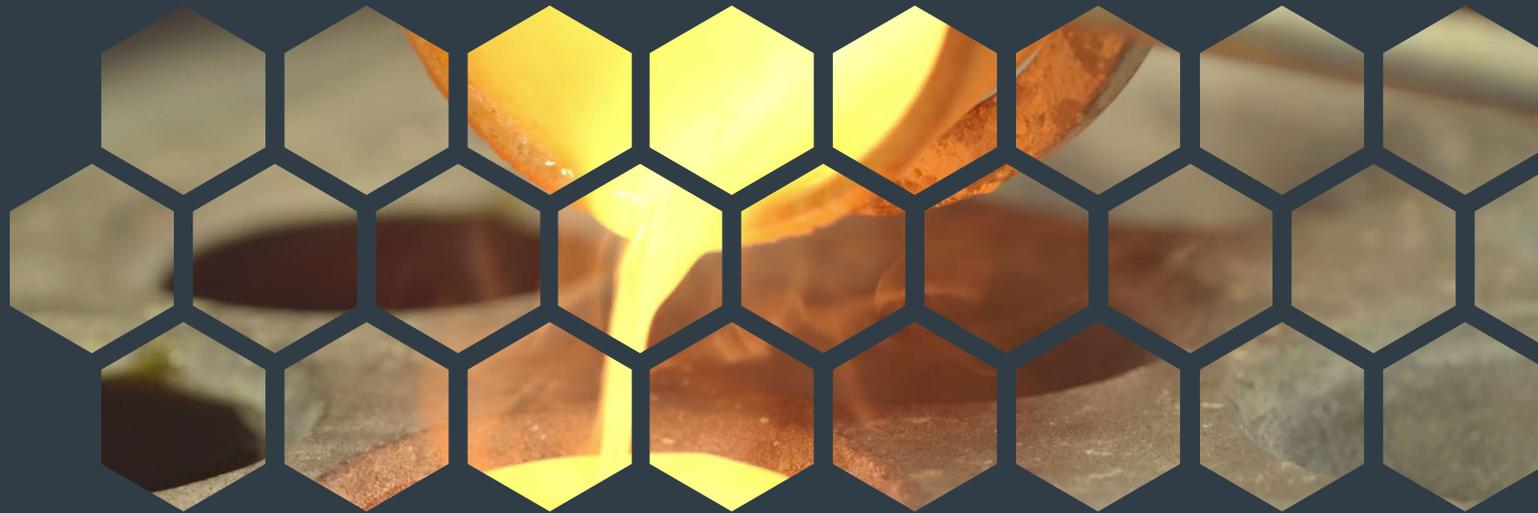




ALAMOS GOLD INC.



Alamos Gold

Building a mining systems platform equipped for growth

Mining: an inherently challenging and hazardous job, and one that Alamos Gold is determined to improve the safety and efficiency of. How? By running many of its critical systems on an ultra-reliable, easy-to-manage hyperconverged infrastructure from Lenovo and Nutanix.

Lenovo™





Not many materials evoke such strong feelings as gleaming, glittering gold. From jewelry to computer chips, gold is all around us – but it’s not often we stop to think about how it got there. It’s easy to forget that mining gold is a dirty, dangerous, and complex business.

Adrian Paulse, IT Director at Alamos Gold, begins: “Gold mines are generally a combination of geographically isolated, risky and hazardous environments, which is why safety always remains one of our top priority and focus points. Many of our safety or operational systems rely on the overall communication, data and network infrastructure in place. In parallel to operating safely, we further need to ensure that we are delivering and working as efficiently and economically as possible. To this point, we operate a number of different technical systems, which collectively deliver or support everything from communication systems through to technical analysis and monitoring systems.

“I can’t overstate how critical these combined systems are to our operations. When our employees’ wellbeing is on the line, there is zero margin for error. Added to this, we have the additional concerns of cyber-attacks becoming increasingly more prevalent in the digital world. However, regardless of any of these challenges, we simply cannot allow these systems to go down.”

Jamie Porter, CFO at Alamos Gold, adds: “Our access to operational and financial information is paramount in order to make valuable, informed decisions that can strategically guide our company in this increasingly digitally oriented world. These solutions are a key component to driving strong business value and growth against the backdrop of our company values and therefore need to be available 24/7. Based on the complex environment we had evolved into over the years, together with upcoming business requirements, the technology team certainly had their work cut out for them.”

So, as the company grew and the backend IT infrastructure became increasingly difficult to manage, Alamos Gold knew it was time to act.

