

“Highly reliable FUJITSU Integrated System PRIMEFLEX vShape enables remote support, eliminates single-point failures and ensures effective monitoring of our fleet, improving responsiveness to business requirements.”

Hamad Suwaid
IT Manager
Nakilat

FUJITSU Integrated System PRIMEFLEX vShape improves operational excellence, enhances reliability and enables efficient management of Nakilat’s fleet.

At a glance

Country: Qatar
Industry: Shipping & Maritime
Founded: 2004
Website: www.nakilat.com

Challenge

As Nakilat expands its role in ship management through a strategic phased vessel transition, it inherits vessels with primitive IT infrastructures, systems and technology. This requires significant digital transformation of these large, complex LNG vessels to guarantee peak performance during operations.

Solution

Having successfully partnered with Fujitsu to deploy FUJITSU Integrated System PRIMEFLEX® for SAP HANA® in its data centers in 2015, Nakilat chose its pre-configured, plug-and-play PRIMEFLEX vShape solution to provide a robust, virtual on-board environment to modernize its fleet for better connectivity and performance.

Benefit

- Faster connectivity enables real-time analysis, leading to swift centralized management, supporting rapid growth
- High availability and redundancy eliminates single point of failures, thus resulting in improved operational excellence and reduced support calls and response time
- Substantial cost reduction by optimizing manpower requirement and improving efficiency

Customer

Nakilat is a Qatari-owned shipping and maritime company providing a critical transportation link in the State of Qatar's Liquefied Natural Gas (LNG) supply chain. Its LNG shipping fleet is the largest in the world, comprising of 63 LNG vessels. Nakilat also co-owns four large LPG carriers. Nakilat operates the ship repair and construction facilities at Erhama Bin Jaber Al Jalahma Shipyard via two strategic joint ventures, and offers a comprehensive range of supply and marine support services to vessels operating in Qatari waters 24 hours a day, seven days a week.

Products and services

- FUJITSU Integrated System PRIMEFLEX vShape
- FUJITSU Server PRIMERGY RX2540
- FUJITSU Storage ETERNUS DX100
- FUJITSU Storage ETERNUS CS200c Integrated Backup Appliance with Commvault software

Modernizing a global fleet

As Nakilat strengthens its vision to be a global leader and provider of choice for energy transportation and maritime services, major transformation is required to ensure all its managed and operated vessels can operate in a safe, reliable and effective manner.

"We have the world's largest and most complex LNG vessels, but they were not well equipped in terms of IT infrastructure and technology. Each ship had a very basic infrastructure, with low availability, no virtualization and no business continuity," explains Hamad Rashid Suwaid, IT Manager of Nakilat. "This made it difficult to collect information even though we had suddenly opened up a new high-speed satellite channel. Furthermore, if a ship goes blind, it can cost us dearly."

Hence, an extensive study was conducted in which Nakilat mapped out a detailed digital transformation roadmap that required a cost-effective yet simple IT platform onboard each ship and then researched the market for the right solution. The company had already partnered with Fujitsu to deploy FUJITSU Integrated System PRIMEFLEX® for SAP HANA in both its data centers. The success of that project, a scalable and flexible SAP private cloud platform based on Fujitsu FlexFrame Orchestrator at half the operating cost, made Fujitsu a trusted partner for this new business critical IT project.

"Fujitsu offered us a pre-configured, plug-and-play virtualized infrastructure based on its PRIMEFLEX vShape solution, which is low cost and easy to implement," adds Suwaid. "That, in tandem with the great working relationship we had built up during the SAP deployment, made it the first choice to provide everything we need onboard our fleet."

Resilient on-board solution

FUJITSU Integrated System PRIMEFLEX vShape is a virtualization and private cloud reference architecture that integrates the expertise and technologies of leading manufacturers' software. It provides highly scalable industry-standard components, including storage, networking, virtualization software, and incorporates backup to the FUJITSU Storage ETERNUS CS200c with Commvault software.

These components are configured, synchronized and validated as a single solution. Since each vessel is different and therefore has different requirements; the beauty of PRIMEFLEX vShape is that it can be customized to meet each ship's specific needs.

Together, Nakilat and Fujitsu created a case study based on the infrastructure of each vessel to ensure that the configuration was correct.

The first four PRIMEFLEX vShape solutions were then put together by Fujitsu; consisting of two FUJITSU Server PRIMERGY RX2540 units and one FUJITSU Storage ETERNUS DX100 device supporting 2TB of data. This platform runs VMware Horizon and connects to both thin clients and traditional PCs on-board, as well FUJITSU Storage ETERNUS CS200c with Commvault software at the head office providing a backup solution.

"It took us around three days to equip each ship with the new equipment, from the bridge deck to the engine room," continues Suwaid. "Typically, there are six virtual desktops and six thick clients on each vessel, all connected to a PRIMEFLEX vShape back end that runs numerous essential applications and has in-built resilience in the event of failure. It is also entirely Solid State Drive (SSD), which is far more suited to life on the waves."

Improved performance with maximum availability

The new PRIMEFLEX vShape on-board solution is helping Nakilat improve system reliability and guaranteed up-time. Previously, ships were required to dock for an engineer to resolve any IT issues. Now, any incidents can be quickly handled remotely. This has dramatically reduced manpower costs as one engineer can now manage eight ships.

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The new virtual environment with in-built disaster recovery ensures that Nakilat can keep a watchful eye on each ship, its cargoes and crew services. Furthermore, application performance has improved hence enhancing productivity of crew onboard and enabling the company to introduce new revenue streams, while making smarter business decisions based on real-time shared data.

"Ships can now operate as independent assets, collecting information relating to weather or conditions, transmitting that data and become information providers to our charterers, operators and top management. Fujitsu provides the reliable hardware to gather that big data," concludes Suwaid. "What this also means is that we expect to recoup between 70-80% of our initial hardware investment in the first year."

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Website: ae.fujitsu.com