CISCO

# Singapore Airlines revamps its data centers to drive innovation

**Singapore Airlines · Size: 27,000 employees · Industry: Transportation · Location: Singapore**

With its hub at Singapore Changi Airport, Singapore Airlines Limited (SIA) is the flag carrier airline of Singapore and has won multiple awards over the years. For more information, visit singaporeair.com.

## Challenges
- Modernize business-critical technology infrastructure
- Establish policy and governance consistency across a hybrid cloud environment

## Solutions
- Application-centric, software-defined network
- Centralized, policy-driven management and automation

## Results
- Improved systems redundancy and availability by connecting two data centers
- Leveraged open infrastructure and APIs to support open source DevOps model
- Standardized application governance with policy-driven automation
- Increased application visibility, security, and resiliency with dependency mapping and whitelist enforcement

## For more information
- Cisco® Application Centric Infrastructure (Cisco ACI™)
- Cisco Nexus® 9000 Series switches

## Challenge: Modernize business-critical infrastructure

SIA is investing heavily in an expansive effort to digitize its operations and create innovative, personalized passenger services—leveraging everything from data analytics to chatbots. And it is extending those services to partner platforms by making its information resources and digital capabilities more readily available.

The airline deployed Cisco ACI, the industry's leading software-defined networking solution, to modernize and connect its two data centers. Using a Cisco ACI Multi-Pod design with Cisco Nexus 9000 and Cisco Nexus 7000 data center interconnects, the active/active data centers with two fault zones have improved the redundancy and availability of SIA's IT systems.

Both sites are now controlled from a single, centralized console, giving SIA operational consistency, common governance, and additional flexibility. The airline's IT staff have the technical capabilities to move virtual machines or entire clusters from one data center to the other, for example, without needing to manage or create new IP addresses.

Using Cisco ACI, SIA will be creating a policy or contract for each application that will follow it wherever it goes. The centralized policy engine and whitelist model improve application consistency and control, increase security and resiliency, and provide better visibility into application dependencies.

The implementation established a strong foundation for current and future digital initiatives.

## Looking ahead

Already at the top of global airline rankings, SIA is not content to rest on its laurels. With a new data center infrastructure and software-defined network in place, the airline is continuing to invest in its modernization and innovation initiatives.

It is exploring new technologies to further improve its digital journey. This includes extending application visibility and policy control to public cloud environments, attaining deeper application insights, and enhancing security enforcement across its data center, DevOps, and public cloud environments.

## Products

- Cisco Application Centric Infrastructure (Cisco ACI)
- Cisco Nexus 9000 Series switches
- Cisco Nexus 7000 Series switches