Hitachi JP1/Automatic Job Management System and Hitachi JP1/Software Distribution bring high levels of automation and IT and business efficiencies to Hitachi operations in Asia South.

Established in 1989, Hitachi Asia Ltd in Singapore is an operations hub for seven countries in Asia South as well as an international procurement center for Hitachi’s manufacturing plants worldwide. The IT needs of the ten offices under the HAS umbrella are managed and met by an Information Technology Centre which uses Hitachi JP1/AJS (Automatic Job Management System) and Hitachi JP1/SD (Software Distribution) to ensure that the business hums along efficiently and system and application software stays current and consistent.

One of four Hitachi regional headquarters across the world, Hitachi Asia Ltd. (HAS) in Singapore co-ordinates the marketing and sales activities for industrial, electrical and electronic products, and information systems solutions for ten offices located in seven countries in Asia South. It also procures parts for Hitachi’s manufacturing plants worldwide.

HAS also serves as the IT hub for Hitachi’s operations in the business. An Information Technology Center (ITC) provides operational, network and application support, as well as recommends IT policies, processes and best practices to the ten business entities in the region. Together, these help the business entities operate efficiently on an individual basis, with one another on a regional level, and with their sister companies outside the region.

The ITC and the local entities use a client/server model, with computing power located where it is needed. Infrastructure software is pretty much standardized, with variation found only in those applications which have to be tweaked in order to meet local needs for accounting, statutory reporting, and so on. The client environment, too, has little variety.

The efficiency and elegance of the IT infrastructure – and the businesses it supports – is a far cry from before 1989, then, each local entity made independent, un-coordinated decisions where IT was concerned. The establishment of HAS as a regional hub that year brought order and greater efficiency. Even greater enhancements were achieved from 1999, thanks to the use of Hitachi JP1/AJS (Automatic Job Management System) and Hitachi JP1/SD (Software Distribution).

Mainframe to Client/Server

HAS started its Y2K transition in 1998 and migrated from its then mainframe environment to a client/server one featuring UNIX servers and Windows clients. The architectural change necessitated changes in the way IT operations were managed. Tools, too, needed changing and the highly proprietary mainframe job scheduler was an obvious first candidate.

“Their mainframe environment, Hitachi JP1/AJS, was used for Hitachi’s manufacturing plants worldwide. The IT needs of the ten offices under the HAS umbrella are managed and met by an Information Technology Centre which uses Hitachi JP1/AJS and Hitachi JP1/SD to ensure that the business hums along efficiently and system and application software stays current and consistent.”

For the new client/server environment, HAS evaluated three UNIX-based schedulers and used one of them – AutoSys from Computer Associates – on a trial basis. Six months into the trial, corporate headquarters in Japan suggested it take a look at Version 5 of Hitachi JP1, which had recently been launched with even more comprehensive job management features and as a modular suite of systems management solutions.

“Hitachi JP1/AJS, with its support of both UNIX and Windows, proved to be a perfect match to our new organizational model and client/server IT infrastructure for the region. The solution’s ease of use and the short learning curve it engendered were also very compelling. We had only a few more months to transit to Y2K and were confident that Hitachi JP1/AJS could help ease the entry into the new millennium,” said Zainuddin Anang, Systems Manager, ITC.

With Hitachi JP1/AJS in place, job management at HAS and the ten business entities in Asia South is vastly different – and much simpler and more efficient – from the mainframe days. Now, instead of having to schedule jobs to run sequentially, the ITC can distribute them to run in parallel on multiple servers and clients, depending on the job type, load, and other parameters. And unlike previously, when a member of the Network and Applications teams had to be roped in an occasion to help their Operations colleagues, day-to-day job-related activities are now managed by just one Operations Team member.

High Job Manageability

“Where Hitachi JP1/AJS really shines is in the high level of manageability of jobs. Take job creation as an example. In the mainframe environment, job creation had to be performed using processes and protocols from which no deviation is tolerated. With Hitachi JP1/AJS, we typically take just 30 minutes to create a job and take it to production; with a mainframe, the same job would have taken a day to create alone,” said Mr. Zainuddin.

