



INDUSTRY

Mining

LOCATION

South Africa

WEBSITE

anglogoldashanti.com/en

KEY CHALLENGES

Deliver a global, agile, high-performance application delivery platform that improves service delivery and productivity.

SOLUTION

Fully virtualize SAP and concurrently transition to a standardized, unified platform on VMware's cloud solutions to deliver improved performance, flexibility, and disaster recovery.

BENEFITS

- 24 x 7 availability
- High performance solution
- Standardized systems enable remote workforce
- Reduced IT costs by 25%
- Real estate savings



oneERP: Global fully-virtualized SAP

Virtualizing with VMware has given AngloGold Ashanti a unified platform that increases manageability, efficiency, and agility of IT systems around the globe. VMware's cloud solutions have delivered improved performance and disaster recovery capabilities for AngloGold's mission-critical, global applications.

Headquartered in Johannesburg, South Africa, AngloGold Ashanti is a global producer of gold with 21 mining operations in 13 countries, as well as several exploration programs around the world. The company has approximately 60,000 employees and contractors. In 2013, AngloGold produced 4.1 million ounces of gold, generating \$5.5bn in gold income. Their mission is to create value for shareholders, employees and partners through safely and responsibly exploring, mining and marketing their products.

Key Challenges

Following heavy economic pressures, AngloGold Ashanti looked to centralize and standardize their siloed and diverse technologies to reduce operating costs and capital expenditures, and to improve productivity on a global scale.

AngloGold Ashanti's CIO, Andrew Crocker, recounted "We're a very geographically spread company, with a lot of languages, and cultures, and varied skill-levels."

AngloGold's IT environment reflects that diversity. "There were a variety of data centers across AngloGold. Every location ultimately had some sort of data center," he added. "The challenge was bringing everyone onto a common level of understanding, and using a common approach to our infrastructure."

In order to support their global business while using a very disparate set of systems, AngloGold needed to centralize and standardize their IT environment.

"We were focused on having an environment that was more agile and more stable. We needed to support a worldwide population of a very demanding set of users running 24x7. We wanted the

most robust solution and the highest performance that we could possibly get," said Mr. Crocker.

AngloGold also looked to reduce the growth of their infrastructure footprint and contain the operating and real estate expenses.

Solution

AngloGold, in consultation with their infrastructure advisor Estrat, began the process of implementing a global SAP ERP system under the moniker of "oneERP". The system designers soon realized that for SAP to provide AngloGold with the performance, flexibility, and disaster recovery capabilities required for a mission-critical, global application, virtualization was key. Once that decision was made, AngloGold quickly settled on the VMware's cloud solutions having had prior positive experiences with VMware, and familiarity with the solution's advanced capabilities and proven reliability.

"Virtualizing the oneERP infrastructure gave us a lot of benefit in terms of getting the system up quickly," said Paul Cooper, Principal Consultant at Estrat, who

VMWARE CASE STUDY

“So we looked at best practices, and worked together with SAP, and Accenture, EMC, DELL and Fujitsu. With the collective input, we put together the design with AngloGold that became the roadmap for the execution of the project.”

Paul Cooper
Principal Consultant,
Estrat

VMWARE SOLUTION

- VMware® vSphere ESXi®
- VMware® vCenter™ Site Recovery Manager™
- VMware® vCenter Server™

TECHNOLOGY PARTNERS

- Accenture
- Estrat
- Dell
- EMC
- Fujitsu
- SAP

partnered with AngloGold to manage the execution of the project. Mr. Cooper added that by virtualizing with vSphere ESXi, AngloGold could achieve a standardized platform for users around the globe. “AngloGold has about 6,000 SAP users,” he said, “but they have many more users of various IT systems around the globe. Virtualizing gave us a way of standardizing the system for all of the users.”

The process happened over a three-year period, starting with a thorough audit of the health of AngloGold’s environment and its readiness for the global SAP ERP platform, which then led to the design.

“We didn’t want to experiment with AngloGold for such an important project,” said Mr. Cooper. “So we looked at best practices, and worked together with SAP, and Accenture, EMC, DELL and Fujitsu. With the collective input, we put together the design with AngloGold that became the roadmap for the execution of the project.”

With the single global SAP system, disaster recovery was a major concern. VMware® vCenter™ Site Recovery Manager™ was chosen because it allows non-disruptive testing in the production environment without having to declare a disaster.

