

## Kitanagoya City

Empowered by Innovation



Kitanagoya City has been focusing on enhancing its public service, responding rapidly and adequately to various issues that the city faces. To support its underlying policy of "Agile Administration", the city introduced NEC's **VirtualPCCenter**, thin client computing system. As a result, 440 workstations were migrated to thin client terminals, establishing strong local governance with enhanced security, as well as increased management productivity and efficiency.

# Migrating 440 PCs to a Thin Client Computing Solution for the Virtual PC Experience -Strengthened Post Merger Local Governance-

### PROFILE Kitanagoya City



West Building Address : 15 Nishinohoushimizuda  
Kitanagoya, Aichi Pref, Japan

East Building Address : 60 Kumanoshouosakaki,  
Kitanagoya, Aichi Pref, Japan

Land Area : 18.37 square kilometers

Population : 81,043 (Jan. 2009)

Overview : Kitanagoya city was formed by the merger of two towns, Shikatsu and Nishiharu.

A northern neighbor of Nagoya, the prefectural capital, the city continues to grow as a residential district. The city deeply respects its relationship with the citizens and implements unique projects like "Life Review" sessions with the elderly to prevent senility.

URL : <http://www.city.kitanagoya.lg.jp/en/>



Thin client implementation Project Team Members (from the front left) Mr. Ikuo Yamanaka, Mr. Masatoshi Ikeda, Mr. Yuta Nakahata (from the back left) Mr. Katsuo Nishiyori, Mr. Hirokazu Inoue, Mr. Yuichi Ikeda

### Reviewing Thin Client Options For the Agile Administration

Kitanagoya city was formed in March 2006 from the merger of two towns, Shikatsu and Nishiharu. Located just to the north of Nagoya City, the capital of Aichi Prefecture, Kitanagoya continues to grow as a residential district. In addition to easy access to the capital, the city is renowned for its unprecedented municipal projects, such as "Life Review" to keep the minds of elderly citizens active and sharp, partnership programs with Nagoya University of Arts, and many more.

According to Masatoshi Ikeda, Deputy Director of Planning, Administrative management department, "Agile and responsive government is the key ingredient to success in our diverse projects." Enhanced effectiveness through Information Technology was a critical mission for the city as it designed local e-government systems and strove for efficiency in managing the city's affairs. Among the challenges the city faced was a problem with client PCs - most of the existing PCs were obsolete and the recent municipal merger had raised numerous issues.

"The municipal merger created issues to be addressed quickly. The city handles a great deal of valuable data including sensitive personal information. Satellite offices located miles apart made data management difficult. Furthermore, a task like installing security patches became overwhelming due

to the remote locations of workstations with multi-vendor operating systems and applications. Operations management was in a catastrophic situation." Ikuo Yamanaka, Information Technology Division leader, Administrative management department, recalled. "Most of the preexisting PCs were 5 years old or more. Those out-of-date PCs often times slowed down and interfered with completing tasks in a timely manner when they were used for various administration services."

Kitanagoya City began deliberating on a course of action to solve all of these issues. By attending multiple seminars, they educated themselves to better assess the situation and understand potential replacements for their current IT infrastructure. After inquiry to multiple vendors for its new system proposal in March 2008, Kitanagoya City has selected NEC as the supplier of the system due to rich experience in thin client solution offering deep understanding of customer issues.

### A Key Success Factor of NEC's Thin Client Computing - Continued Use of Existing Applications -

Figure 1 shows the system implementation plan. The city decided to go with **VirtualPCCenter**, and purchased 440 of NEC's **US100** thin client terminals to roll out to city personnel. The new infrastructure enabled the city to process and store the data from all existing workstations on the **SIGMABLADE** servers and **NEC Storage D3-10**, located in the city's server room.

Why a thin client solution? Why not a standard client PC solution? According to

Mr. Yamanaka, "There were two big reasons. First, we believed the thin client system was the best solution for enhancing the local governance while insuring proper security measures and simultaneously reducing management and administration tasks. Second, with no hard drive, fan or other moving parts, thin client terminals are less prone to failures than standard computers. Thin client systems ensure availability and provide a longer life span than PCs."

Furthermore, **VirtualPCCenter** enabled on-going use of existing application software. Kitanagoya city's IT infrastructure manages all of the city's finances, with GIS, applications developed with Microsoft Access, and so on. Competitors' solutions did not provide full-scale migration of the PC environment or they would have required configuration of a brand-new network. "The VPCC solution presented by NEC featured full-scale migration of the existing PC environment. Virtualizing the client environment onto a server enhanced our ability to use existing applications and the current network." said Yuichi Ikeda, Information Technology Division.



Thin client terminal is placed behind a display monitor and provides better system performance and increased productivity.

The new system was developed and introduced within a one month period. From July to August 2008, all required steps were performed for the system migration. This included preliminary examinations and complete development of the software configuration template which was based on the old system. By September of that year, the new system was in full operation. The migration was successfully completed, with the necessary application running on the virtual PC environment without any problems, including the use of printer.

### Easier Management Increased Productivity

After migrating 440 PCs to the NEC thin client solution, the city's management and administration tasks were dramatically reduced. The thin client terminals are located in local government buildings as well as child daycare centers. Even with the terminals distributed across the city, all maintenance and support tasks are performed through central servers, including application and security updates. Less travel is required for support inquiries. "Operation management tasks are now reduced by half, or maybe less." said Mr. Yamanaka.

Security robustness has also been enhanced. In the past, the city implemented various security measures including using wire locks to hold down the workstations to prevent theft. However, doing so did not ensure 100% security. Unlike the previous workstations, thin client terminals store data on the central servers. Since the system does not store data locally, it reduces the chance of data loss through unauthorized access or terminal theft.

Improved productivity is apparent as well. "It only takes a few seconds for a thin client terminal to start up. Local government buildings are located far apart after the municipal merger. However, we can access our PC environment and get to our work regardless of the location." said Yuta Nakahata, Assistant Section Chief, Information Technology Division.

Kitanagoya City, a leader in new municipal projects, is now headed to becoming a pioneer in "e-government", the nationwide approach to digital municipalities. With countless benefits of NEC's thin client computing system, **VirtualPCCenter**, on their side, Kitanagoya successfully enhanced its public services. **VirtualPCCenter** will certainly play a significant role in carrying out the city's "Agile Administration" policy as well as its journey to "e-governance".

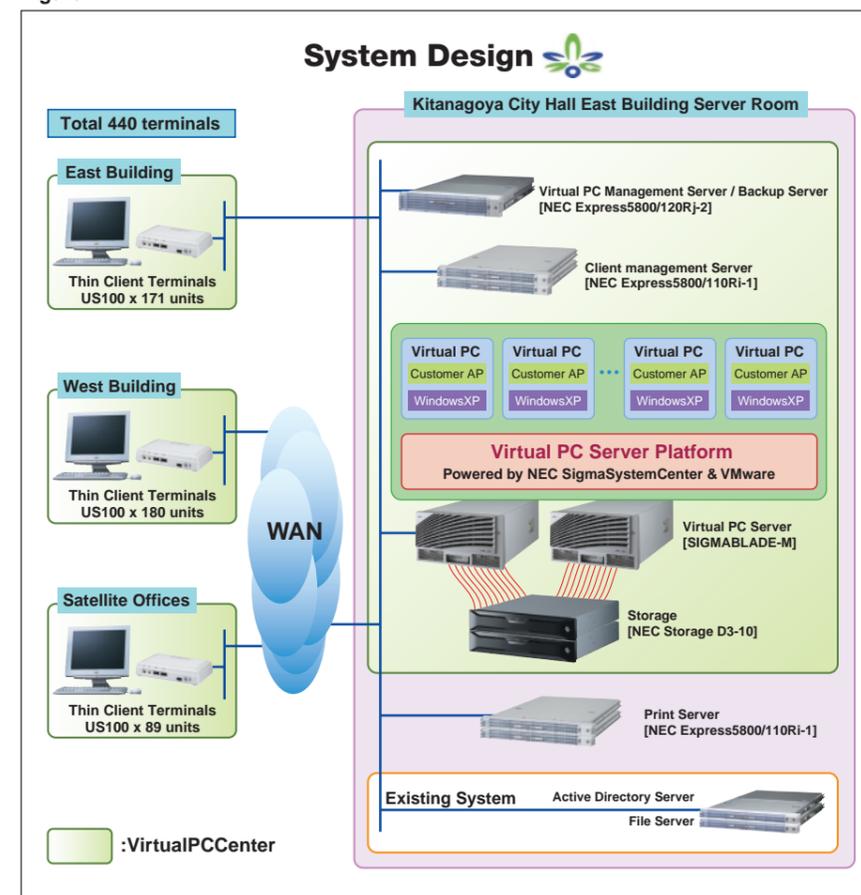


Empowered by Innovation



NEC Corporation  
7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan

Figure 1



**VirtualPCCenter**, thin client computing system centrally manages, processes and stores the client environment on NEC's **SIGMABLADE** servers and **NEC Storage D3-10** to minimize the data loss.