Coming from a mainframe legacy, with its text-only green screens, ITC also found the intuitive graphical user interface in Hitachi JP1/AJS a welcome change:
“Where Hitachi JP1/AJS really shines is in the high level of manageability of jobs.”

“WOA allows us to manage Hitachi JP1/AJS from anywhere where there’s access to the Internet. The search function is especially useful.”

Case Study

Hitachi Asia Ltd

Established in 1989, Hitachi Asia Ltd. was established in 1989 as a regional hub for Hitachi operations in Asia South. It also functions as an international procurement center for the conglomerate.

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Need

- Increase job management efficiency
- Meet reporting needs of country offices
- Improve software distribution and version consistency
- Reduce report-to-resolve cycle time for end-user issues
- Lower administrative burden on regional and local IT teams

Solution

- Automated job management using JP1/Automatic Job Management System
- Centralized and localized distribution of software using JP1/Software Distribution

Benefits

- Improved job creation, scheduling and status monitoring
- Automation of job management tasks
- Ability to execute jobs outside office hours
- Remote Web-based job management
- Speedy job searches
- Orderly distribution of software and patches
- Minimal disruption of end-user operations
- More productive IT and end-user staff

Jobs are linked and ordered flowchart-style, running jobs are visually monitored using color codes, and monitoring can be done on a per-job or per-server basis. Alerts to job hitches are sent as text messages to the cellular phones of the relevant ITC staff members, allowing for management by exception.

The high level of automation means that routine jobs – such as collecting each day’s transaction data, creating daily reports, running end-of-month closing and generating reports – can be run automatically. Using Hitachi JP1/AJS, the ITC runs about 700 jobs, of which up to 300 are run on a daily basis. Many of the jobs run on the fly; heavier jobs are scheduled to execute early in the morning, at lunchtime and after working hours. Archival jobs are run on weekends.

The majority of the jobs managed using Hitachi JP1/AJS are for customer-facing applications. With the solution in place, the local business entities are now able to report their operations in a timely manner to HAS and, in turn, to the head office. The freshness of the data that goes into the reports also means that they are more accurate. Together, this enhanced accuracy and faster processing of tasks that impact customers has resulted in an improved overall capability to meet their needs.

Web Operation Assistant

Ease of use and job manageability were further enhanced in 2006, when HAS implemented the Web Operation Assistant (WOA) module of Hitachi JP1/AJS.

“WOA allows us to manage Hitachi JP1/AJS from anywhere where there’s access to the Internet. The search function is especially useful.”

The search function in WOA does away with all this drilling-down. Now, any job can be located using its name or a character string within its name, with a search taking less than a minute, representing at least an 80% saving time-wise.

The ease with which the operation and use of Hitachi JP1/AJS can be learned has also resulted in less role compartmentalization. Another result: a flat headcount in the Operations Team since the mainframe days, although both IT needs and the business have grown in variety and size.

Software Distribution

Job management isn’t the only function where HAS has seen significant improvements from the use of Hitachi JP1. Software distribution, too, is now more efficient. Implemented in 2000, Hitachi JP1/SD is used to ensure that system software and applications used in the various countries and across the region are up-to-date and consistent.

Before HAS was established, software patches were done on an individual country basis by the local IT teams. This resulted in a situation where reformatting was sometimes necessary when information was shared with other Hitachi entities. The use of Hitachi JP1/SD has put an end to this. Now, patches and new applications from software vendors or Hitachi’s own applications teams are distributed by HAS to the local entities, which then distribute them to end-users in-country. Distribution is usually scheduled for the start of the workday and at lunchtime so as not to disturb end-user operations.

Working Together

“Together, Hitachi JP1/AJS and Hitachi JP1/SD have enabled each of the business entities in Asia South to function more efficiently and effectively. At the same time, the solutions allow them to work together as a larger synchronized enterprise that operates across the entire region. In a way, that reflects the Hitachi JP1 philosophy where each solution stands on its own and yet integrates seamlessly with its sister solutions and brings out their potential when used together with them,” said Mr. Zainuddin.