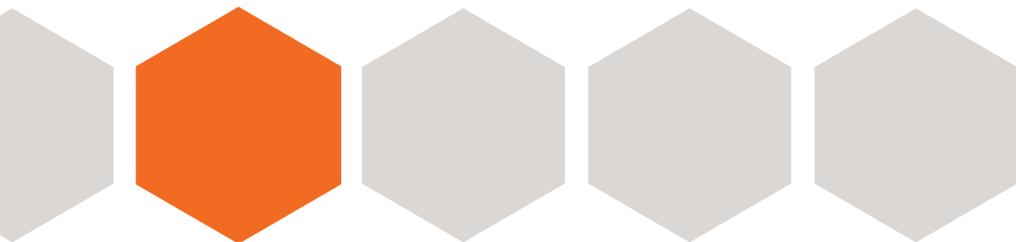
“Following growth through several recent mergers and acquisitions, we’d ended up with a really diverse technology infrastructure and platform,” says Adrian Paulse. “Our data center architecture was a mixture of hardware of all makes and models, from different vendors with different lifecycles and maintenance warranties. It was a nightmare to manage or integrate, and simply wasn’t sustainable.

“We also found that, as a result of this complexity, even minor issues had the potential to escalate quite quickly. We just couldn’t run the risk of mining systems, exploration systems or ERP business applications going down.”

The solution? A software-defined data center.

Alamos Gold teamed up with its local Lenovo technical partner, PCI Services, to commence replacing its mismatched hardware with a single hyperconverged infrastructure. Based in Ontario, Canada, PCI Services is a Lenovo Business Partner that specializes in hyperconverged technology. Committed to fostering long-term relationships with its clients, PCI Services helps them get the most out of their IT.

In a successful joint project working together with Lenovo, Nutanix, and PCI Services, Alamos Gold implemented a Lenovo Converged HX5510 Appliance, a factory-built and integrated hyperconverged building block with powerful Nutanix virtualization software and equipped with Intel® Xeon® E5 processors. The redundant Lenovo RackSwitch G8124E 10GE



switches ensure ultra-low latency connectivity between the HX Series nodes for maximum performance and sky-high reliability on the clustered storage network.

“Nutanix is a market leader in the virtualization space, and this resides on top of the reliable of Lenovo enterprise hardware, which we know has a long pedigree,” says Adrian Paulse. “We love the fact everything’s all rolled up in one solution: compute resources, software, and networking. And everything’s under one warranty, with a single point of contact for support and maintenance. What’s more, consolidating to the Lenovo-Nutanix solution enables us to reduce our physical footprint by 50%. It’s so simple and streamlined – the exact opposite of what our data center was like before!”

Now, Alamos Gold can rest assured that key systems will run reliably 24/7. Adrian Paulse comments: “Knowing that we have a rock-solid Lenovo hardware platform underpinning one easy-to-manage, software-defined infrastructure gives us confidence that our technical and core business applications will run uninterrupted.”

As well as improving availability and reliability, the Lenovo-Nutanix solution lets Alamos Gold scale performance and capacity up and down with a few clicks of a mouse. So, when exploration teams need more compute power to analyze satellite images of a potential new mine site, or when finance teams get extra busy during year-end, Alamos Gold can deliver extra resources without missing a beat.

Adrian Paulse remarks: “The beauty of the Lenovo-Nutanix solution is that you can spin up resources as and when you need them. It’s a real game-changer. For us, hyperconvergence is not just another buzzword. These solutions are a key component of our digital transformation strategy that will allow us to drive continuous improvements across our business.”



Greg Fisher, Vice-President of Finance at Alamos Gold, comments: “On many occasions now, we have had an urgent need to work on some very resource-intensive applications. Our technology team has been able to deliver additional resources or recover data almost immediately to ensure we are able to operate uninterrupted. As our requirements are usually time sensitive, knowing that these resources are easily accessible is a huge benefit.”

For Alamos Gold, a software-defined data center means simplicity, scalability and stability – exactly what it needs to support its mining operations. It’s good as gold.

ThinkAgile NUTANIX™



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Solution components

Hardware

Lenovo Converged HX5510 Appliance with
Intel® Xeon® E5 processor family
Lenovo RackSwitch G8124E

ThinkAgile

Software

Lenovo XClarity
Nutanix Enterprise Cloud Platform

- Nutanix Acropolis
- Nutanix Prism

NUTANIX™

Services

Lenovo Installation Services



“We love the fact everything’s all rolled up in one solution: compute resources, software, and networking. And everything’s under one warranty, with a single point of contact for support and maintenance.”

—Adrian Paulse, IT Director, Alamos Gold

With highly complex technical and business solutions, there is no room for error. To keep vital mine systems running uninterrupted, Alamos Gold upgraded its data center with a software-defined infrastructure from Lenovo and Nutanix, powered by Intel® Xeon® E5 processors. Simple, scalable and super-stable, it’s a solid systems foundation for the company’s mining operations.



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