



Fuji Television Network, Inc.

Revamped network optimizes IT support for changing work styles and cloud adoption

Fuji Television is a television station based in Tokyo, Japan. Its business segments mainly comprise broadcasting, media and content, and urban development and tourism. Founded in 1959, the company operates as a subsidiary of Fuji Media Holdings, Inc. Fuji Television employs more than 1,300 people.

Business challenge

Fuji Television Network, Inc. needed to build a more secure, flexible network infrastructure to pave the way for work-style reform and future cloud computing initiatives.

Transformation

Fuji Television needed a more secure, flexible network infrastructure to support changing employee work styles and cloud computing capabilities. Kyndryl™ Network Integration Services helped design, deploy and migrate a network solution based on Cisco TrustSec technology. In-house IT systems can now be used companywide, improving convenience and efficiency.

Results

Reduces space and power requirements by over 30% while improving performance

Provides centralized administration to streamline authorization changes and reduce operating workload

Creates a security-rich, flexible network environment enabling users to control communications and connect enterprise wide

"The whole enterprise is working on work-style reform and exploring how we can improve operational efficiency to help all kinds of people work."

Shin Kurosawa Senior Manager, Operational IT Promotion Fuji Television Network, Inc.





A network in need of an upgrade

Fuji Television has a mission to seamlessly deliver high-quality content to viewers. As part of that mission, it's pursuing innovative corporate initiatives that extend beyond broadcasting, such as virtual reality projects. Cloud computing already plays a role in this strategy, and the company intends to expand its use in the future.

However, in 2017, the company's network infrastructure was struggling to keep up. It lacked the bandwidth to handle growing communications volumes and was not equipped to enable users to work anywhere throughout the enterprise. Technological updates related to work-style reform, a Japanese initiative to improve employee work conditions, also presented challenges.

"We needed to respond to changes in employee work styles while producing and delivering content and preparing to support businesses other than broadcasting," says Masanori Izumi, Senior Manager of Operational IT Promotion in Fuji Television's Technology IT Promotion Center. "What we needed was a secure, flexible network with support for bring-your-own-device (BYOD) capabilities."

Attempts to bridge gaps in the network made it increasingly complex and difficult to manage, notes Akihiko Miyata, Network Engineering Expert at Fujimic, Inc., an affiliate that manages Fuji Television's network operations. He recalls: "We received a variety of network requests from our users. Quite often, we did not have solutions for them based on our system design, requiring us to offer disparate, arbitrary fixes. We added firewalls or connection lines each time, which increased operational complexity and management burden."

To address these issues, the company decided to migrate to a new network infrastructure—one that would provide enhanced security, support future cloud deployments and improve network convenience and manageability. Simply updating existing equipment was not enough.

User-based communications and enhanced security

Fuji Television joined forces with the Network Services team from Kyndryl, formerly IBM Infrastructure Services, to design and implement an upgraded network infrastructure solution. After analyzing the company's existing infrastructure, the Kyndryl team provided services for network design and implementation of Cisco TrustSec technology.

The Cisco solution uses software-defined segmentation to control connections based on specific terminals or user IDs, rather than on IP addresses, thereby facilitating user-based access control. The Cisco Identity Services Engine centralizes the policy for each ID, helping reduce operational workload. Another solution component, the Cisco Virtual Switching System, expands bandwidth and creates a highly available network environment.

The migration had to accommodate the needs of a modern television network. Since the company provides internet-based news programs in addition to conventional TV programs, minimizing downtime was critical. To that end, the Kyndryl team created a two-phase approach to migrating server and client-side switches. As a result, the company's mission critical network transformation was conducted with minimal migration downtime (less than two hours).

"[Kyndryl] delivered superb services for us when we upgraded our networks last time, so we worked again with [Kyndryl] for this project."

Akihiko Miyata Network Engineering Expert, Fujimic, Inc. Mr. Miyata recalls another challenge: "Ours was the first deployment of this technology in Japan, so we had many hurdles. As we waited for Cisco Systems to fix some components, [Kyndryl] adjusted the schedule and front-loaded some tasks to flexibly deal with the situation, which made us very happy."

The Kyndryl team stepped up to perform a thorough verification process. Planning started early, with the team conducting a basic design phase and extensive testing a year prior to the solution's targeted go-live date. The team's carefully constructed strategy included multiple iterations over a period of six months, and ultimately accomplished all tasks successfully.

Anytime, anywhere network access with 30% power and space saving

Fuji Television experienced many benefits from the upgrade, including significant improvements in its internal operations. Mr. Izumi explains: "Our employees used to work at their designated desks using desktop computers. As we put these transformed networks in place with secure wired and wireless capabilities, we are seeing people work in new ways. For example, they have started to bring their laptops to meetings instead of printing out materials."

This has led to enhanced efficiency and significantly reduced administrative workload. According to Mr. Miyata, users with no expertise can now easily modify information to control their connection from the administration page. Previously, Fuji Television provided switches and personal computers to its vendors and configured a firewall so they could only access part of the company's intranet.

Security improved markedly too. "In the media industry, employees sometimes need to access bulletin boards and websites rarely used by others," says Mr. Izumi. "This increases risks for viruses. Our new networks have enabled us to deploy terminals that can only access the internet—but not the intranet. This has resulted in a more secure IT environment."

Moreover, deploying the latest equipment reduced space and power requirements by more than 30% while improving performance. According to Mr. Izumi, "Embarking on this new technology would not have been possible without [Kyndryl's] knowledge, experience and execution capabilities."

"We are already using the cloud for on-demand content and other projects," he continues, "and we are planning to put our operational systems on the cloud going forward. The network upgrade project we implemented this time has set the groundwork for it."

Shin Kurosawa, Senior Manager of Operational IT Promotion at Fuji Television, shares additional insights into the company's future vision: "Right now, we are focused on workstyle reform across the organization. We are not simply cutting down overtime but are exploring how we can improve operational efficiency in line with a variety of work styles. The new networks have delivered the infrastructure for this purpose. That is why we provide laptops to our employees—and BYOD is on the horizon."

The refreshed network infrastructure enables employees working at studios in outside buildings to connect to networks with the same policy as headquarters for business operations. In the near future, Fuji Television is prepared for significant changes in how its employees work.

"As Fuji Television works on work-style reform and productivity improvements, we want to build sophisticated networks that perfectly fit the company to help our business grow."

Akihiko Miyata Network Engineering Expert Fujimic, Inc.



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