Data#3

AngloGold Ashanti deploys new virtual infrastructure at its Tropicana gold mine to improve performance and disaster recovery capability.

A Data#3 Customer Story

Data#3

ABOUT ANGLOGOLD ASHANTI

Headquartered in Johannesburg, South Africa, AngloGold Ashanti Ltd is the third largest gold miner in the world measured by production. The company currently operates 14 gold mines in 10 countries.

OBJECTIVE

To implement a new virtual infrastructure solution at the Tropicana mine site to help reduce complexity, improve application performance, minimise costs and strengthen disaster recovery capability.

APPROACH

Replace existing server, storage and backup infrastructure with a simplified IT platform for all virtual workloads to support operations over the next five years and beyond.

FUN FACT

By 2021, more than **50%** of large enterprises will use an **integrated risk management solution** set to provide better decision-making capabilities, up from approximately **30%** today.

COMMENTS

"The simplified technology stack helps us to streamline application performance, increase capacity, reduce risk, and minimise costs"

Adam Wahby, Systems & Infrastructure Specialist, AngloGold Ashanti Australia.

BENEFITS

- A robust, scalable and secure infrastructure that provides greater capacity, is easier to manage, and helps reduce risk through lower Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO).

- Improved application performance and reduced complexity to streamline operations, resulting in efficiency and productivity benefits.

TECHNOLOGY

- ☑ Cisco server switching
- ☑ Dell EMC PowerEdge servers
- ☑ Dell EMC Unity Storage
- ☑ Dell EMC DataDomain upgrade
- ☑ Dell EMC TLO Tape Library
- ☑ VMware VSphere

The Background

Headquartered in Johannesburg, South Africa, AngloGold Ashanti Ltd is the third largest gold miner in the world measured by production. The company currently operates 14 gold mines in 10 countries.

AngloGold Ashanti's two gold mines in Australia, Sunrise Dam and Tropicana (70%), are located in Western Australia and produce approximately 18% of the group's total gold production.

The Challenge

AngloGold Ashanti Australia was experiencing challenges associated with its virtual infrastructure at the Tropicana mine site, located 330km east-northeast of Kalgoorlie.

The legacy architecture was over five years old and consisted of many moving parts, creating a great deal of complexity.

It was also increasingly difficult to meet critical business requirements with regards to workload performance and capacity, as well as RPOs, RTOs and Disaster Recovery.

Overall, the key challenges included:

- Management of the existing infrastructure was complex, time consuming and costly
- Risk associated with RPOs, RTOs and Disaster Recovery
- Live migration within the virtual environment presented challenges for the existing mining application
- The live workload recovery and rollback process was difficult to perform

Solution

AngloGold Ashanti Australia sought to replace the existing server, storage and backup infrastructure used to host the virtual environment. This included simplifying the technology stack to streamline operational processes, improve capability to meet business objectives including RTOs and RPOs, and reduce costs.

From an IT perspective, the new solution had to provide a modern, simplified IT infrastructure platform for all virtual workloads to support Tropicana operations over the next five years and beyond. The solution would also need to resolve issues relating to operational activities such as data storage and backup, disaster recovery, performance, monitoring and capacity requirements.

After a comprehensive tender process, AngloGold Ashanti selected Data#3 as the preferred partner to deliver this project. Data#3 proposed a solution that addressed all of AngloGold Ashanti's key business and technical requirements, and within budget and time parameters.

Delivery of the new solution included project management, planning and design, deployment, data and workload migration, functional and disaster recovery testing, operational product training, onsite knowledge transfer, plus final build and operational documentation.

Technology deployed included:

- Cisco server switching
- Dell EMC PowerEdge servers
- Dell EMC Unity Storage
- Dell EMC DataDomain upgrade
- Dell EMC TLO Tape Library
- VMware VSphere

IT Outcome

The new solution deployed at Tropicana mine site addressed and resolved a number of key IT infrastructure requirements for the company.

Firstly, onsite IT personnel now have a simplified virtual environment to manage. Workload and processes have been streamlined, and the team now has greater visibility over the system's operation and performance. This helps to free up internal resources to focus on more critical IT requirements.

Secondly, backup and recovery capability has improved, helping to minimise risk and ensure business continuity. The Tropicana site now enjoys reliable and predictable backups and restores, as well as functional disaster recovery fail-over and fail-back.

And finally, the enhanced speed and capacity of the new virtual infrastructure means AngloGold Ashanti Australia can optimise performance and scale up to accommodate future growth.

Business Outcome

The technical benefits of the new solution aim to improve application performance and contribute to efficiency and productivity gains.

Maintenance and operational costs are reduced, and internal IT resources no longer have to manage complex and ageing infrastructure.

Reduced risk is a crucial benefit of the new environment. Low RPO and low RTO means any downtime is limited.

Key business benefits include:

- Improved application performance
- Reduced risk
- Enhanced disaster recovery capability
- Highly available and robust infrastructure
- Better control and visibility
- Increased productivity due to freeing up internal IT resources
- A future-proofed, scalable solution that can grow with the business

Conclusion

The new virtual infrastructure deployed at AngloGold Ashanti's Tropicana mine site is now an integral part of the company's business.

"The simplified technology stack helps us to streamline application performance, increase capacity, reduce risk, and minimise costs," says Adam Wahby, Systems & Infrastructure Specialist, AngloGold Ashanti Australia.

On the back of the Tropicana site deployment, Data#3 has been engaged to implement the solution at Sunrise Dam – AngloGold Ashanti's second mine site in Western Australia. Data#3 has also been asked to develop a solution for AngloGold Ashanti's regional office in Perth, plus a migration to a co-location facility later in 2018.

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