

## NTT COMWARE CORPORATION

*JP1 Case Study*

### Accounting system connects complex fixed-asset management and cost calculation by linking "PeopleSoft" and JP1

In the software industry, managing fixed assets is extremely complicated. It is necessary to keep track of even individual components inside computers and reflect them in cost control.

NTT COMWARE CORPORATION, (NTT COMWARE), which was founded in 1997, has been linking fixed-asset management and cost calculation by creating proprietary systems based on an ERP core and establishing advanced connects between the systems. A total of 14 servers is managed using Hitachi's Job Management Partner 1 (JP1) integrated systems management software. For month-end accounting processes, a massive job schedule spanning as many as four days is monitored and controlled automatically and reliably.

#### USER PROFILE

**Company name:** NTT COMWARE CORPORATION ("NTT COMWARE")  
**Headquarters:** Shinagawa TWINS Annex Building, 1-9-1 Konan, Minato-ku, Tokyo  
**Founded:** September 1, 1997  
**Capital:** 20 billion yen  
**Number of employees:** 9,100 (as of March 31, 1998)  
**Business operations:** One of the largest information communication service companies in Japan. Using the know-how accumulated through building and maintaining NTT's communication networks and information systems, the company provides all types of user corporations with total support, including consulting, network integration, business-process outsourcing, system outsourcing, system integration, and maintenance and operation.

#### Stage-wise development of new company's accounting system

NTT COMWARE was founded to provide the software technologies that NTT had developed and used to many other corporations, with the goal of leading the way into the network-computing era in Japan.

The company's basis was an organization that had been performing everything from development to maintenance for software and job processing and support systems at NTT. Therefore, as an independent company, NTT COMWARE does not merely subcontract software development, but provides total support for all system cycles, including consulting, development, operation, and maintenance, to NTT as well as other corporations. The company also worked on the software revisions associated with the reorganization of NTT.

NTT COMWARE develops and builds accounting-related systems.

After the company was established in 1997, it began running expense, procurement, and contract management job systems, which revolved around cost calculation, as in its Phase I Accounting System. Then, in 1999, the company completed settlement processing and fixed-asset management systems as Phase II.

In Phase I, functions unique to NTT COMWARE were designed in. In contrast, in Phase II, the company worked on developing common accounting functions that any company could use.

#### Sophisticated system linkage essential for complex cost calculations

In Phase II, an accounting system for handling settlement-processing and accounts payable payment jobs was built using the PeopleSoft integrated job package as its core, and was linked to a proprietary system developed for handling fixed-asset management and asset-management jobs.

NTT COMWARE 's accounting framework is extremely complex. All information about expenses, procurement, and communication fee management jobs is collected daily, and cost calculation is performed. Functions for handling jobs up to this point were completed in Phase I.

In the Phase II system, fixed-asset management was linked to cost calculation.

"For example, we must calculate the depreciation expense for hardware, such as computers for debugging, used for software development, and include it in the development cost for the corresponding software. Consequently, the systems for handling fixed-asset management and cost calculation return data to each other, back and forth many times, and repeat calculations," says Mr. Mori.

Fixed assets are not simply managed in rough units of "computers." Instead, components that can be diverted to other uses are managed in two or even three stages. Also, the company's fixed assets amount to approximately 500 billion yen compared to capital of 20 billion yen. This was NTT COMWARE 's first attempt to build an infrastructure for linking fixed-asset management to cost calculation in an open system consisting of multiple servers.

Successful development of the Phase II systems required software for controlling the complex exchanges among these systems. Additionally, reliable linkage with the Phase I systems also had to be completed.

NTT COMWARE, the largest information communication service company in Japan, selected Hitachi's Job Management Partner 1 (JP1) integrated systems management software.

### **JP1 ensures stable operation in UNIX and Windows environments**

"Selecting JP1 was almost natural," says Mr. Matsui.

That was because the company's Technology Development Division had already compared various products and selected JP1 as one of NTT COMWARE 's recommended software products, based on its market share and performance record.

JP1 had already been adopted in Phase I, and the fact that it had linked 12 UNIX servers to a system consisting of two Windows NT servers in a stable, problem-free manner also helped.

In Phase II, NTT COMWARE developed a proprietary facility for linking JP1 to PeopleSoft, and integrated operation with the existing systems developed in Phase I. In the future, the company plans to commercialize this linkage program and make it available to a wide range of customers.

### **Automatic job scheduling spanning four days**

Development in Phase II, including the facility for linking JP1 to PeopleSoft, proceeded smoothly, and operation began in April 1999 as planned.

The month-end settlement consists of a set of complex system linkage processes that span up to four days. UNIX servers, now increased by one to a total of 14, must produce accurate settlement data while exchanging data many times.

Even with such a long time span this massive job is controlled reliably. The entire job, from completing the monthly settlement on the fourth day after monthly processing begins, to replicating the data in the server for the information-utilization business, is run and managed completely automatically.

"The job net that must specify the date and time for starting the system, the time for outputting reports, and the day for depositing travel expenses has become too complex to manage manually. The fact that we can just leave scheduling, including that of jobs spanning several days, to JP1, leaves us with great peace of mind," says Mr. Mori.

Additionally, faster settlement processing now enables the individual divisions to use the accounting information more strategically.

