.”

The Lay of the Land

Most of Glencore CAA’s data is on-premises in traditional data centers or server rooms at their mining and operations sites. Glencore CAA uses the native DP series tools for management, monitoring and reporting. Says Egan, “From a management view, it’s much easier. And we’ve definitely seen a reduction in our backup window. They’re 100% done in eight hours, and 99% done in only four hours – with a success rate of 95-99%.” The average deduplication rate is 49:1.

Glencore CAA boasts a 100% restore success rate with their DP series appliances, and restores are fast. Says Egan, “Recently one of my engineers restored a SQL database – 1.5 terabytes of data – in four hours. That gives you a good indication of the speed of restores we’ve been experiencing.”

Rock Solid

Glencore CAA has a mix of DP4400 and DP5800 integrated appliances at their sites. The backups from these appliances are replicated between Glencore CAA’s regional data centers and transferred on a monthly basis to two existing Dell EMC PowerProtect DD series appliances, which previously served as Glencore CAA’s backup targets. After six months, the backups are moved from the DD series appliances to scalable Dell EMC ECS object storage via Dell EMC Cloud Tier for archiving.

“It’s rock solid,” says Egan. “Implementation was managed by the Dell engineers, and one of my staff helped with that. It was all quite smooth. Management has been easy. It’s almost set-it-and-forget-it. Once it’s set up, you don’t really have to touch it.

“It’s all managed out of the Avamar console. Avamar drives not only the backups and restores from the active tier, but also pushes the data to ECS, which is in this case the cloud tier. That’s one of the value propositions: If you use an integrated

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solution, then you don’t have to do any kind of fiddly work to push the data from the DD series to or restore the data to the DD series from ECS. It’s all managed.

“The main reason for going to ECS was cost related,” says Egan. “Right now our ECS is about 290 terabytes with five nodes, and in the next six months we’ll be adding another two nodes.”

Staked for Growth

Glencore CAA’s data growth of 20% to 25% annually will compound over time, so the ability to expand secondary storage cost effectively with ECS will be vital to keeping costs in check.

“We’ve had a positive experience with Dell through PowerProtect DD series appliances, and now through the DP series,” says Egan. “We’ve reduced our backup times. From a management point of view, it’s much easier, and there’s less risk than having that single point of failure with our NetBackup solution.”

Says Perkins, “This was a strong collaboration between Data#3 and Dell Technologies that enabled the customer to upgrade their existing environment to a solution that would ensure high-level protection, storage and growth for the next five years.”