

Building on a Zero Trust model and following a cloud-first policy, the company uses an authentication platform to provide secure connections



Implemented an authentication platform for more than 80 business systems



Supported remote access for 5,000+ users



Allowed secure remote work under pandemic conditions

# Housing construction company embraces digital transformation

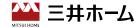
Mitsui Home Co., Ltd., a core part of the Mitsui Fudosan Group, constructs custom homes, builds medical facilities, and handles property leases and land use. The company's Digital Transformation (DX) Promotion Department manages the information and communications technology strategy that supports the builder. Yasushi Hara, Head of the DX Promotion Department, explains, "Our role is the design, formulation, and management of systems strategy and development planning for Mitsui Home and the group as a whole. In addition, we are responsible for the core systems and networks, so our operations expand beyond general information systems."

With the shift of housing information services from paper-based to internet-based workflows, the real estate industry has been actively working to utilize the latest information and communications technology (ICT). And with COVID-19 countermeasures in place, there has been a keen interest in using ICT tools to hold online meetings with customers and host webinar events, while avoiding in-person contact. "Mitsui Home is pursuing innovation with ICT," says Hitoshi Ikezawa, Head of the Corporate Planning Department at Mitsui Home Components, and former Head of the Systems Group. "In addition to using digital technology for customer-oriented services, we are constantly updating our internal personnel systems — adding flexibility and more advanced features. In fact, we are currently migrating from on-premises systems to a cloud-based system."

# Migrating critical business systems to the cloud

Mitsui Home's shift to a cloud-based system will help the builder reduce labor costs associated with system management and maintenance. "As an example, if there is a two-year development period and assets are depreciated over five to seven years, then the usage period for on-premises systems is around 10 years in total," says Masayuki Yamaga of the DX Promotion Department. "If we only make partial additions and replacements, the final system may still be outdated. To that end, we decided that the best option was a cloud solution that can be immediately upgraded."

憧れを、かたちに。



Mitsui Home Co., Ltd. Shinjuku, Tokyo www.mitsuihome.co.jp

## Industry

Building materials and construction

#### Solution

Enterprise Application Access



With many of Mitsui Home's employees working at sales offices and construction sites, moving on-premises business systems to an infrastructure as a service (laaS) cloud computing model — which provides virtualized computing resources — made sense. "We use a wide range of business systems, including an internal company portal used by all employees; CRM and customer information used by sales; and process management, budget management, maintenance management, and CAD tools used on construction sites," says Yamaga. "When these applications are used remotely, our employees want the same experience as when they are used inside the office. Cloud-based systems can be accessed anywhere with an internet connection, so we began supplying all personnel involved in fieldwork with tablets in 2015, then with smartphones in 2018, and most recently we created an environment that allowed these mobile devices to access business systems in the cloud."

## Expanding remote access companywide

The decision to extend remote access coincided with an anticipated change in employee work styles in response to an international athletic event. "Before and after the large-scale sports event in the summer, train congestion was expected. In light of that, we began looking for a remote work solution that would enable people to work from home or use a model house as a satellite office," recalls Ikezawa. "We assumed that around 70% of the personnel working in the Tokyo metropolitan area, or a total of around 2,000 people, would be working remotely. At that scale, it would take a huge amount of labor to handle the necessary mobile router management and VPN account creation, maintenance, and licensing. We needed to come up with a new method of enabling remote access, and quickly."

At that time, Mitsui Home provided remote access connectivity to about 300 employees using a USB mobile router and VPN connection, which could scale to meet that demand. However, as Mitsui Home began to consider the scalability needed for a companywide remote work solution for 5,000 users, it turned to Akamai Enterprise Application Access, our Zero Trust Network Access solution.

The company also knew that Enterprise Application Access would eliminate the security vulnerabilities of VPN technology. "The technology is usually good enough as long as users can simply access and use business systems, but a VPN connection is similar to an internal LAN in that it connects directly to operational work servers," says Yamaga. "A VPN account being hijacked by an attacker is a grave risk that could lead to a data leak, so we needed a new method of remote access from a Zero Trust perspective."

# Cost and time savings gained

With Enterprise Application Access in place, Mitsui Home is seeing the following benefits:

## Easy expansion to a larger number of users

According to Yamaga, "With the VPN, we had to make manual adjustments every time the number of users increased. But with Enterprise Application Access, account creation is conducted as part of the workflow to grant access to business systems linked to LDAP authentication. Since accounts can be created and managed without increasing the amount of work, we felt that the user population could increase without burdening our operations team."

