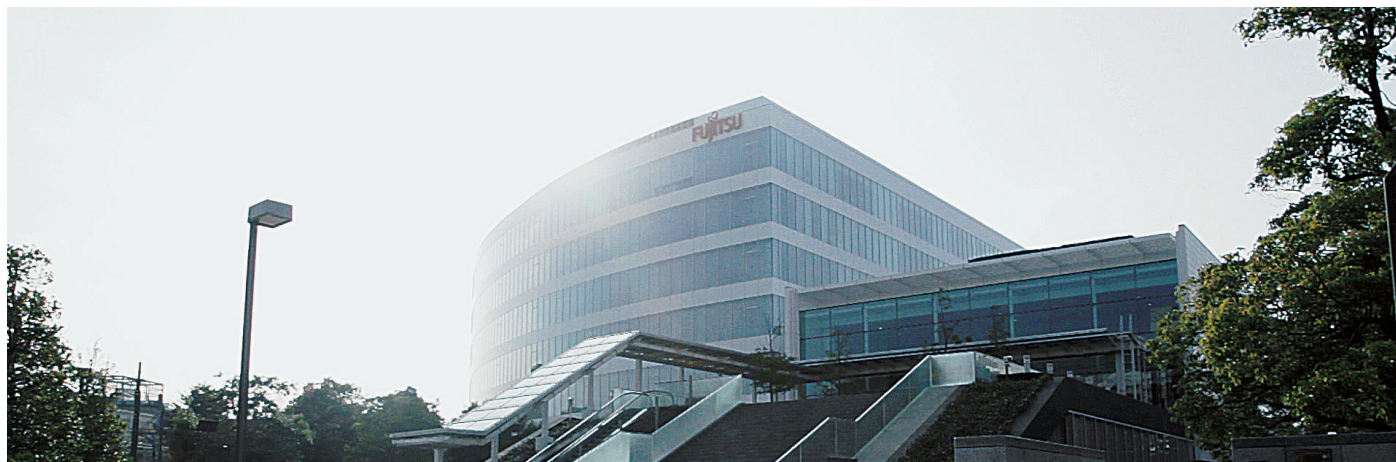


# Implementing a “One Data Center” Concept



## EXECUTIVE SUMMARY

**Customer Name:** Fujitsu  
**Industry:** Information systems services  
**Location:** Tokyo  
**Number of Employees:** 159,000

### Business Challenge

- To connect a large number of data center facilities with multiple network lines and provide them to customers as an easy-to-use single system.

### Network Solution

- Created an environment that supports diverse customer needs and delivers the necessary system foundation to them on demand
- Made full use of the existing circuit and installed a single flat network that connects each data center

### Business Results

- Expanded to provide data center and network services for the global market
- Strengthened the Fujitsu relationship with Cisco

Fujitsu used the Application Centric Infrastructure to operate multiple data centers on a single, flexible, on-demand platform

## Business Challenge

Fujitsu has been managing data center services for more than 20 years. It offers optimum systems combined with an extensive menu, including cloud, to meet customer needs. Its data center comprises 69 domestic centers and a total of 100 centers globally.

