L&T-CHIYODA LIMITED

L&T-Chiyoda achieves engineering excellence with Nutanix

With Nutanix Hyper-Converged Infrastructure (HCI) in place, L&T-Chiyoda is more agile and sustainable, enabling the engineering business to be even more productive.

L&T-Chiyoda (LTC) is a global Design and Engineering consultancy based in India. Its excellence in engineering world class processing and handling plants for Oil and Gas industry relies on cutting edge IT Infrastructure. The ever-growing business in current dynamic scenario called for dramatic advancement from conventional infrastructure, to remain ahead of what business expects from its IT.

LTC migrated its business-critical design systems and related processes over to Nutanix HCI. This has made the business more agile and better able to provision required IT resources in days' time for new projects and can be scaled on-the-fly. Moreover, the company has reduced IT total cost of ownership by 25 percent, and boosted sustainability by lowering their hardware footprint by 90 percent and, energy usage by 30-40 percent.

CHALLENGES

L&T-Chiyoda (LTC) is a global design and engineering consultancy formed in a joint venture between Larsen & Toubro of India and the Chiyoda Corporation of Japan. It brings together the engineering heritage of both companies, specifically in the development of state-of-the art refineries, petrochemical and oil and gas complexes.

The Engineering Excellence of LTC have helped design several world-class processing and handling plants for the hydrocarbons sector. Using cutting-edge 3D design software and other engineering applications, they routinely develop a complex's core infrastructure, constituting various systems within. The IT supporting them is crucial and needs to be both

INDUSTRY
Engineering of Oil & Gas Projects

BENEFITS

- Gains agility launching new projects in days, instead of months

- Increases engineering efficiency with zero downtime

- Improves customer services being able to scale IT on-the-fly as projects evolve

- Boosts business performance reducing total cost of IT ownership by 25%

- Enhances sustainability, shrinking hardware by 90% and energy usage by 30-40%

- Enables IT to be more creative, lowering routine management significantly

SOLUTIONS

Nutanix Cloud Platform

- Nutanix Cloud Infrastructure
  - AOS Storage
  - AHV Virtualization

- Nutanix Cloud Management
  - Intelligent Operations (Prism)

NUTANIX

Applications

- Engineering management servers
- Microsoft RDS Deployment Servers
- 2D Application Virtualization Servers
- Lotus Notes Domino Server
- Microsoft SCCM Server
- File servers

high performing and reliable to ensure these massive construction projects stay on track.

The conventional IT infrastructure behind all critical business functions was found to be chasing the growing needs of the company and its expectations from IT. It could take months to scale the infrastructure having substantial number of servers and, to deploy additional resources for new projects.

The moment that 60 percent of the servers came up for replacement in the latest hardware refresh, the company decided to take action. Amit Jogi, Deputy General Manager, at LTC says, "It was time to get out of this repeating cycle of expensive refreshes and move to a more agile kind of platform that would help the business shift to more efficient and sustainable IT."

SOLUTION

LTC looked at transitioning from the three-tier set up to a highly efficient hyperconverged infrastructure (HCI) and assessed different HCI solutions in the market. Says Mr Jogi, "Pretty soon, we began to see Nutanix HCI as the best option." Nutanix offered its own integrated AHV hypervisor, reducing the number of components compared to other offerings. "What's more it could support different virtual appliances, enabling us to seamlessly migrate such workloads to the Nutanix platform." says Mr Jogi.

Nutanix Partner Network Techlab assisted LTC throughout, supporting all stages from an assessment to deployment and data migration. "Network Techlab was really professional in the way it worked and dealt with everything well, including the commercials. It was very commendable." says Mr Jogi.

Today, LTC is running its business critical as well as productivity applications on the Nutanix. With the AHV hypervisor and Nutanix Prism as a single, unified management plane, the IT team is maximizing the performance of key environments such as Engineering management servers, Microsoft RDS Deployment Servers, 2D Application Virtualization Servers, File servers, and other key applications.

CUSTOMER OUTCOMES

Gains agility in provisioning resources for new projects in days instead of months

By migrating to Nutanix HCI, LTC has increased business agility, breaking free from expensive, periodic refresh cycles and time-consuming upgrades. Instead, the company now has a highly flexible platform that it can scale in hours for new projects and incrementally expand over time. "Being able to deploy the environments that support our engineering business just in days with Nutanix rather than months makes the business nimbler," says Mr Jogi.

Increase engineering efficiency with zero downtime and new deployments in hours
The business can focus on developing next-gen hydrocarbon complexes for customers, knowing whatever IT Infrastructure they need can be deployed or updated in hours. What's more, with zero downtime, there's nothing to get in the way of delivering these enormous projects on time. "The migration to Nutanix has brought with it a flexibility and control across the data center that allows us to answer the business needs faster and maximize uptimes," comments Mr Jogi.

Improves customer services by being able to scale IT on-the-fly as projects evolve
The migration to Nutanix also supports the broader aim of the organization to continuously improve their IT services. This is because the company can now respond faster to the scale-up requirements for projects at short notice. "Before we worked to deadlines of weeks or months to make changes, but now when changes come in, we're saying, 'your server is ready' in a matter of hours," says Ms Vijayalakshmi Das, Head - IT.

Boosts business performance reducing IT TCO by 25%
At a moment when organizations globally are highly focused on cutting expenses, the IT team at LTC can report back to the business that it's reduced the total cost of ownership (TCO) by a quarter. Ms Vijayalakshmi Das says, "We're better able to deliver on our efficiency goals with Nutanix."

Enhances sustainability shrinking hardware by 90% and energy usage by 30-40%
Furthermore, as companies worldwide are also driving towards greater sustainability and energy efficiency, LTC can meet its goals and obligations there too. As a simple calculation shows, the migration to Nutanix HCI has reduced the IT footprint in the data center by 90 percent. And because of this consolidation, energy consumption is down more than one third.

Enables IT to be more creative, lowering routine management significantly
Importantly, the IT team has cut back on basic IT management and has the time to think creatively about the company's future IT and technologies such as artificial intelligence and machine learning. This is crucial since LTC is at the cutting edge of its own industry and is integrating these kinds of solutions into its design processes. "Our IT is future ready with Nutanix, and adaptable to the latest technologies," concludes Mr Jogi.

NEXT STEPS
Looking ahead, LTC will continue working with Nutanix to further improve their IT infrastructure as the business continues to scale.

PARTNER

Network Techlab
With offices across India, including Mumbai, Network Techlab was the main provider of Nutanix services on this project. Their support from initial Nutanix engagement through to deployment and optimization were both expert and timely.

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