Considering the increasing amount of cybersecurity risks, Kawaguchi-Shinkin Bank felt that higher levels of security for their data systems were necessary to further their brand as a financial institution that customers can rely on. To achieve this, they began working with a thin client system through Parallels Remote Application Server. Not only did they succeed in increasing their security levels, they also simultaneously witnessed significant reductions in operating and support costs from their systems department.

**Organization**
Kawaguchi-Shinkin Bank is a regionally-focused financial institution. There are 45 branches within the southern area of Saitama Prefecture, centered around the main branch in Kawaguchi City. As of March 2015, there were 65,190 members, comprising both businesses and individuals, and 2.097 trillion yen in capital. Based on a philosophy that emphasizes fair and reliable operations together with contributing to local prosperity, all bank employees work together to contribute to Kawaguchi-Shinkin Bank’s operations and the local community.

**Issue: Increasing security risks concomitant with a fat client environment and higher operational loads**
Previously, employees were using approximately 400 Windows® PCs for general business purposes throughout all Kawaguchi-Shinkin Bank branches. Sufficient efforts were expended with regard to the security of the PCs at each site to both protect the important data that customers entrust to a financial institution and to comply with all laws and regulations. Internally, guidelines were formulated to prevent the leaking of data. Compliance with those guidelines occurred in conjunction with the implementation of technical strategies that included the use of IC card authentication when using PCs, and prohibitions against connecting external recording devices, such as USB memory, to those PCs.

That said, in recent years there have been increasing amounts of targeted cyber-attacks against various organizations. As a result, there have been more and more incidences of business data leaks. In light of these increasing risks, Kawaguchi-Shinkin Bank began considering a move to a system environment with greater levels of security and a lower risk of data leaks. At the same time, the systems department also wanted to reduce the burdens and costs associated with the operational management of those approximately 400 PCs. Department staff needed to apply Windows security patches and updates for business-related applications to each PC, one by one. This placed an extreme burden on the department.

It was also cumbersome to provide support when trouble arose with the PCs. Work had to be done at the PC level to collect and check computers experiencing problems and then, once repairs were complete, to restore the original environment and return the computer. Moreover, although there were directives to save any data files used for business to shared servers, a lot of other data ended up being saved to individual computer hard disk drives. When those computers failed, it was difficult to restore that data. There were instances where, as a result of this, business was negatively affected.

Given the need to solve these issues, and with the official end of support for the Windows XP operating system, the Systems department made a decision to revamp system environments using thin clients.

**Solution: A thin client environment using Parallels Remote Application Server**
To introduce the thin client system, Kawaguchi-Shinkin Bank compared various products and services against their business requirements. The result was a decision to purchase Parallels Remote Application Server, formerly known as 2X Remote Application Server.

Parallels Remote Application Server is a product that provides virtual desktops and applications to thin client devices using network-based servers. All of the computing resources, Windows environments, applications, and business data used by each user is managed by and saved on the servers. Each user then uses that material on inexpensive thin client devices that display only a relevant screen. Although there are other solutions offering thin client environments, Parallels Remote Application Server was ranked highly by the bank because of its strong affinity with the Windows environment that had been in use and because of the comparative ease with which the system could be brought online and managed. KDDI Corporation was responsible for installation, but the
Installation began on a trial basis for the Systems department and in parts of the main branch. Over the course of an approximately year-long trial, sufficient verification occurred with regard to whether there were any issues with the Parallels Remote Application Server environment, whether existing business could be carried out without issue, and whether multiple systems and applications could be launched without issue, among other things. Once it was confirmed that there were no issues, a roll-out to all branches and locations occurred.

In August of 2015, all of the bank’s general business computers were migrated to thin client systems using Parallels Remote Application Server.

Mr. Kokubu went on to say that with the roll-out after a year’s trial period, everything went, and continues to go, smoothly. There are no issues for server and network sizing. Users use their systems as they always have, enabling greater performance in the execution of their work. He also noted that there have been absolutely no claims.

**Adoption Result—success in greatly reducing system costs, as well as increased security**

As a result of the completed roll-out of the thin client environment across the entire organization, the risk of bank data leaks dropped to even lower levels. Unlike PCs, thin client devices have no hard drive disk, so no data can be saved on them. As a result, the security measures for the clients became much simpler.

An additional and important benefit was the reduction of the operational burden. With the Parallels Remote Application Server thin client environment, all applications and data are maintained and saved on servers. Should a device ever fail, business can resume immediately simply by replacing that thin client device. Prior to adoption, when a computer failed, it needed to be carefully boxed up and meticulously and explicitly tracked throughout the course of an important transport system. Once repairs and restoration occurred after arriving at the Systems department, the same amount of effort was needed to replace the computer to its original location. Due to the fact that now the application of security patches and application updates can occur at once on the servers, there is no longer any need to dispatch Systems department staff to on-site locations. Work that, three years ago, required a staff of six persons in the Systems department now only requires four. The environment has enabled sufficient support with fewer personnel.

The cost reductions that occurred as a result of changing to a thin client environment were described by the department’s manager, Mr. Kokubu, as enabling sufficient satisfaction for both initial and running expenses when compared to an environment where they needed to work while constantly swapping out computers. Of particular significance was the ability to cut back on the indirect costs involved in the running of the environment. These indirect costs include a variety of expenses, such as those incurred when department personnel need to perform support tasks, travel expenses to each location, and the cost of security measures that are now moot due to the transition to thin clients. When all are taken into consideration, the project succeeded in a massive cost reduction.

He indicated that the greatest benefit was a revolution in awareness for systems department personnel. He concluded by saying that the ability to greatly reduce operational burdens has formed the basis for creating and providing system environments and services, led by the systems department, that can better benefit their entire business.

Moving forward, the Systems department will continue to be able to reliably take on customer materials, with the Parallels Remote Application Server thin client environment serving as a foundation. They are also considering the use of various communication tools that would enable greater business efficiencies for all locations.

(Reporting assistance: KDDI Corporation)

**Summarizing Business Conditions**

Kawaguchi-Shinkin Bank formerly had approximately 400 Windows PCs for business use. Recent increases in cybersecurity risks prompted them to implement higher levels of security. Furthermore, the small number of systems department personnel had reached a limit in terms of the burden imposed by their support tasks. An infrastructure that enabled more efficient operations was needed.

**Summarizing the Advantages**

A thin client environment that eliminated the placement of data and applications on clients resulted in an environment where data leaks were even more difficult. What is more, the drastic decrease in support burden has enabled a team of only four systems department staff to perform all necessary operations.

**Summarizing the Solutions**

The bank considered introducing thin clients as a system environment that would be able to increase security levels and bring greater efficiency to operational management. A variety of products were compared against the content of their business. A decision was reached to implement Parallels Remote Application Server. This system was highly rated for the relative ease of roll-out and management, and for the high level of affinity with Windows environments.

Inquiries: