A world leader in the oil and gas industry, SMOE Pte. Ltd. uses Hitachi JP1/Asset Information Manager and Hitachi JP1/Software Distribution to manage desktop assets in both their onshore and offshore projects. Among the benefits that it has reaped are: Greatly improved end-user support, better oversight of client operations, software consistency, sturdier compliance and security posture, and enhanced IT team efficiency and productivity.

Established since 1973, the Singapore company provides to oil majors EPCIC (Engineering, Procurement, Construction, Installation and Commissioning) services for offshore fixed facilities and modularisation and integration for floating facilities and onshore plants. The company is a subsidiary of Sembcorp Marine, a leading global marine and offshore engineering group. Its well equipped facility is located on the north eastern shore of Singapore and its wholly owned subsidiary yard is located on the Indonesian island of Batam, a forty-five-minute ferry ride from Singapore.

On the IT front, SMOE has at its disposal Windows and Unix-based servers running ERP, office automation, EDM and engineering software, and 500 PCs shared by 800 users at the desktop level. While they each have more or less the same application software, these PCs use various Windows operating systems and processor types, a result of their having been procured over the years. This spread is also seen at the physical level: Of the 500 PCs, a hundred are located in a single building housing the corporate offices; the other 400 are distributed across smaller facilities in the fabrication yard.

The responsibility for keeping the IT environment humming along falls upon a seven-strong IT team, including two staff members tasked with providing support services to end-users. Besides ensuring that IT operations in Singapore are well maintained, the team also backs up a two-person end-user support team in the subsidiary yard on Batam Island. Considering the leaness of the team, the variety in PC type, the high growth in the user pool (SMOE had only 200 PCs in year 2000), and the widespread location of the machines, this is no mean feat. IT Manager Rizal B. Siam attributes it to the dedication of the team, continual training, forward-looking planning and the use of Hitachi JP1/Asset Information Manager (Hitachi JP1/AIM) and Hitachi JP1/Software Distribution (Hitachi JP1/SD).

**Asset Management Freeware Fell Short**

Up until early 2006, SMOE conducted an annual stock-take of its client assets using a freeware solution that used logon script. While it could pick up hardware specs and some details of installed software and then collate the information into a spreadsheet, it could only do so for the newer machines.

“Sometimes you get it [detailed client information], sometimes you don’t. Other times, it just plain didn’t work. So what we had was like a jigsaw puzzle with missing pieces, except you couldn’t tell which pieces were missing,” Mr. Rizal recalled.

Finding these ‘missing pieces’ so as to be able to complete the puzzle required onsite visits to every machine. Given that the majority of the PCs are located in the sprawling fabrication yard, this involved much legwork and IT team members had to walk or even cycle to where the machines are deployed.

Not having concise pre-knowledge of each and every PC also affected end-user support, as support personnel had to spend more time onsite to discover the exact configuration. Time spend onsite ranged from one to two hours. In addition, even though it had three persons dedicated to support then, each could only attend to one call at a time. On occasion, the IT team had no choice but to consolidate desk-side support visits according to physical zones in the yard and then attend to the users seeking assistance at one go.

**Manual Software Distribution**

The distribution of software was even more demanding on the IT team. While it relied on Microsoft Windows Server Update Services to keep Microsoft operating systems and office automation applications up to date, other applications (including specialist engineering ones) were updated manually. Non-critical updates were done every three months. While users were grouped by department or division for updates and new installs, this still involved many man-hours. For example, in year 2000, it took the entire team three months to migrate the 200 PCs SMOE had then from Microsoft Office 95 to Microsoft Office 97. Updates also required end-user downtime of about 30 minutes, after which there was the usual worry about compatibility and so on.

“The two complementary Hitachi JP1 solutions had just what we wanted so there was no question of us having to over-buy in order to have all the functionalities we wanted.”

Rizal B. Siam, IT Manager

**Complementary Hitachi JP1 solutions make keeping scattered desktop environment tidy and up to date a breeze.**
The few years leading up to 2006 saw high growth in the number of PCs, but IT headcount remained the same. At times, it even ‘shrank’ temporarily when some team members had to stay for up to two months on projects delivered offshore to ensure that the new IT systems installed function properly.

"In 2005, we started looking at automated solutions that could help us do more with the same number of persons. The need to manage IT assets centrally had become greater and end-user support clearly needed a big boost. And while software governance wasn’t an issue, with the PC pool growing at a very high rate, we wanted to be sure it didn’t become one," said Mr. Rizal.

