CTC upgrades its integrated authentication platform

HPE IceWall SSO delivers fast and reliable single sign-on for 13,000 users

Leading Japanese IT solution provider, ITOCHU Techno-Solutions Corporation (CTC) wanted to build a new integrated authentication platform by leveraging the stability and ease of use of single sign-on (SSO) and with an eye to future integrations with public cloud services and mobility solutions. HPE IceWall SSO provided the solution.

Challenge

Next-generation integrated authentication platform

ITOCHU Techno-Solutions Corporation (CTC) is one of Japan's leading solutions providers. It has built up a reputation around the ability to create IT platforms and multi-vendor systems in mission-critical areas, providing total solutions from proposing IT strategies to building and running systems. After merging with CRC Solutions in 2006, CTC focused on business challenges, such as developing the Cloudage cloud service using the expertise it had built up in infrastructure building. Planning, developing, and running CTC's internal system, which is used by 13,000 people, is handled by the company's IT Dept.
“While choosing a product, we looked not only into factors needed for running a system that handles 13,000 users with stability and speed, but also ease of operation in terms of making it easy to add new applications. After a comprehensive review, we chose HPE IceWall SSO.”

— Tomohiro Abe, Infrastructure Systems Section, IT Dept., ITOCHU Techno-Solutions Corporation (CTC)

To provide support for CTC’s many business activities, the IT department has focused on using commercially available packages to put together speedy systems and improve the ease of use of operational applications. As one part of this, in 2005, the IT department put together an integrated authentication platform, based on HPE IceWall SSO web-based solution, for internal applications, including the company’s internal portal. Prior to 2005, there had been authentication issues of unknown origin that touched everyone, as single sign-on was the entry point for all employees into the system. Ensuring stability of the system was therefore the top priority.

Tomohiro Abe, who works in the Infrastructure Systems Section of the IT department and has worked on building both the existing and previous integrated authentication platform, says: “The major goal was to achieve stable operation of the single sign-on system, to resolve reliability issues with the old system.

“We also wanted a forward-looking platform that would let us connect to public cloud services and mobility solutions,” comments Abe. “Working style innovations using these services were an important thing for us to consider going forward. To maximize the effect of this, we had to have the convenience of single sign-on. It was necessary to start accommodating functionality such as federation with public cloud services and access from mobility platforms now.”

In 2011, the IT Dept. decided to upgrade its integrated authentication platform for cloud. After two years of consideration, it picked HPE IceWall Federation as the new platform in 2013.

Solution

Picking a high-reliability authentication platform

When choosing a product, CTC looked not only at factors needed for running a system that handles 13,000 users such as stability and speed, but also making it easy to add new applications to the SSO system without the need of application modification. A Request for Proposal (RFP) was issued to the main single sign-on vendors and after a comprehensive review it was decided to go ahead with HPE IceWall SSO.

HPE IceWall SSO is a single sign-on product developed and offered by Hewlett Packard Enterprise (HPE). It is widely used in large-scale intranet and B2C/B2B services, and more, as the go-to solution for creating an integrated authentication platform. Its market share in Japan is 46.90%, with over four million user licenses. Hitoshi Senbokuya, who heads up the IT department, has been praised for the stability and usability of HPE IceWall SSO, which has a solid reputation in large-scale systems and mission-critical operations involving tens of thousands of users. “CTC provides customers with a service which runs 24 hours a day, 365 days a year. It was unacceptable for the service to be affected by any slowdown in internal applications. HPE IceWall SSO provides multi-layer redundancy, which allows us to ensure stability of single sign-on and minimize downtime. And if anything ever does go wrong, we still have the peace of mind of knowing that HPE 24/7 support is there to help us out.”
Abe says they focused on the benefits offered by the reverse proxy system employed by HPE IceWall SSO, which would be important when integrating with new applications: “On top of having to install an agent for each application, we used to waste a lot of time integrating new applications with the SSO system and managing the numerous agents with the agent-type products we used before,” comments Abe. “With a reverse proxy system, integrating new applications with the SSO system is easy as there is no need for application modification.”

This translated directly into cost cutting. During deployment or expansion, the application development lifecycle can be made shorter, which allows savings in manpower.

“HPE Japan has already verified HPE IceWall SSO with major public cloud systems, so you can integrate with them right away,” says Abe. “So when we introduce a public cloud service in the future, there should be no problems.”

There is also strong affinity with mobility platforms. Incorporation into such platforms is quick and easy thanks to the fact that the authentication accommodates smartphone applications and smart devices.

Overall, the HPE IceWall integrated authentication platform provides highly-reliable support for the operational infrastructure and will also accommodate future needs.

The HPE IceWall SSO affinity with public cloud services has also been highly praised. HPE IceWall SSO product comes standard with HPE IceWall Federation, a feature that delivers federated authentication using SAML (Security Assertion Markup Language), the industry-standard Security Assertion Markup Language.
Benefit

Employing virtualization technology

Server integration using virtualization is progressing at CTC. In putting together this integrated authentication platform, the HPE IceWall SSO servers, authentication servers, and federation servers have been virtualized. The risk of service downtime is minimized by using the latest virtualization technologies for these servers.

The IT department plans to gradually increase the number of systems connected to this integrated authentication platform. The initial services that have been incorporated were the ERP system, used for creation of quotes, managing sales, invoicing, and other basic operations; R&D; and the HR system, used for managing personnel data.

"In the future we plan to gradually increase the number of systems integrated with the SSO system, starting with newly developed systems," comments Abe. "The next target will be systems requiring external integrations, such as public cloud services."

This integrated authentication platform can be connected to Windows® authentication as well. Users simply log into a Windows environment which is integrated with HPE IceWall SSO authentication. Introducing software that syncs the Active Directory with HPE IceWall SSO authentication databases has allowed contract personnel and other users, who don't have terminals for connecting to the Windows domain, to login to HPE IceWall SSO.

"CTC is also a solutions provider with extensive experience in building authentication infrastructures using HPE IceWall SSO," states Reo Kawai, who heads the Applications & Middleware Technologies Section, and is also in charge of HPE IceWall SSO.

“We integrate many types of products, including HPE IceWall SSO, to build authentication infrastructures that meet customer needs, and provide round-the-clock operational support,” says Kawai. “Our strength is the ability to accommodate customer needs flexibly as a total service covering everything from development to operation.”

The expertise CTC has gained from upgrading its own integrated authentication platform is now something it can use in solutions for customers.

“As customers become more and more interested in integrations between public cloud services and mobility solutions, reliable and flexible SSO solutions are growing in demand,” comments Kawai. “Our situation, in which we required both stability for everyday business activities and the ability to integrate with external applications for future development, can be a point of reference for our customers.”

“To meet the ever-changing needs of business, our internal applications also change. We were so heavily dependent on our previous agent-type single sign-on system that we were unable to keep pace with all of these changes. That all changed when we deployed HPE IceWall SSO, which liberated us from the workload of our previous system,” says Senbokuya.

Specifically, HPE IceWall SSO can respond immediately to changes in the application environment, assuring the value of single sign-on into the future. CTC has gained practical experience in the HPE IceWall SSO integrated authentication platform for its internal systems. The greatest benefit of using HPE IceWall SSO is the ability to respond quickly to changes in the business environment.

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