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Global Mobility Leader Hyper-Accelerates its ERP Database Queries from Hours to Seconds

ITX · Industry: Global mobility solutions · Size: 110 employees · Location: Geneva, Switzerland

Challenges

- Improve the performance of business-critical ERP and customer-facing apps
- Ensure data security, privacy, and compliance across international borders
- Overcome the administrative burdens and technical limitations of legacy infrastructure

Solutions

- Cisco HyperFlex™ All-NVMe with Intel® Optane storage technology
- Cisco Intersight™ SaaS Systems Management Platform
- Cisco Stealthwatch® Security

Results

- Accelerated Oracle ERP database queries from hours to seconds
- Greatly simplified and largely automated data center operations
- Improved systems redundancy, application resiliency, and data security

Founded in 2000 by seasoned HR and finance executives, ITX is a leader in global mobility matters. The company helps simplify expatriation programs, reduce operational costs, and maintain full compliance with regulations. For more information, visit itx-ge.com.

For more information

- Cisco HyperFlex
- Cisco Intersight
- Cisco Stealthwatch
- Intel Optane SSD

Challenge: Modernize and accelerate business-critical applications

ITX helps large, international organizations hire and manage some 5000 expatriates working in 130 countries. This not only creates a complex matrix of customers, mobile workers, contracts, and local laws, but also a mountain of sensitive data to secure and maintain.

That's why the company's backend ERP system and frontend customer applications—known collectively as the ITX Connected Platform—are so vital. Leveraging ten Oracle Database 11g servers, the ERP system supports a number of HR and financial services for its clients as well as mobile apps and online portals for the expatriates they employ.

"Our mission is to pay corporate expatriates on time, in their local bank, wherever they may be," says Marcos Ares, CIO of ITX. "The performance of our backend systems has a direct impact on our ability to pay them without interruption and their experience with our apps, portals, and services."

With its business continuing to grow and its legacy compute and storage systems running out of capacity, technology change was inevitable. But public cloud services were not an option.

"We must own and host all of our data," Ares explains, citing data security and privacy requirements. "It can't be in the cloud and must stay in Switzerland. All of it."

That's difficult for a company with clients around the world and branch offices in London and Singapore. And it became increasingly challenging when ITX had to establish a second data center in Geneva.

"We ran out of capacity and needed to expand," Ares says. "We wanted a state-of-the-art infrastructure that would be reliable and last a long time."

"Cisco HyperFlex is the best product for managing storage resources and images. It's very easy, which is key for us because we don't have storage experts on staff."

Marcos Ares, CIO, ITX

Deploying all-NVMe hyperconverged infrastructure

As they evaluated infrastructure solutions, ITX leaders prioritized performance, high availability, and data security. They wanted to standardize and align the company's two data centers. And they were keenly interested in the seamless integration and simplified administration of hyperconverged infrastructure (HCI).

ITX chose the all-NVMe version of Cisco HyperFlex, which leverages the power of Intel Xeon processors and Intel Optane Solid State Drives (SSDs). Representing a new class of storage, Intel Optane SSDs eliminate latency bottlenecks to improve the performance of ERP systems, databases, and other demanding workloads.

"When I first saw Cisco HyperFlex with Intel Optane, I knew it was the right solution for us. It's everything, all in one," says Paulo Pratas, head of infrastructure at ITX, noting the tight integration between virtualized compute, storage, and networking components.

With the help of IT services partner Sword Technologies, ITX deployed a Cisco HyperFlex All NVMe stretched cluster that aligns its two Geneva data centers. Synchronous replication and Cisco Stealthwatch provide full redundancy and exceptional data security. And both data centers are managed collectively using Cisco Intersight, a cloud-based systems management platform.

> "We thought we would get a 20 to 30 percent boost in performance [with Cisco HyperFlex All NVMe and Intel Optane SSDs], but it's been way better than that. Test queries used to take two hours, but now they're almost instantaneous."
>
> **Paulo Pratas**, Head of Infrastructure, ITX

Accelerating Oracle database queries from hours to seconds

With the company's ten Oracle databases and two Microsoft SharePoint farms now running on Cisco HyperFlex All NVMe with Intel Optane SSDs, application performance is no longer an issue for ITX.

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"Cisco HyperFlex is the best product for managing storage resources and images," Ares adds. "It's very easy, which is key for us because we don't have storage experts on staff."

With ITX's data centers fully integrated, highly automated, and largely hands off, the company's IT staff now has time to tackle a backlog of work—all of the things that were pushed to the backburner when hardware systems needed full attention.

"There's been a huge gain of time," says Pratas. "I can focus on higher-level needs, like security and documentation."

In addition to security and documentation, Ares says the team plans to dedicate more time to policies, firewalls, and audits. The team is also prepared to deploy Cisco HyperFlex Edge to the company's branch offices in London and Singapore and manage them centrally using Cisco Intersight.

"When the business has the need, we have the solution." Ares says. "And it will be a seamless extension of what is already in place."

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