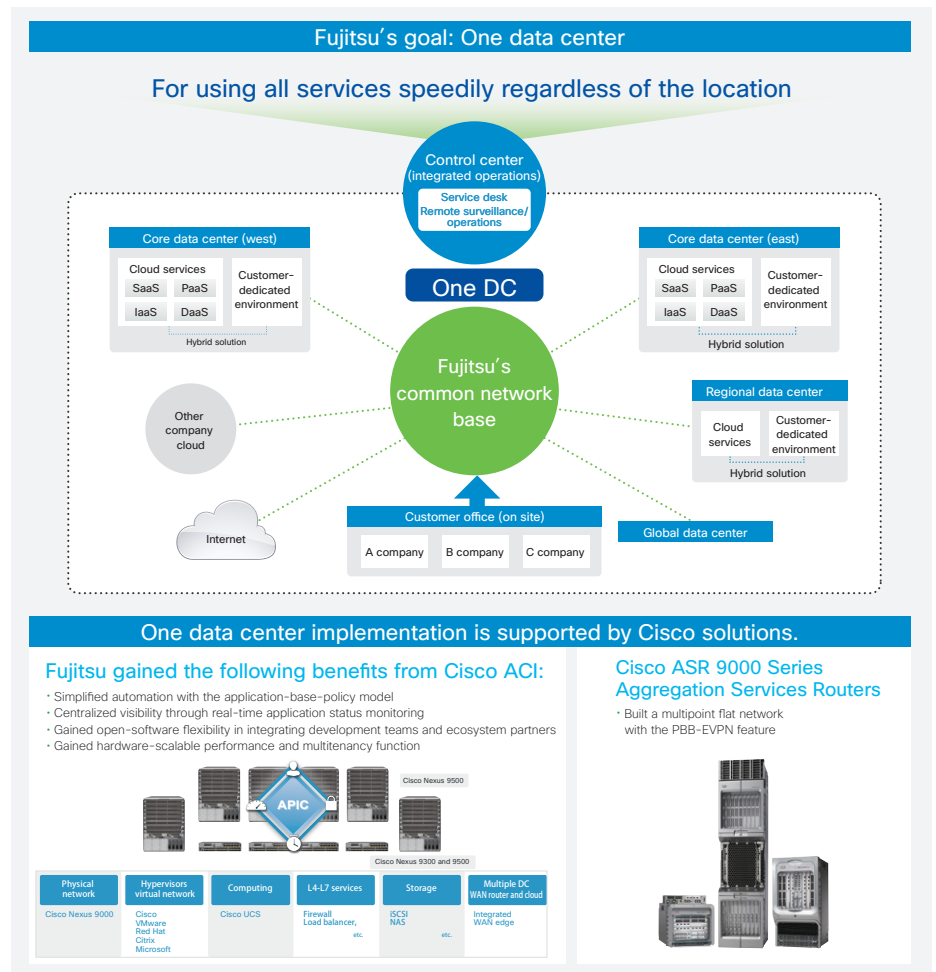
With the increasing need for infrastructure as a service (IaaS), Fujitsu created an environment for the smooth operation of data centers, networks, and the cloud. The “One DC” (one data center) initiative was launched in 2013 using the Cisco ACI (Application Centric Infrastructure) and Cisco ASR 9000 Series to provide multiple data centers as a single, flexible, on-demand platform.

Yasunori Suzuki, Fujitsu’s senior director, explained: “We had previously built individual customer systems on separate data centers, which was difficult to migrate to the cloud. With One DC, we created a common base to which many data centers and clouds could be connected, regardless of location.”

## Network Solution

Senior Director Takao Kida also noted the importance of a common network base: “A critical solution must be implemented quickly, so we removed the barriers by creating a common network that connects a variety of services such as data centers and the cloud. We then expanded to major data centers and formally adopted the Cisco solution.”

Mr. Kida stated, “Customers want to be confident in on-demand services that enable immediate set-up of networks and data centers. We want to use SDN technology that supports diverse use of services and infrastructure.”



### Simplifying Operations with Cisco ACI

Cisco ACI automates and simplifies the operations of a data center. It creates and applies network functions using application profiles, with real-time configuration edits. Its software-defined networking (SDN) policy model encompasses networks, servers, storage, security, and services.

Masakazu Fukaya, who oversees data center planning, says, “When we saw the first demo we recognized it as an advanced network structure and a different way of thinking. Technology verification is progressing and we’re making use of Cisco’s advanced technical capabilities.”

Kida added, “Customers want to be confident in on-demand services that enable immediate setup of networks and data centers. We want to use SDN technology that supports the diverse use of services and infrastructure.”

### Building a Flat Network with Cisco ASR 9000 Series

Fujitsu centrally controls the WAN circuits in the network foundation. A flat network connects data centers using the existing network and Cisco ASR 9000 Series routers. The ASR routers offer a function called PBB-EVPN, or provider backbone

bridging Ethernet VPN. “A more user-friendly and cost-efficient network can be implemented by using the FENICS circuit, whereby communication between the data centers uses MPLS protocol, but adds PBB-EVPN linked to Cisco ACI,” Fukaya explained. (“FENICS” refers to the Fujitsu Enhanced Information and Communication Services, Phoenix, circuit).

## Business Results

Fujitsu’s customers have global operations and need data center services and cloud services across Asia. Global and domestic needs differ greatly, and Fujitsu continues to work with Cisco on enhanced offerings.

### PRODUCT LIST

- Cisco Application Centric Infrastructure (ACI)
- Cisco Nexus 9000 Series Switches
- Cisco Application Policy Infrastructure Controller (APIC)
- Cisco ASR 9000 Series Aggregation Services Routers
- Cisco Advanced Services

## For More Information

For details about Cisco ACI, see: [www.cisco.com/go/aci](http://www.cisco.com/go/aci).

For details about the Cisco ASR 9000 Series routers, see: [www.cisco.com/go/asr9000](http://www.cisco.com/go/asr9000).



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