Breaking Global Service Delivery Barriers with Cisco HyperFlex and Cisco ACI

Tech Mahindra Business Services · Industry: Business process outsourcing · Size: 6500 employees · Location: Mumbai, India

With headquarters in Mumbai, India, Tech Mahindra Business Services (TMBS) provides digital customer experiences and back office services for businesses in a variety of industries. TMBS is a subsidiary of Tech Mahindra, a USD 4.9 billion IT services company that supports 938 customers in 90 countries. For more information, visit techmbs.in.

**Challenges**
- Improve the cost and efficiency of global service delivery
- Modernize data center infrastructure and IT operations
- Boost systems security and regulatory compliance

**Solutions**
- Cisco HyperFlex™ system
- Cisco® Application Centric Infrastructure (Cisco ACI™)
- Cisco Unified Computing System™ (Cisco UCS®)
- Cisco UCS Director
- Cisco Nexus® 9000 Series switches
- Cisco MDS 9000 Series switches
- Cisco Collaboration solutions

**Results**
- Created innovative, global VDI delivery model
- Accelerated infrastructure and security provisioning
- Segmented applications, data, and users to meet ISO and PCI requirements

**For more information**
- Cisco HyperFlex
- Cisco ACI
- Cisco UCS
- Cisco UCS Director
- Cisco Nexus 9000
- Cisco MDS
- Cisco Collaboration
Challenge: Improve the cost and efficiency of global service delivery

With its data centers in India and its employees and customers spread around the world, TMBS has always had to deal with the geographic realities of global service delivery. But TMBS isn’t just an outsourcer of business processes—it’s an innovator that pairs modern technologies with novel approaches to continually improve its service offerings.

The company’s IT leaders had been intrigued by the transformative possibilities of hyperconverged infrastructure (HCI) and software-defined networking (SDN), believing they could dramatically improve both internal IT operations and global service delivery. As a proof of concept for sweeping data center modernization, TMBS upgraded its contact center infrastructure in 2017 with Cisco HyperFlex and Cisco ACI.

“In a conventional contact center, you have to keep the applications and data close to the agents and you need to refresh the desktops every four to five years,” says Avinash Panchal, vice president of technology at TMBS. “We wanted to be creative and do it differently. So we found a way to eliminate the refresh cycle and allow people to work from anywhere, without sacrificing security or cost efficiency.”

Using Cisco ACI, the industry’s leading SDN solution, TMBS connected its 3-node Cisco HyperFlex cluster in India with its 70-agent contact center in Ireland. The unique deployment separated data and voice traffic, overcoming traditional virtual desktop infrastructure (VDI) limitations.

“We can now put our contact centers anywhere in the world and handle all of the data processing and storage from a central location. It’s much more time and cost effective than placing infrastructure, desktops, and IT resources in all of our regional contact centers.”

Avinash Panchal, Vice President of Technology, TMBS
Modernizing, standardizing data centers

The new contact center infrastructure was eye opening for TMBS. Not just because of its ability to support virtual desktops and remote users, but also because of its small footprint, high reliability, simplified management, and exceptional performance.

“The VDI deployment worked so well, we decided to expand our use of Cisco HyperFlex and Cisco ACI,” Panchal says. “They were the best options in terms of TCO, scalability, and management.”

The company’s primary and disaster recovery data centers now feature 8-node and 7-node Cisco HyperFlex clusters, respectively, in addition to Cisco UCS blade servers for bare metal workloads and Cisco MDS switches for legacy storage systems. The two data centers are managed with Cisco UCS Director and will soon be connected using the Cisco ACI Multi-Site capability.

“We now have a standardized policy model and centralized control across the entire infrastructure,” says Sagar Gyanshankar, general manager of technology at TMBS. “It used to take us two weeks to provision a new application environment. Now it takes half a day.”

Pursuing new certifications, service possibilities

In addition to improving IT efficiency and global service delivery, data center modernization is spawning new business opportunities for TMBS. For example, the company is seeking ISO 27001 and PCI DSS certifications for the first time, which will help attract new clients and enable additional service possibilities.

“The certification process can become a nightmare if your data center isn’t organized and segregated. If you don’t have a clear understanding of what is talking to what, it can take a year,” says Gyanshankar. “The whitelist policy model of Cisco ACI has not only made certification possible, but also fast and easy.”

Using Cisco ACI automated scripts, TMBS has segmented and fully isolated its applications, data, and users. Doing so meets several key requirements for ISO and PCI certification.

“Complying with various security standards would have taken much longer without Cisco ACI. And beyond compliance, we now have essential visibility into infrastructure connectivity and communications.”

Sagar Gyanshankar
General Manager of Technology, TMBS