To deliver cloud-based benefits including elastic resources, fast provisioning times, and built-in disaster recovery, the company deployed a private cloud; a 100% virtualized model across new primary and secondary data centers located within Fujitsu’s facilities in the U.K. AngloGold’s virtualized platform was built on a vSphere ESXi foundation. The virtual servers run the Windows Server 2008 operating system, and each site has independent instances of VMware® vCenter Server™ and Site Recovery Manager.

AngloGold then began the process of linking almost 30 global sites to the new virtualized platform, simultaneously decommissioning the independent ERP systems to create a single standardized instance worldwide.

Benefits

Virtualizing with VMware has given AngloGold employees around the globe a standardized, unified platform to increase manageability, efficiency, and agility.

Single lens into global IT speeds and improves decision making

Using vSphere, AngloGold now has a single lens into their global IT environment, giving them improved access to information, improved analytics, and a better understanding of key drivers and dynamics affecting the business.

“For the first time we have a clear view of the performance and the utilization of the different environments,” said Hendrik Du Toit, Vice President, Global IT Operations, AngloGold Ashanti. “Now we have the information to make the right decisions quickly, and it also give us the capability to then implement the changes in a very short time of period as well.”

Increased flexibility and speed

AngloGold CIO, Andrew Crocker noted that the agility of the virtualized environment is one of its greatest attributes. “We can turn these machines on and off as we need to, and can rapidly add new machines,” he said.

“The fact that we’re able to react so quickly now means that we can spend much more time engaging the business units and understanding their needs, rather than being distracted by procuring infrastructure,” said Mr. Crocker.

Robust, high performance solution

“At the end of the project, after implementations across the world in a variety of circumstances, there was not one single complaint about the quality and performance of that infrastructure,” said Mr. Crocker. “It has been an unparalleled success on the infrastructure side.”

Reduced IT costs by 25%

AngloGold estimates that they have realized between 15% and 25% cost reduction in back end infrastructure for their environment, and they have improved resource utilization by up to 30%.

“When we report on our efficiency and on our cost of operation to the Executive Board, we look at the unit cost of providing IT to the users in our company and we see that going down as a result of virtualization,” said Crocker.

VMWARE CASE STUDY

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CIO,
AngloGold Ashanti

Real estate savings

By virtualizing data centers through VMware, AngloGold now requires less physical space for IT equipment, and has been able to reduce their real estate footprint.

“When we look at demand on real estate, that’s a very measurable thing,” said Crocker. “We had a number of computer facilities that were almost overflowing and we have been able to reduce the floor space that we require for the systems.”

Improved disaster recovery

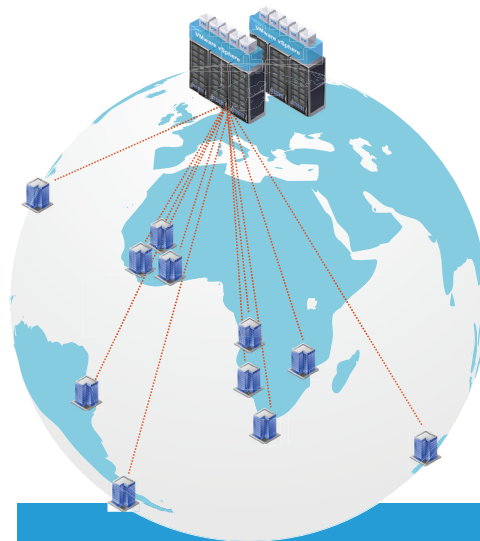
According to Crocker, Site Recovery Manager has greatly eased AngloGold’s disaster recovery issues. “Having to have shadow data centers with shadow, physical equipment, is not just costly, but adds to the real estate problem,” he explained. “So we’ve now moved to

a more sophisticated disaster recover approach where we can just set up a virtual machine to replace anything that has a problem in the field.”

“If we look at disaster recovery in the past, it would have taken us hours to recover, whereas now we can do it now in minutes,” added Mr. Du Toit.

Looking Forward

“We’re very happy,” concluded Estrat’s Paul Cooper, “The oneERP environment delivered exactly what we wanted, and perhaps more. AngloGold sees other opportunities for virtualization. It has indeed become the global standard now for them. So, I think going forward, they’ll look at other ways of leveraging the technology and the relationship.”



- High-performance 24 x 7 availability
- Standardized systems
- Reduced IT costs by 25%
- Real estate savings
- Robust & comprehensive disaster recovery with SRM

oneERP: AngloGold Ashanti’s single global fully-virtualized SAP solution

SAP
EMEA
GOLD
AWARD

