

Gulf Stevedoring Contracting Company leverages Nutanix infrastructure to deliver 50 per cent increase in container volumes across Saudi port facilities while also reducing IT overheads.



“With zero downtime even during major capacity upgrades, migration to Nutanix Enterprise Cloud has revolutionised our IT infrastructure, making it quicker, more reliable and much easier to both scale and manage. We simply couldn’t have handled the recent massive growth in container traffic without it.”

- Hossam El-Masry,
Information Technology Manager,
GSCCO

Nutanix Enterprise Cloud Helps Saudi Port Operator Achieve Major Milestone

BUSINESS NEED

As the organisation responsible for the management of three major port container and bulk terminals in Saudi Arabia, Gulf Stevedoring Contracting Company (GSCCO) is fully committed to supporting the government’s Saudi Vision 2030 agenda for economic diversification. Scalable, reliable and easy to manage IT systems are recognised as key to delivering this agenda which meant the company would have to both virtualise existing workloads and replace its end-of-life physical infrastructure with a more flexible and scalable hyper-converged solution to cope with predicted increases in customer demand. Nutanix Enterprise Cloud was chosen as that solution, enabling GSCCO to reach a milestone of 50 per cent growth in container traffic well ahead of schedule whilst, at the same time, significantly lowering operational overheads.

CHALLENGE

In order for port management specialist, Gulf Stevedoring Contracting Company (GSCCO), to meet its commitment to the ambitious Saudi Vision 2030 agenda for economic diversification, it needed to make big changes to its IT. Virtualisation was a real priority as was replacement of the legacy 3-tier server plus storage hardware in its data centre. With three port terminal operations to manage the company was also keen to migrate to a solution that would integrate management of all physical and virtual resources through a single interface as well as provide tools to enhance the resiliency of its IT infrastructure.

“We wanted a solution that would deliver linear scalability to handle predicted rapid growth in container traffic,” explained Hossam El-Masry, Information Technology Manager at GSCCO. “We were also looking for greater resiliency and the ability to upgrade and manage the infrastructure without any downtime or impact in any way on the level of service provided to staff and customers at the ports we manage.”

SOLUTION

Following a comprehensive evaluation of hyper-converged solutions from a number of vendors, the team at GSCCO decided on Nutanix Enterprise Cloud with implementation in two phases. The first involved installation of a primary Enterprise Cloud cluster in the GSCCO data centre, followed by virtualisation of as many server workloads as possible then subsequent decommissioning of the legacy hardware once the new software and client workloads were fully operational.

The second phase required the building of disaster recovery facility at the company’s Jeddah Islamic Port location equipped with a second Enterprise Cloud cluster to be used for snapshot replication, backup and disaster recovery using tools included as standard in the Nutanix software stack.

The full installation was completed in late 2016, since then the company has put the promised scalability to the test by adding additional nodes to cope with growing IT demands in each of the following years. With the previous infrastructure this would have required weeks of planning to cope with the disruption and possible downtime that would have ensued but, with the Nutanix Enterprise, it was a quick, seamless and trouble free exercise, as El-Masry confirms.

“The Enterprise Cloud delivered fully on its promise of cloud-like scalability, enabling us to add additional nodes in hours rather than days or even weeks with the old hardware, and with no downtime,” he said. “We now also have a much more resilient infrastructure,” he continued, “allowing us to keep the ports running at all times with no disruption in service during maintenance and rapid failover to our recovery site to enable us to keep the ports working should we suffer a power outage or other problem.”

CUSTOMER OUTCOME

As part of the migration to the Nutanix Enterprise Cloud El-Masry and his team have virtualised all of the GCSO workloads leaving just a handful of legacy systems with specific hardware dependencies. This has led to a significant increase in performance and greater capacity. It has also allowed the port operator to reduce rack occupancy by a full 1.5 racks, in turn, leading to a significant reduction in associated power and cooling overheads.

The support team, too, has benefited by being able to manage the two sites and all physical and virtual resources from the one Nutanix Prism console. Moreover, the support team no longer need specialist storage management skills and are able to spend more time supporting users and planning for further developments than struggling to just keep the data centre working.

“Not only have we saved on capital IT spending, we have also achieved a saving of around 15 percent in terms of OpEx,” commented El-Masry. “We’ve also been able to bring new developments online earlier than planned including recent major upgrades to our Navis N4 Terminal Operating System and EmPower employee performance management systems needed to cope with the extra container traffic expected going forward.”

NEXT STEPS

In the short term it’s business as usual with El-Masry and his team focused on further expanding the Enterprise Cloud deployment to cope with continued growth. Looking to the future the company is evaluating possible use of public cloud services, process automation and support for the Internet of Things (IoT) and is doing so confident in the knowledge that the Nutanix Enterprise Cloud is uniquely equipped to enable them to take advantage of these and other new technologies and do so at minimal risk and expense.

INDUSTRY

Port operations and logistics

BENEFITS

- › Agile and scalable IT infrastructure to keep pace with 50 per cent growth in container port traffic.
- › 15 percent saving on IT Operational Expenditure (OpEx) through major reduction in rack occupancy, lower power and cooling requirements plus significant savings in management and support.
- › Enhanced availability and instant failover using built-in snapshot and replication tools across Enterprise Cloud clusters in two separate data centres.

SOLUTION

- › Nutanix Enterprise Cloud Platform hosted across two replication/failover clusters
- › Prism management plane
- › VMware Hypervisor

APPLICATIONS

- › Navis N4 Terminal Operating System (TOS)
- › EmPower employee performance management platform
- › Microsoft Dynamics GP
- › In-house ERP solution
- › SQL Server
- › Microsoft Windows file, print and management servers

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on [Twitter@nutanix](https://twitter.com/nutanix)

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