

## LG.PHILIPS LCD

## JP1 Case Study

### **Centralized management of 3,000 PCs scattered over five different locations with JP1 Problem solving is drastically accelerated, and TCO is reduced by 30%.**

LG.Philips LCD was established in 1999 as a joint venture between South Korea's LG Electronics and Philips, and now has the top share of the LCD (liquid crystal) monitor market for computers. Here JP1 / SD (Software Distribution) asset management is used in the desktop management of approximately 3,000 PCs scattered over five different locations. Centralization of PC management is achieved by utilizing PC hardware and software asset management, software distribution, and remote control functions. This drastically accelerates a problem solving, and strongly supports 24-hour, non-stop production activities. They have also succeeded in greatly reducing TCO by approximately 30%.

#### **USER PROFILE**

**Company name:** LG.PHILIPS LCD  
**Established:** 1999  
**Capital:** 1.4 trillion won  
**Number of Employees:** Approximately 4,000  
**General Information:** Established as the LCD section of LG Electronics in July 1999 with capital investment from by Philips. An international company specializing in LCDs with headquarters in Seoul, R&D center in Anyang, three plants in Gumi, and four oversea's branch offices. Has the world's top share of the LCD monitor market for computers. It plans to enter the field of liquid crystal TVs, etc. in the future.

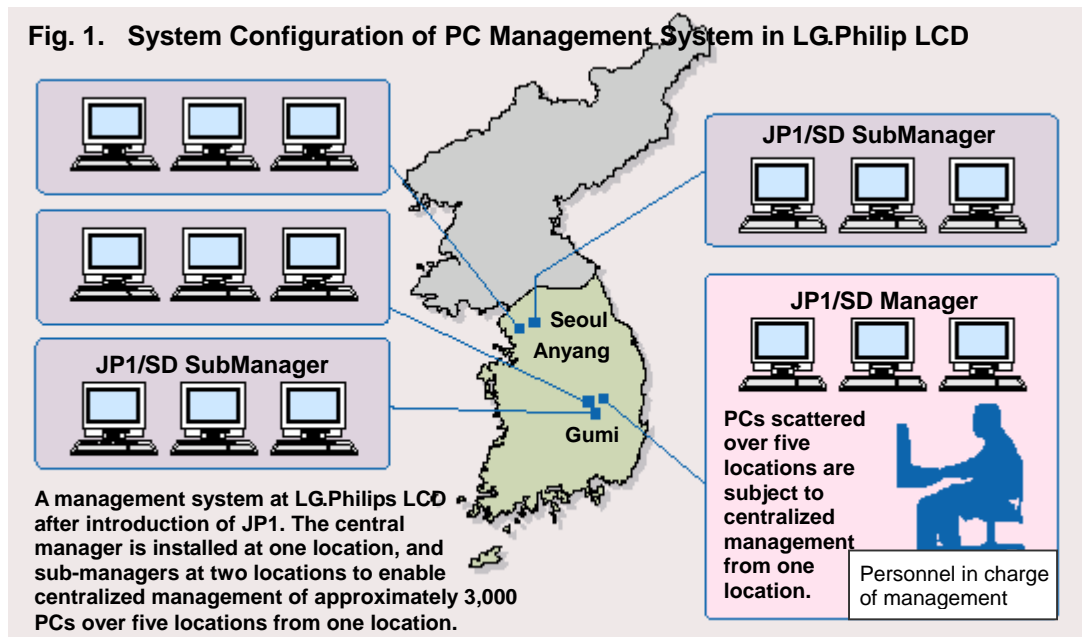
#### **Production site with higher IT dependency PC management now dominates production efficiency.**

The degree of IT dependency in our daily business is increasing at an unprecedented speed. No longer does business stop when PCs develop problems. IT utilization increases efficiency in business processes, and makes information sharing and communication inside and outside the company smooth. On the other hand, however, many companies are need help in managing the enormous number of PCs.

LG.Philip LCD introduced today was one of those companies that had been suffering from a lack of desktop management with respect to PCs. It is an international company specializing in LCDs, which was established with capital investment by Philips in the LCD section of LG Electronics in 1999, and it prides itself on having the world's top share of the LCD monitor market for computers. Its business sites include headquarters in Seoul, R&D center in Anyang, and three plants in South Korea alone. As many as 3,000 PCs are scattered over these five locations.

"How do we operate our production site 24 hours a day, 365 days a year nonstop? This is our most important issue," says Mr. Joon-Tai Seo, who supervises the overall IT team in LG.Philip LCD. "To do so, we need to minimize PCs problems at each plant since production activities are largely dependent on IT, he continued."

To minimize PC problems, a system to minutely ascertain the status of each PC and to take measures promptly when problems occur is indispensable. Furthermore, prompt distribution of the latest virus definition files and patches is also necessary in order to prevent damage by computer viruses. That is, functions such as asset management to integrate hardware/software information, helpdesk support including remote control, and distribution management of files are required.



LG.Philips LCD started examining the possibility of introducing desktop management products at the beginning of 2001 in order to realize these functions. It decided to adopt JP1/SD(Software Distribution) in March 2001.

