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, the 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 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.

Kitanagoya City, a leader in new municipal organizations, 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 thin client solution, 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 -**

- **VirtualPCCenter**, thin client computing system centrally manages, processes and stores the client environment on NEC’s servers and provides better system performance and increased productivity.

- **Total 440 terminals**
  - **US100 x 180 units**
  - **US100 x 89 units**
  - **US100 x 171 units**

- **Customer AP**
  - **Powered by NEC SigmaSystemCenter & VMware**
  - **Powered by NEC Virtual PC Server Platform**
  - **Powered by NEC Virtual PC Server Platform**
  - **Powered by NEC Virtual PC Server Platform**

- **Existing System**
  - **Active Directory Server**
  - **File Server**
  - **Storage**

**PROFILE**

**Kitanagoya City**

- **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 DS-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, the client terminals are less prone to failures than standard computers. Thin client systems ensure availability and provide a longer life span than PCs.”**

**Easier Management – Increased Productivity**

After migrating 440 PCs to the NEC thin client solution, the city’s management and administration tasks were dramatically reduced. 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 so after the municipal merger, 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.”

According to Masatoshi Ikeda, Deputy Director of Planning and Administrative management department, “Agile and responsible 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. Operation management tasks are now reduced by half, or maybe less.” said Mr. Yamanaka.

**A Key Success Factor of NEC’s Thin Client Computing - Continued Use of Existing Applications**

"The municipal merger created issues to be addressed quickly. The city handled 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.” Kuo Yamamoto, 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 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. (http://www.city.kitanagoya.lg.jp)

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