Revolutionize the Way We Work and Build a Set of Secure Base Infrastructures Designed to Leverage the Cloud

Customer Name: Tokio Marine and Nichido Fire Insurance Co., Ltd.

Industry: Insurance

Location: Tokyo

Number of employees: 17,483
Tokio Marine and Nichido Fire Insurance Co., Ltd. (Tokio Marine and Nichido) is not only Japan’s first insurance company, it’s also its largest domestic corporation, with an expansive history spanning more than 140 years. Tokio Marine and Nichido is working to expand telecommuting work arrangements to all its employees, and is actively involved in efforts to revolutionize working styles. In October 2018, the company implemented a secure base infrastructure leveraging Cisco® wireless LAN and SD-WAN solutions. It built a new network foundation capable of supporting the increasing pace of digitalization and work style reforms.

Tokio Marine and Nichido offers a variety of casualty insurance products, including fire, marine, accident, automobile insurance, and more. Its mid-term business plan, which kicked off in FY2018, is based on the concept: “To Be a Good Company ~ Aiming for No. 1 Quality and to Exceed Customer Expectations.” To achieve that aim, the company endeavors provide its clientele with a sense of security, to be selected by customers, and to enjoy consistent growth. Since October 2018, the company has been actively involved in trying to reform work styles by, for example, expanding the scope of telecommuting work arrangements for all employees and allowing personnel to work outside of the office. At this particular junction, Tokio Marine and Nichido made the decision to build a new concept branch office network capable of responding to digital transformation by leveraging changes in working styles, the cloud, and fat applications. As part of its secure base infrastructure project, the company rolled out Cisco’s wireless LAN and SD-WAN solutions.

Business challenges
- How to support a wide range of working styles resulting from the spread of telecommuting
- How to respond to fat applications, cloud usage, and other forms of digitalization
- How to enhance security measures to protect the assets of a financial institution

Network solutions
- Cisco wireless LANs and SD-WANs in the head office as well as the branch offices
- Cisco Advanced Services for project management, requirements definition, configuration, and support

Business results
- Installed wireless LANs and SD-WANs at the head office
- Initiated a plan and process to continuously expand similar connectivity to all branch offices
- Continuous advancement of Software-Defined Networking (SDN) through the cloud and with Cisco Application Centric Infrastructure (Cisco ACI®)

What is Cisco SD-WAN?
Customers use Cisco SD-WAN technology to create WANs with various connection types, such as MPLS, Internet, and 4G LTE, to name a few. SD-WAN greatly enhances the user experience and speeds up WAN deployment. It can securely connects users to applications and can protect all forms of data spanning from the edge to the cloud.

- **Stable application experience**
  Real-time analytics, visualization, and control contribute to the optimization of cloud- and on-premises applications as well as enhance user productivity.

- **Simple enterprise-level deployment**
  Centralized cloud management simplifies SD-WAN deployment and enables policy administration across thousands of sites.

- **The right security at the right place**
  Users, devices, and applications are protected through the prompt deployment of embedded or cloud-based security solutions made possible through superior threat intelligence.

- **A flexible network**
  Advanced routing can be utilized to control users, applications, and clouds, all while maintaining flexibility.
Business challenges

Ryo Hatakeyama, a senior architect at Tokio Marine and Nichido Systems Co., Ltd. and the lead for this project, explains the thought process behind it all. “Since nearly 10 years ago, Tokio Marine and Nichido has conducted business using wired LAN connections and desktop-style thin client terminals. However, the new terminal requirements, which came about as part of the work-style reform process, included items such as laptop PCs, wireless LAN, Internet connectivity directly from the terminals, etc.—requirements which were completely different from those that had been defined to date. We strongly felt an impending sense of danger if we did not consider new network solutions, as our present network, which had been built to cater to thin clients, would not be able to adequately respond to the newly defined requirements. We felt SD-WAN was one such possible solution for our problems.”

Cisco Software-Defined WAN (SD-WAN) is a solution that can create WANs using a variety of connectivity types, such as Multiprotocol Label Switching (MPLS), Internet, and 4G LTE, and it also enhances the user experience as well as WAN deployment agility.

Several years ago, Hatakeyama saw the need for a new network that served to enhance not only security but also usability. For that very purpose, he visited the U.S. in the summer of 2017 to see several companies’ SD-WAN solutions, including Cisco. Thereafter, Tokio Marine and Nichido announced in 2018 that it would be overhauling the entire company’s working style, and with that, the Secure Base Infrastructure Project was launched, which entailed the simultaneous deployment of SD-WANs and wireless LANs from the perspective of revolutionizing branch office-level network systems.

