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>
> **Motoaki Nakamura, Director of the Group Common Service Division, IT Strategy Headquarters of Fujitsu**

Building a secure and easy-to-use Virtual Desktop Infrastructure for workstyle innovation by 80,000 Fujitsu Group employees.

At a glance

Country: Japan
Industry: Technology
Website: www.fujitsu.com

Challenge

- Needed to build a system for teleworking to promote workstyle innovation
- Wanted to minimize the risk of data breaches by the threat of malware, such as targeted cyber attacks
- Wanted to eliminate security inadequacies (against the impersonation of users) by only using VDI and to make it more convenient

Solution

In the second half of 2015, Fujitsu started an initiative to deploy VDI throughout the company and its group companies in Japan. This project targets 80,000 out of a total of 110,000 Fujitsu Group employees, with the goal of completing the deployment in the first half of FY2017.

Benefit

- Develop an environment for working anywhere with VDI. It also provides an alternative for when network access is unavailable
- Take security measures, including the application of the latest antivirus updates and installation of applications, by the IT divisions at one single step
- Use biometrics authentication such as PalmSecure

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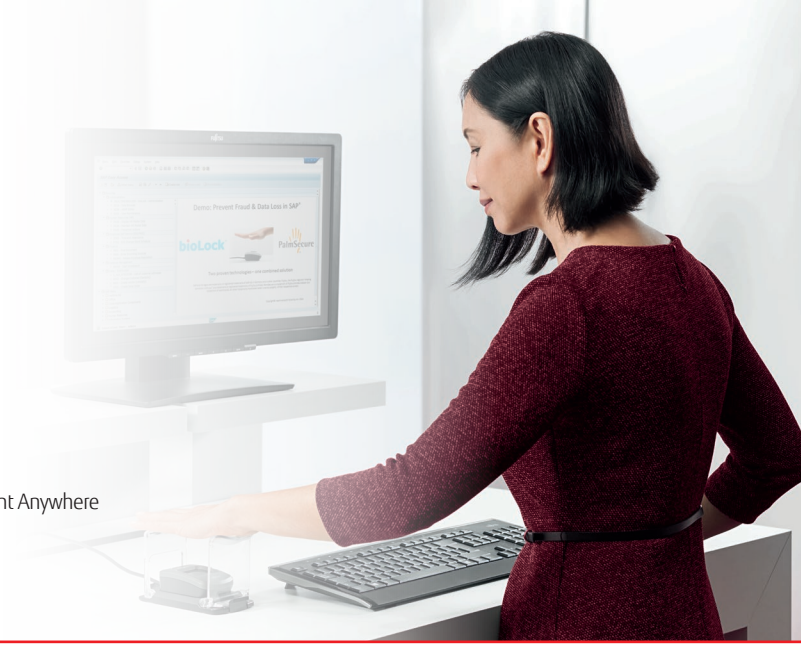
Customer

Fujitsu has been building a company-wide virtual desktop infrastructure (VDI), for approximately 80,000 of the Fujitsu Group employees in Japan, including affiliates. In this initiative, which is aimed at bringing about workstyle innovation and strengthening measures to prevent data breaches, Fujitsu is using a variety of its latest technologies, of which it is justly proud. It is also intended to provide customers with high value-added cloud services by collecting know-how and knowledge on the VDI through putting it into practical use in-house.



Products and services

- FUJITSU Integrated System PRIMEFLEX® for VMware VDI
- FUTRO Thin Clients
- Fujitsu PalmSecure™
- FUJITSU Cloud Service Print Anywhere
- FUJITSU Cloud Service K5

Challenge

Population aging is increasingly becoming a serious problem in Japan, and Fujitsu is no exception. "Unfortunately, even at Fujitsu, some employees chose to take leave or reluctantly resigned due to a difficulty in combining their career with childcare. For this reason, calls for workstyle innovation have grown, and the company was challenged to develop a means to implement a telework system, such as working from home or from a satellite office. This triggered our efforts toward the company-wide deployment of VDI," says Motoaki Nakamura, Senior Manager of the Group Common Service Division, IT Strategy Headquarters of Fujitsu.

