

Remote PC Array Case Study

# Universal Computer Co., Ltd.



Using Remote PC Array to Resolve Remote Access  
and RPA Issues

### Exploring solutions for resolving the issues of remote access environments

Since its establishment in 1973, Universal Computer Corporation ("Universal Computer") has been providing comprehensive support for the ICT (Information, Communication, and Technology) strategies of various customers as an independent, comprehensive system integrator, through the company's four technological pillars (namely, control systems, general-purpose systems, open systems, and web systems) and a corporate structure specializing in areas and industries including infrastructure, embedded and in-vehicle software, and finance. Recently, we have also been focusing on providing RPA (Robotic Process Automation) tools and telework solutions to help our customers realize work styles that take into account changes in the social environment. When Universal Computer first launched a division to handle solutions in the infrastructure field, it introduced VMware Horizon, a Virtual Desktop Infrastructure (VD) solution, to build a remote access environment for system engineers. This has allowed remote access from outside the company in secure environments, thereby contributing to improved business efficiency. Owing to such increased convenience, users of VMware Horizon are gradually increasing, from the 10 users when it was first launched, to more than 50 users today. On the other hand, since this has also resulted in the sharing of VMware Horizon's resource pool by all users, the performance of the entire system sometimes slows down when processing-intensive tasks overlap, affecting the work of other users and necessitating increased resources. This is where we turned our attention to "Remote PC Array".



Infrastructure Solution Division  
Solution Service Department,  
General Manager,  
**Mutsuya Fukui**

### Introduced "Remote PC Array 100" after evaluating its many advantages

"Remote PC Array" provides multiple physical PC cartridges, CPUs, memory, storage (SSDs), network switches, management software, and other components necessary for a virtual desktop infrastructure in a 1U chassis. Mutsuya Fukui, General Manager of the Solution Service Department, Infrastructure Solutions Division, talks about introducing "Remote PC Array" to resolve issues in remote access environments. With Remote PC Array, one user can occupy one resource (PC cartridge). This means there is no load interference between users, so



Infrastructure Solution Division  
Solution Service Department  
General Manager  
Mutsuya Fukui (left)

West Japan Business Division  
Vice President  
Shigeo Wakayama (right)



### Company Profile

**Company name**  
Universal Computer Co., Ltd.

**Established:**  
January 1974

**Address of head office:**

- Osaka head office  
TWIN21 MID Tower 26F, 2-1-61 Shiromi, Chuo-ku, Osaka City, Osaka
- Tokyo head office  
Yurakucho Denki Building North Tower 11F, 1-7-1 Yurakucho, Chiyoda-ku, Tokyo

**Business activities:**  
Control systems, general-purpose systems, open systems, and web systems)

Independent, comprehensive system integrator providing a wide range of services, from consulting to system development, post-implementation operation and management, system maintenance and other support, and outsourcing, based on four technological pillars: control systems, general-purpose systems, open systems, and web systems.  
<https://www.uni-com.com/>

obviously we thought that this would resolve the problem of poor performance of the entire system that was occurring with VMware Horizon. We also decided to install the system in order to use our current terminal (Windows 10) as a client.

The "Remote PC Array 100" introduced by Universal Computer is a solution for virtual desktops with 20 physical PC cartridges in a single enclosure.

Fukui also talks about the merits of "Remote PC Array" compared to conventional VDI solutions.

"Typical VDI products use a hypervisor, which requires systems to be designed and built by engineers with specialized skills, as well as costs and time according to the purpose and conditions. After implementation, systems must be redesigned to cope with unexpected performance degradation and system expansion. In contrast, the "Remote PC Array" system consolidates multiple PC cartridges into a single chassis, eliminating the need for the hypervisor. It can be scaled in a single chassis with no downtime to accommodate additional users, reducing the cost and time required for implementation significantly.

### RPA operations can now be used at remote locations, facilitating collaboration among offices

In this way, Universal Computer has resolved the issue of poor performance in remote access environments by introducing Remote PC Array. The company is also leveraging the Remote PC Array as the operating environment for Robotic Process Automation (RPA) tools.

Universal Computer has introduced UiPath, an RPA tool that has been widely used in Japan and globally, to streamline and automate operations such as accounting and sales clerical work, this has also been accompanied by some challenges.

Tatsuo Wakayama, Deputy General Manager of the West Japan Business Division, talks about how RPA tools can be leveraged for "Remote PC Array".

"As we proceeded with the use of RPA tools, one of the issues we faced was that the person in charge could not use the PC for other purposes while processing with UiPath. So, by preparing a "Remote PC Array" exclusively for "UiPath", we are now able to use our internal PCs more efficiently. Furthermore, mounting RPA tools on the Remote PC Array enables them to be used from Tokyo, Osaka, and other offices nationwide through remote access environments, facilitating collaboration among offices and improving business efficiency significantly".

Currently, of the 20 PC cartridges in "Remote PC Array 100", Universal Computer uses 15 for the remote access environment and the remaining 5 PC cartridges for the RPA tool environment. Moving forward, we plan to augment our "Remote PC Array" to further promote efficiency through RPA.

### Designed based on the results of implementing it at our company, the "Easy Telework Package" we offer allows customers to choose a remote work style suited to their work environment.

Resolving the issues faced with remote access environments and RPA tools, Universal Computer is also working on providing solutions using "Remote PC Array" for customers facing similar problems.

The "Easy Telework Package" is a solution bundle allowing access to your



West Japan Business Division,  
Deputy General Manager,  
**Tatsuo Wakayama**

company's desktop environment from any browser, from any device, from anywhere. This system enables the easy construction of remote work and remote access environments, which have been difficult to introduce in the past. Its features are:

- OS environment for remote work can be selected according to the scene of use.
- Accessible from any device with an HTML5 compatible browser
- Remote work as a security measure
- Solution packages for getting started with remote work easily

Two versions available; Hardware proprietary type tailored to the customer's business (Remote PC Array version) and the hardware sharing type (customized version) for customers to choose the one that best suits their environment. (Fukui)

### System conceptual diagram

