Coterra Energy Takes Exploration Steps Ahead with Nutanix

About Coterra

Industry: Energy

Geo: Houston, TX

Website: http://www.coterra.com

Applications

- · Esri GIS applications
- · SCADA applications
- · Citrix

Products

- · AHV Virtualization
- Prism
- Nutanix Move

Ready to get Hands-On?

Take a Test Drive

Nutanix helps boost agility, minimize footprint, and standardize IT

Overview

Operating in Texas, Oklahoma, and Pennsylvania, Coterra Energy is a premier diversified energy company. With access to rich oil and natural gas assets, the organization embraces innovation, technology, and data, working to create value for its investors, team members, and the communities where it operates. When the organization was formed through a merger, its technical leaders saw an opportunity to consolidate separate IT environments. Coterra has begun moving to Nutanix to streamline its operations, while improving the performance and reliability of its critical exploration tools and systems.

Key Benefits

Unified hyperconverged environment enabled rapid company merger

Standardized environment improves administrator agility Technical support keeps essential exploration systems available 24x7

"Nutanix provides the resilience we need for our essential systems. In one instance, we had a site briefly lose power, and Nutanix came back up, restarted all the VMs, and nobody even knew there had been an issue."

- Chip Dyson, Vice President, IT, Coterra Energy

Challenges

In 2021, two large energy companies came together to create Coterra Energy. The combined company was dedicated to reducing its footprint and maximizing efficiency. However, like any organizational change, the merger was challenging, and IT team was working under an aggressive timeline to fully integrate both organizations.

"We had 18 months to get this company operating as one," said Chip Dyson, Vice President, IT at Coterra Energy. "We needed to move into new offices, build a new data center, integrate networks, consolidate contracts, and change our name and domain."

Like every innovative energy company, Coterra relies on its infrastructure environment to support its key operations. "We have SCADA systems that support our OT environment," explained Dyson. "Uptime is critical, so we wanted to establish an isolated environment for SCADA. We were looking to use a standardized approach on a common platform. We also wanted to consolidate our GIS and VDI environments."

Solutions

Dyson and his team considered several options before choosing a hyperconverged infrastructure solution based on Nutanix Cloud Platform. From the outside, Nutanix made the consolidating the merging firm's infrastructures fast and efficient.

"Nutanix was in instrumental in helping us move our legacy workloads from Tulsa to Houston," said Josh Robinson, Senior Datacenter Architect at Coterra Energy. "We used Nutanix Move to synchronize all of that data to our Houston data center. And then that product allowed us to see how long the final sync and the cutover would be, minimizing the downtime and facilitating getting out of that data center. Nutanix was brilliant, and it really helped us move out of that old data center into our new environment."

Dyson and his team are in the process of deploying Nutanix to Coterra's field office locations, where it is essential for supporting the company's SCADA systems.

"Our SCADA system monitors all of our equipment out in the field," said Dyson. "It gives us visibility into what's happening in the field, and the status of equipment pressures, volumes, and types of activities. That's why it's so critical to be up and running reliably."

After its field office deployment is complete, Coterra plans to extend its use of Nutanix to its GIS and VDI applications.

"GIS requires GPU intensive hardware," said Robinson. "We looked at some options but ultimately landed on the Nutanix just because it was kind of a self-contained platform. Our team can have all their GIS data local with fast retrieval of maps. And so far the feedback from that team is that it's performing exceptionally well."

Nutanix Professional Services played a key role throughout the deployment across multiple remote locations. Coretta was especially pleased with the

scheduling flexibility that the Nutanix team offered to make the deployments more efficient.

"We asked to have a consistent post-sales engineer working on all the deployments, because they best understood our environment," said Dyson. "It helped us be more efficient in our deployments by having a known resource that knew the environment, so we didn't have to stop and restart the process when moving to different sites or providers."

Customer Outcomes

With Nutanix supporting its essential applications, Coterra is empowering employees with improved productivity and flexibility.

"We use Esri GIS software to provide visibility into our maps and topography," said Robinson. "The land management aspect is an important part of oil exploration. You can't start drilling on land if you don't have a lease. When you have multiple leases, being able to overlay those leases over the land, understand where you have certain capabilities, and communicate with landowners is important."

Nutanix provides support for Citrix VDI applications to enable employees to access GIS tools regardless of their location.

"I think initially, some employees felt they were only going to use it when they were in the office, and that's changed now," said Dyson. "They want to be able to log on and use GIS everywhere. We also have field personnel that are that are out driving around, who need to be looking at maps and activities out in the field."

Administrators are seeing improved visibility as well, thanks to the unified Nutanix Prism management dashboard.

"Having a single pane of glass for all of our clusters and being able to get the full hardware information and the view down to the component level is pretty important," said Robinson. "We can acquire good statistics on the performance of our environment all within a nice dashboard, which was not available before."

Next Steps

In the coming months, Coterra plans to further extend its deployment to more sites, leveraging Nutanix as a common platform connecting its Houston and Midland data centers for its SCADA environment to achieve faster synchronization times.

"We'll be able to sync our data and have an orchestrated DR solution out of the box for one of our most important applications," said Robinson. "As soon as we get the pieces in place, the changeover is really just a matter of flipping a switch, which will be fantastic because we won't have to spend a lot of man hours building out a multivendor solution."

The IT team is also exploring ways to extend its use of Nutanix AHV hypervisor to more sites, to save money on hypervisor licensing and enable a more consistent, standardized approach. With Nutanix in place and operating dependably, Coterra can choose from a variety of journeys to scale its platform to meet changing needs.

Learn more at www.nutanix.com.

Partner/Customer

With operations in Texas, Oklahoma, and Pennsylvania, Coterra Energy is an innovative, diversified energy company.