### **Preliminary benchmarking implemented JP1 with the highest score was adopted**

In selecting the desktop management product, LG.Philips LCD picked several major solutions other than JP1 from several manufacturers. They implemented a benchmark test while actually using each of them in a pilot system. Each solution was used for a period of one week, and each function and performance was assessed using a checklist developed beforehand. The checklist consisted of five main categories; a software asset management function, a hardware asset management function, a remote control function, a software distribution function, and a group of other check items.

“The reason we adopted JP1/SD in the end was because it gained the highest total score in this benchmarking,” says Mr. Young-Jo Lee, who is the Part Leader in charge of system infrastructure on the IT team of LG.Philips LCD. According to him, it not only had the highest total score, but also had a higher score compared with other products in nearly every check item.

On the other hand, Mr. Byeong-Ho Yang, who is in charge of C/S system management under Mr.Lee, says, “Other products had functions equivalent to JP1 if we only focused on the specs. However, when we actually used them, the performance and success rate of processes varied dramatically. Speed and stability are especially essential for remote control. So we decided that JP1 was the most practical, with high introduction effectiveness.”

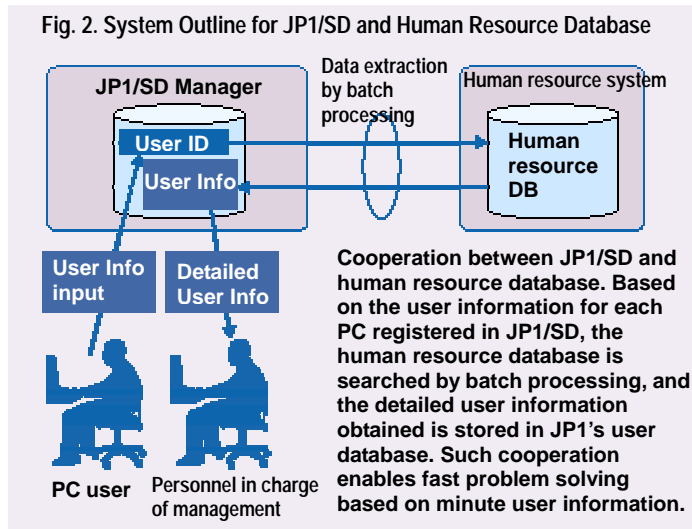
Although LG.Philips LCD outsources the actual operation management to an external IT company, Mr. Sunmok Paku of Atec System in charge of this task says, “JP1 is easy to use. The remote control is especially useful. In addition to its speed and stability, the equipped functions are unique. For example, it is able to obtain remote control operation screens in moving form. By posting the obtained movie as a procedure on the Intranet, the possibility for the end user to solve the problem by consulting the procedure increases.”

language was also a big point besides functions and performance. Other products used for comparison only provided English versions, and did not support Korean. However, JP1 had been localized by a Korean engineer, and a Korean version was available for this benchmark test.

**Expansion companywide in only one week**

**Cooperation with human resource DB was also achieved**

The system configuration LG.Philips LCD has introduced is shown in Figure 1. The central manager is installed in one of the three plants in Gumi, and sub-managers are installed in another plant and at the headquarters in Seoul. On each PC, a JP1 /SD client is installed. Operations such as asset management, software distribution and remote control can be executed at the location of the central manager.



In addition to simple JP1/SD introduction, cooperation with the human resource database has also been realized (Fig. 2). This function makes inquiries to the human resource database based on the user information input by the client and with the employee ID as the key, and stores the results in the JP1/SD database. This enables the system manager to ascertain not only the user information on the system but also information on what kind of work that user does and in which organization. This is very effective in making helpdesk businesses more efficient. Cooperation with the human resource database in this case is made so that it is carried out by batch processing using an originally development C++ program.

When actual mounting the remote control function, sufficient consideration was given to security. If general users operate PCs of other users or directly control the server, problems such as leaking of classified information and system shut down will arise. LG.Philips LCD has specified the settings so that operation is not possible unless the helpdesk sends a remote control request screen and the user for the PC to be controlled presses the "permit button" when remote control is performed. In operations designed to solve server failures, the user ID and password of the manager are requested.

The system was introduced in May 2001, and the time needed to expand it companywide was only one week.

**About 30% TCO reduction achieved through centralization**

**Time for problem solving was also cut by half**

With JP1/SD introduction, efficiency in desktop management was enhanced dramatically.

While some 100 questions arrive at LG.Philips LCD's helpdesk daily, the manager needed to actually visit the user to provide on-site support before. They had stationed 2 - 3 management personnel for this task at each location. Since JP1/SD was introduced, approximately 60% of all software-related problems can be solved by remote control, and stationing one person at each location is enough to cope with all the problems. They say that this led to about a 30% reduction in TCO. Speed of problem solving is also being increased. The standard time till solutions were found was 48 hours, but now it had been reduced to 24 hours.

The task of asset management was also speeded up. While they manually confirmed the inventory four times a year before introduction, now information can be collected automatically. Thorough software management also became easy, and now there is no illegal copying (Mr. Seo).

By promoting efficiency in IT operations with the introduction of JP1/SD, non-stop business processes are strongly supported, thus greatly improving the company's ability to compete. It is, however, also playing an important role in promoting a good company image by preventing illegal copying.

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