

Daewoo Engineering & Construction Chooses Cisco Catalyst Full Stack for New Building

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Daewoo Engineering & Construction (Daewoo E&C) has been a leading Korean construction company for nearly half a century. Their new innovative office building in Seoul, Eulji Twin Tower, is equipped with Cisco Catalyst Full Stack network infrastructure.

Executive Summary

Customer Name: Daewoo Engineering & Construction

Industry: Construction

Location: Seoul, South Korea

Number of Employees: 5500+

Challenges	<ul style="list-style-type: none">• Increasing need for improved network connectivity across various office locations• New requirements to support secure hybrid work at office and home• Poor response to issues due to lack of resources and network visibility• Improving user experience on web and monitoring of SaaS services
Solutions	<ul style="list-style-type: none">• Cisco DNA Center• Cisco Identity Services Engine (ISE)• Cisco Catalyst 9300 Series PoE and Data Switches• Cisco Catalyst 9400 Series Chassis Switches• Cisco Catalyst 9800 Wireless Controller• Cisco Catalyst 9100 Access Points• Cisco DNA Software - Advantage License• Cisco ThousandEyes
Results	<ul style="list-style-type: none">• Seamless and flexible IT experience from anywhere in the office building• Complete visibility into network infrastructure, resulting in 3x faster issue response• Constant and proactive monitoring of network application performance



New building and network

For nearly half a century, Daewoo Engineering & Construction has been leading the Korean construction industry by applying the most advanced technology and achieving premier quality. In 2019 Daewoo E&C completed Eulji Twin Tower, a new building complex in Seoul. With eight stories below ground, 20 above, and a total floor area of approximately 146,000 square meters, the building consists of two office towers with a podium covering and supporting them up to the third floor. Many of the latest intelligent systems have been applied to this building and its contemporary interior design. It has obtained the “1st grade building” energy efficiency ranking and a “green building best grade” through its wall greening, geothermal power generation, and the photovoltaic power generation systems covering the entire southern exterior wall of the podium.

Daewoo E&C focused on IT infrastructure to the same extent as it did the exterior of the new building. As its business continues to accelerate, there has been a constant demand to expand and improve the connectivity of the network infrastructure between the headquarters, overseas subsidiaries, and branch offices. In addition, there was an urgent need to expand into more flexible network infrastructure capable of supporting diverse types of work over time, such as remote work. The company has needed to carefully consider measures to handle emerging security threats with an increasing number of employees working in hybrid environments. In addition, it had to find an integrated management solution that can quickly respond to diverse network failures, even with a limited workforce, by securing visibility throughout the overall network infrastructure.

Accordingly, Daewoo E&C renovated its company-wide network infrastructure using the Cisco Catalyst Full Stack solution in time for the completion of the new building.

“With the completion of our new building, Daewoo E&C innovated the company-wide network infrastructure with SDN and selected Cisco as its business partner. Now, with Cisco Catalyst Full Stack supporting everything from wired and wireless integrated network access to smart and safe security, analysis, and control, we can guarantee a seamless and flexible IT experience anytime, anywhere to our employees, tenants, and customers.”

Chang Seung-ho

Manager of IT Operation Team, Daewoo E&C

A complete network

Daewoo E&C established its company-wide network infrastructure using Cisco Catalyst Full Stack solution to solve various concerns from connectivity to security and flexibility in a hybrid work environment. Based on SDN technology, Cisco supports all needed solutions for network infrastructure operation, from wired and wireless network access to security, analysis, and control, through Cisco Catalyst Full Stack. This technology has produced successful results in Korea and around the world.

Daewoo E&C expanded and improved the connectivity of the entire network among its headquarters, overseas subsidiaries, and domestic branches. In-house wireless access is now possible anytime, anywhere without blind spots, and the IT infrastructure can be flexibly accessed even when users are shifting between sites or changing connected devices.

The solution ensures adaptable connectivity while eliminating concerns about network failures and security threats. Visibility is ensured by Cisco DNA Center, which supports comprehensive management of connectivity, control, and analysis of the entire network infrastructure. Meanwhile, Cisco ISE provides integrated authentication and access control, and automation makes it possible to predict and address problems proactively. Since the upgrade, Daewoo E&C has been able to respond to network failures three times faster than before.

Improved experiences

Daewoo E&C's customers have directly experienced the positive impact of Cisco Catalyst Full Stack. Daewoo had been receiving complaints about access issues on the apartment application website whenever heavy traffic was concentrated, but Daewoo has since resolved customer experience issues by implementing Cisco ThousandEyes. When traffic is concentrated within a brief period of time and failures are likely to occur, Daewoo can now identify the cause of a problem and quickly address the issue by predicting the connection quality of internet users on each Internet Service Provider (ISP) and by constantly monitoring their access experiences with Cisco ThousandEyes. Furthermore, Daewoo E&C can monitor the overall quality of IoT service in the evolving apartment environment as an increasing number of IoT-based smart home IT services are provided, which will enable the company to flexibly respond to future changes.

With the introduction of Cisco Catalyst Full Stack, Daewoo E&C can guarantee the best possible IT environment for its employees, tenants, and customers, thereby improving both work efficiency and customer service.

Daewoo E&C's vision is to become a company that realizes the best possible value together with its customers. It is now one step closer to that vision after investing in its network infrastructure. Drawing upon the technology it has accumulated in the construction field, the creative talents of Daewoo E&C are now more intricately connected to one another, making it possible to collaborate with and deliver value to customers.

Learn More

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