“One thing we wanted to accomplish with the new branch office-level network was to create a network that could isolate data traffic per the business requirements and also guarantee stable operations when carrying out important workflows. We felt that using SD-WAN would allow us to quickly and efficiently achieve this goal,” explained Hatakeyama.

SD-WAN and wireless LAN deployment were executed simultaneously in order to revolutionize the branch-level network.
Network solutions
The main deciding factor behind selecting Cisco’s solutions was security. Tokio Marine and Nichido Systems Co., Ltd. and its longstanding partner in network construction and operation/maintenance, Mitsubishi Electric Information Systems Corporation (MDIS), decided in March 2018 to engage Cisco after comparing Cisco to the other alternatives.

“The single largest deciding factor was security,” said Hatakeyama. “One of the key, underlying assumptions we had with respect to the new, to-be-built infrastructure was that it would be complete with over-the-top security features. Cisco develops its security solutions in-house, and it is also involved in service rollout. The breadth and depth of this expertise far outstripped that of the competition. I think the fact that Cisco proactively presented security-related requirements for financial institutions during the consideration phase was another reason we eventually went with Cisco.”

Prompt rollout achieved through cooperation with Cisco Advanced Services team
Hatakeyama goes on to state that Cisco Advanced Services played a significant role in the process. “Not only was the project at hand massive in scale and complete with high-level, industry-specific requirements from a stability and security perspective, but prompt delivery was also required. On the other hand, we had engaged Advanced Services for the Cisco TelePresence® video conferencing revamp project last fiscal year, at which time we were thoroughly impressed with the product quality and project management capabilities.

As such, we were convinced that everything would go smoothly if we had Cisco’s support this time around as well.”

From that point onward, Cisco Advanced Services held one to two regular meetings a week with Tokio Marine and Nichido and MDIS. Video conferencing was used to rope in experts from all areas, and the project continued to move forward. The target service go-live date was set for October 1, 2018, and the actual network construction time worked out to be less than half a year after all the paperwork and other red tape had been dealt with. This particular project turned out to be a race against time in view of its scale and the abnormally short turnaround. However, the project progressed with remarkable speed due to all the project members coming together and working as one cohesive unit.

Hatakeyama recalls the project being a future-oriented one in which “all project members proactively divvied up the tasks and made prompt decisions.”

Fusako Ishii, an employee at Tokio Marine and Nichido Systems Co., Ltd. who managed all internal tasks, tracked the overall progress, and was in charge of integration with the cloud, stated that she “devised an unconventional management technique emphasizing speed so as to deliver on the required short turnaround.” She believed that, while said method of management placed a lot of pressure on the task force, it was also one of the keys to the project’s success.

Satoshi Iwasaki from MDIS, who was primarily responsible for wireless LAN construction, explained, “We moved things forward by joining heads with one another and brainstorming regarding what could be done to shorten the construction period.”

And Daichi Nozawa, also from MDIS, shared, “This project not only took us out of our element, but also necessitated that numerous experts be brought together, and that the trial-and-error process be accelerated as much as possible.”
Business results
The launch was achieved on schedule at the headquarters location on October 1, 2018. Operation of a secure base infrastructure leveraging wireless LANs and SD-WANs, and that is capable of isolating transmissions per applications, such as thin clients and Cisco Webex®, commenced. Hatakeyama comments that he truly felt the impact of the work that had been done when an update on his terminal following the network construction prompted a massive download. “Being able to isolate traffic with SD-WANs is most effective. There was zero impact on key processes during the update, and I didn’t even notice the download and installation until I saw on the log a few days later that the update had been completed.”

There are plans over the next few years to roll out the same solution to all locations. Hatakeyama shares his expectations for Cisco going forward as follows: “I believe that network possibilities will continue to expand through cloud integration and automation, etc., as programmability continues to advance over the coming years. However, on the other hand, this comes with a blurring of boundaries that I feel will lead to a need for even more refined engineering skills when looking to accomplish various business requirements. I expect that we will continue to cooperate with Cisco to not only cultivate and train engineers who possess said required broad knowledge, but also come together to work on projects leveraging its global track record and know-how.”

Products and services
- Cisco vEdge Router
- Cisco vEdge Cloud
- Cisco Aironet® 2800 Series Access Points
- Cisco 8500 Series Wireless Controllers (WLC)
- Cisco Prime® Infrastructure
- Cisco Mobility Services Engine (MSE)
- Cisco Identity Services Engine (ISE)
- Cisco Catalyst 3850 Series Switches
- Cisco Catalyst 2960-X Series Switches (PoE)
- Cisco Advanced Services (AS/PMO, Network, Mobility, Security)

For more information
For more details on Cisco SD-WAN visit www.cisco.com/jp/go/SD-WAN.