"Over the last several years, the number of cyber-attacks targeted at specific companies is rapidly growing, and the problem of data breaches due to malware infection has become serious. Under these circumstances, our being targeted for attack at any moment would not be surprising. We considered that deployment of VDI was essential also as a countermeasure to such attacks. Although VDI by itself is sufficient to provide security, hacking cannot be prevented by conventional authentication which uses IDs and passwords. So, we needed an authentication method that offered more robust security."

Solution

Fujitsu launched a project that was led by the Group Common Service Division of the IT Strategy Headquarters. "We started from divisions which have the strictest security requirements first, specifically those divisions which handle extremely confidential customer data, and then moved on to personnel divisions which are required to take action regarding Japan's My Number system (equivalent to social security numbers). Lastly, we will deploy it among maintenance personnel who investigate dump files and log data received from customers for the investigation of incidents," says Nakamura.

He also says, VDI that is secure and easy-to-use is being comprehensively examined from a wide perspective in this project; not only from the selection, design, and construction of a VDI, but also from the standpoints of data breaches, security measures, and usability. Nakamura said that the new challenges that surfaced through such efforts were resolved by Fujitsu's latest technologies.

Fujitsu is using 'an immersion cooling server' (a server in which modules are directly dipped in an immersion tank filled with insulating liquid) as the server to run the VDI management tool and virtual desktops on. The server is still undergoing research and development and is expected to achieve extremely high levels of density and energy saving.

In order to support employees' various work styles, a broad lineup of products is being offered. Among them, the FUTRO MS936, a mobile thin client device that is perfect for taking out of the office that weighs only 1.13 kg and is only 19.8 mm thick, has excellent portability and design.

Benefit

The VDI that Fujitsu is running on a company-wide basis ensures security in terms of not saving data on devices while centrally managing the installation and patching of applications by IT divisions. However, for conventional VDI, challenges need to be tackled such as measures against illegal access by impersonated users, support for maintaining confidentiality, and use in places where Internet access is unavailable. While the VDI enables employees to work from anywhere, some challenges have surfaced during the stage of examining deployment. In its attempts to eliminate these challenges, Fujitsu is using its own latest technologies in all areas.

For instance, as measures to prevent users from being impersonated, the company incorporates biometrics authentication mechanisms, including PalmSecure, into the VDI as well as developing and providing computer devices that have a built-in sensor for PalmSecure. With these devices, the users only need to put their hands above the sensor to easily log in to virtual desktops, and so they are also freed from having to enter passwords every time.

In addition, since thin clients cannot be used without network access, if network access cannot be established at a customer's site for some reason or other, the user will not be able to present using the thin client device. A mechanism for dividing and saving data using PASERI for PC, a technology that secures confidential information by distributing as individually useless chunks across multiple locations, has eliminated this challenge. By using the mechanism to distribute confidential information safely as chunks between the local device and USB memory, it enables data breaches to be prevented even when data is taken outside the company.

Fujitsu has introduced Print Anywhere, allowing users to freely print data, regardless of the printer model, from any office located in Japan. By integrating printer drivers used across all the offices into one virtual printer driver, users can now print data from any printer or multi-function printer from anywhere in the company without needing to install a specific printer driver for the office in question. This has significantly improved user convenience because they can immediately print data from offices during business trips or at satellite offices.

Fujitsu's mission is to accumulate know-how and knowledge through its experience in deploying VDI on a company-wide basis and to provide secure and easy-to-use VDI services to customers. It will build functionality for using PalmSecure into the VDI and the Print Anywhere features on the FUJITSU Cloud Service K5, a cloud service in the FUJITSU Digital Business Platform MetaArc, and provide them to customers as services.

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