## The ability to connect regardless of location

"A business system on laaS can be easily and safely accessed over the internet using an EAA connector (virtual appliance)," explains Yamaga. "Enterprise Application Access connectors can be activated very easily and in any quantity at no additional cost and we were drawn to that ability."



With Enterprise
Application Access,
web applications can
be accessed using
any web browser.
There is also no
need to distribute
and manage client
software as we did
with the VPN, which
helps streamline
operations.

#### Hitoshi Ikezawa

Head of the Corporate Planning Department at Mitsui Home Components, and former Head of the Systems Group, Mitsui Home Co., Ltd.

#### Convenient web-based application access for users

"Before the cloud migration, we had many client-server business apps that became unusable every time our operating system was updated," says Ikezawa. "That's why we changed to a web application environment so that any device could access it when needed. With Enterprise Application Access, web applications can be accessed using any web browser. There is also no need to distribute and manage client software as we did with the VPN, which helps streamline operations as well."

## A solid technology foundation

"We determined that Akamai's solutions, noted for CDN, had sufficient capacity to provide us with stable service," Ikezawa says. "In addition to the stable performance, we were also convinced by the 100% uptime service-level agreement."

## Intuitive usability drives user adoption

It has been roughly two years since Mitsui Home signed the service agreement and the number of business systems accessed through Enterprise Application Access is now more than 80, including development and training environments. The number of user accounts has increased from nearly 2,000 initially to 5,000+ today, including Mitsui Fudosan Group staff and outside vendors. The environment can be remotely accessed by roughly 4,000 computers, 3,500 tablets, and 3,500 smartphones.

"When Enterprise Application Access was first released, we provided two options to access applications: the traditional in-house access method and the new Enterprise Application Access route," says Yamaga. "Users were confused by the fact that there were two access methods, and it didn't catch on. Since there was almost no change in access speed using Enterprise Application Access, we quickly standardized on it to access business systems from inside or outside the company."

The main aspect that users appreciate is that it's very intuitive and easy to use. "One of the advantages of Enterprise Application Access is that users don't have to think about whether they are connecting from the company's internal network or from the internet," says Ikezawa. "Of course, it can also be accessed from any device through a browser, which is important to users. For example, a request for approval or similar decision can be made with a smartphone by accessing the workflow system. Since this enables senior personnel to approve decisions from their smartphones while away from the office, decisions that used to take a week can be completed in as little as a day. Also, from our perspective as administrators, we were initially wary of remote access for so many users, but we feel secure with Akamai thanks to Enterprise Application Access's Zero Trust security."

With the remote access environment in place, Mitsui Home was well-positioned before the spread of COVID-19. There was no reason to panic when telecommuting became the preferred way to work after a state of emergency was declared in Japan. Since access via Enterprise Application Access is based on the concept of Zero Trust and does not distinguish between internal and external types of system access, little explanation was needed for personnel to use it. "We explained how to request a company computer, how to have video conferences and chat, and so on," says Ikezawa. "Enterprise Application Access has contributed greatly to our remote productivity under these pandemic countermeasures."



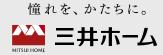
In addition to the stable performance, we were also convinced by the 100% uptime service-level agreement.

#### Hitoshi Ikezawa

Head of the Corporate Planning Department at Mitsui Home Components, and former Head of the Systems Group, Mitsui Home Co., Ltd.

# Promoting cloud computing with an eye to secure access service edge

In the future, Mitsui Home will be reorganizing its internal networks, as it has seen reduced traffic since the introduction of Enterprise Application Access. There are many networks under contract for leased lines, and the company plans to rework those contracts to be internetcentric. Mitsui Home will set up secure access service edge (SASE), a new network and security framework for the cloud era. "To further promote cloud usage since we are already shifting to a cloud-based system, I see the future of Mitsui Home in SASE, which provides comprehensive network and security functionality from the cloud," says Hara. "We also look forward to Akamai supporting us with its expertise in the SASE field."



Mitsui Home Co., Ltd., is a core company in the Mitsui Fudosan Group. Since its founding in 1974, Mitsui Home has been a leading company in wood-frame construction with superior basic performance in quake resistance and heat insulation. Pursuing performance improvements through technological development, the company aims to create safe, secure, comfortable housing. In addition to contributing to society by providing sustainable buildings made from environmentally friendly wood, Mitsui Home seeks to further polish its superior technological and design capabilities while providing housing and lifestyle options that people aspire to achieve. https://www.mitsuihome.co.jp