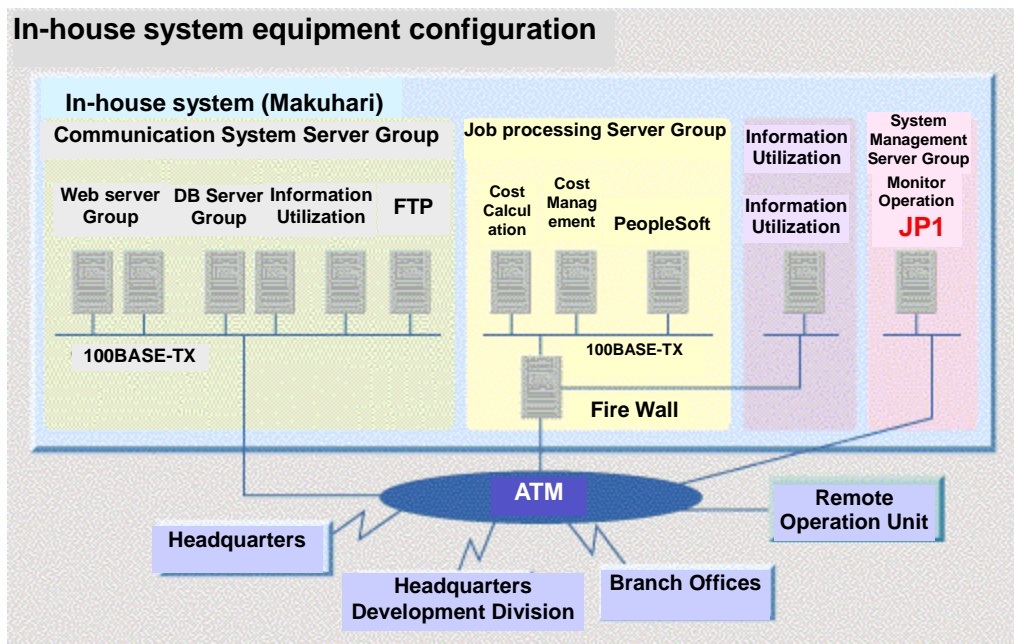
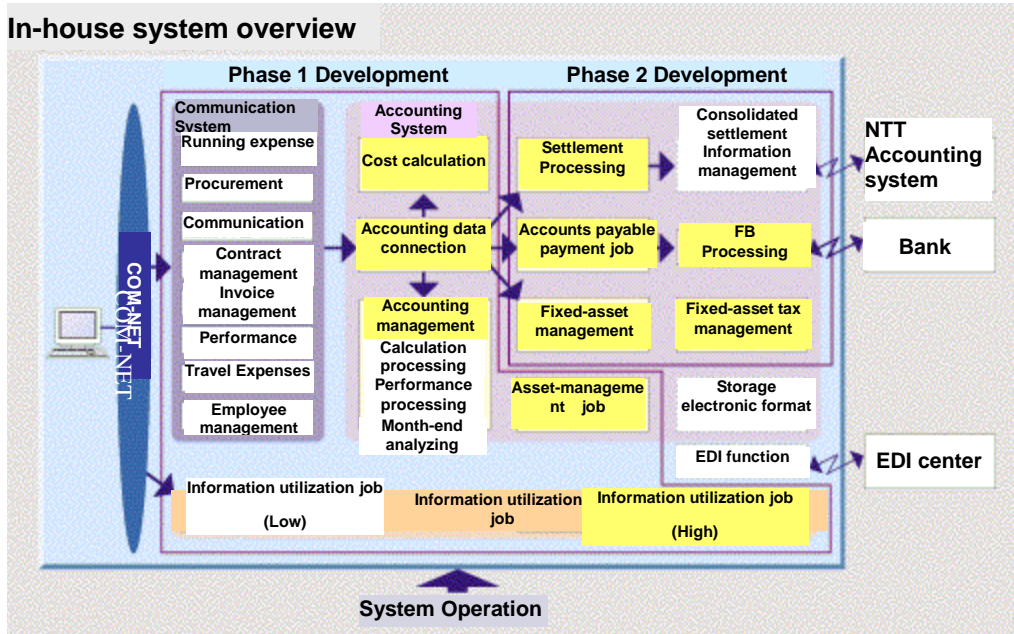
"JP1 enables us to be more agile. For example, we can check actual expenses against the project budget along the way and take quick action accordingly," stresses Mr. Matsui.

After verifying stable operation of the systems developed in Phase II, NTT COMWARE plans to add other functions that use JP1's facilities beginning about September 1999. Because JP1 can automatically reassign jobs by interpreting their return values, a recovery process will be designed in to be automatically executed should

an error occur. The company will also continue to further enhance the system's usefulness by using JP1's facilities, for example, alerting the system administrator through a mobile phone, in the event of a serious error.

More functions, such as EDI and consolidated settlement, are being added to NTT COMWARE 's accounting system. One of the reasons for including consolidated settlement is to save bank-transfer commissions by canceling out revenues and expenses within the NTT group. Implementing this will require even more complicated linkage among servers.

JP1 provides total computerization of this kind of advanced system linkage, and has succeeded in simultaneously satisfying two normally opposing requirements—labor reduction in system management and system-usability enhancement.



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