**Remote Support a Top Priority**

At the top of SMOE’s must-have features list was – no surprises here – remote support. Other must-haves were centralised dynamic management of assets, automated software distribution, and the ability to block the use of USB storage media and built-in CD/DVD drives. The company also preferred the solution to have a small footprint at the client side for two reasons: some of the older PCs could not be upgraded further, and the bandwidth of the satellite link from the Singapore office to the completed projects delivered offshore was only 1Mbps in size.

At that time, SMOE was unaware of the Hitachi JP1 suite of integrated systems management solutions, and looked at solutions from three other vendors. It eventually picked one and was on the verge of inking the deal when a Hitachi Asia representative called to introduce the Hitachi JP1 suite. The company then decided to take a close look at the two Hitachi JP1 desktop management solutions, after which it started the evaluation process all over again – with the previously shortlisted vendor and Hitachi Asia as the contenders.

"It was just as well that we held off signing on the dotted line. While the solution we had picked met our criteria, its full potential could only be leveraged with the use of sister solutions for which we had no immediate need. The two complementary Hitachi JP1 solutions had just what we wanted so there was no question of us having to over-buy in order to have all the functionalities we wanted," said Mr. Rizal.

**“Much Better Now”**

SMOE implemented Hitachi JP1/AIM and Hitachi JP1/SD in early 2006. Users in the corporate offices were the first to get on board, followed by those in the yard and then those carrying out the hook-up and commissioning work on the offshore platforms. As remote support was the most urgent area, the company first tapped the Remote Control feature in Hitachi JP1/SD, which enables IT team members to gain control of problematic client PCs remotely and troubleshoot them from their desks. It then went on to Hitachi JP1/AIM and the other features of Hitachi JP1/SD.

"Things are much better now. With detailed client asset information at our fingertips and with Remote Support, each of our support personnel can now attend to four helpdesk calls at any one time. Previously, users had to queue up and wait up to three days for attention so that’s a big improvement. Moreover, issues are typically resolved within thirty minutes, compared with up to two hours before we implemented the Hitachi solutions. We’ve also been able to maintain the same support cost structure even though the number of PCs has grown," said Mr. Rizal.

Yard visits have become the exception, he added, and team members no longer need to fly to offshore platforms to attend to support issues. The duration of the stays on the platforms was also shortened to just two weeks. Software distribution is now fully automated and does not incur any end-user downtime. As for IT asset stock-takes, these can be done with just a night’s effort as and when the audit department asks for them, with most of the time spent on massaging the data into the preferred format than actual stocktaking.

Another area that has seen improvement is software governance, which received a further boost in 2007 when SMOE upgraded to Version 8.5, which gives administrators even tighter control over what happens at the client level, thus enhancing security and strengthening compliance, among other benefits.

**IT Team More Efficient & Productive**

The Hitachi solutions have also brought change to the IT department. The end-user support team has been trimmed from three persons to two and these two persons now do more than support end-users and are being deployed to other tasks, including SAP support. There’s also less overtime and hours are more predictable. Information sharing among team members has improved significantly and because the Hitachi solutions are so easy to learn and use, everyone is equally qualified in their use.

"On an enterprise level, there’s more transparency in terms of what we have, more consistency software-wise, and better oversight of end-user operations and information transfer. End-users are definitely happier because they get their issues resolved much faster than before," said Mr. Rizal.

Having tasted sweet success with Hitachi JP1/AIM and Hitachi JP1/SD, SMOE is now looking at how other IT areas can benefit from automation. It also plans to take advantage of increased commoditisation in the server market, with a view towards moving to a diskless client environment for yard operations.

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**JP1**

**SMOE**

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Rizal B. Siam,
IT Manager

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**Needs**

- Reduce time and labour on managing client environment
- Improve end-user support
- Minimise scheduled end-user downtime
- Gain visibility and control of desktop assets and operations
- Prevent software governance from becoming an issue

**Solution**

- Client asset management using Hitachi JP1/Asset Information Manager
- Centralised software distribution using Hitachi JP1/Software Distribution
- Remote end-user support using Remote Control

**Benefits**

- Significant cut in man-hours for IT asset management and software distribution
- One-third reduction in number of end-user support personnel
- Time to resolve end-user issues cut from 1-2 hours to 30 minutes
- Support personnel can now handle more simultaneous helpdesk calls
- Shorter stays on new offshore platforms
- Greater visibility and control of end-user operations
- Improved data security and compliance