



## Microsoft CSI Customer Solution Case Study



Singapore Discovery Centre Limited

### STATS ChipPAC completes merger with ease, thanks to Microsoft

*Consolidation onto Microsoft Windows Server 2003 and  
Microsoft Exchange Server 2003 reduces TCOs by 30%*

#### Overview

**Country**  
Singapore

**Industry**  
Manufacturing

**Customer Profile**  
STATS ChipPAC Ltd. is a leading service provider of semiconductor packaging design, assembly, test and distribution solutions.

**Business Situation**  
STATS ChipPAC needed to consolidate its disparate business systems after the merger of STATS and ChipPAC in August 2004.

**Solution**  
Microsoft Windows Server 2003 and Microsoft Exchange Server 2003 were chosen as the unified server and email platforms respectively.

- Benefits**
- Disparate server and email systems consolidated for 30% savings in IT costs
  - Improved security in terms of access to corporate resources and communications
  - Able to scale easily and cost-effectively to meet future expansion
  - Integrates easily with other Microsoft systems and applications

*"We selected Windows Server 2003 because it was already a proven platform for us in terms of providing enterprise-class availability, scalability, and performance. Our past experience has also shown it to be an easily deployable and manageable solution."*

*— Mr. Lee Teck Guan, Corporate IT Director*

STATS ChipPAC Ltd. is a leading service provider of semiconductor packaging design, assembly, test and distribution solutions to some of the largest semiconductor foundries, integrated device manufacturers and fabless companies in the USA, Europe and Asia. The merger of STATS and ChipPAC in August 2004 resulted in a global organization with manufacturing plants located in Singapore, South Korea, China, Malaysia and Taiwan, and customer support offices throughout the United States, Europe, and Asia.

STATS ChipPAC needed to consolidate, scale up and improve the security of its IT systems to meet the global business demands arising from the merger. It decided on Microsoft Windows Server 2003 and Microsoft Exchange Server 2003 as the unified server and email platforms to reduce costs, ease management efforts and improve security.

*"Windows Server 2003 and Exchange Server 2003 are much more versatile in terms of permissions—it gives us a firm grasp on authority levels for a range of tasks, locking things down with Active Directory and Group Policies. We now have the means to provide users with secure and differentiated access to our confidential network resources, and to allow them to communicate with each other with peace of mind."*

*- Sean Lim, System Engineer*

## **The Situation – A newly merged entity**

The merger of STATS and ChipPAC in August 2004 created one of the world's premier independent semiconductor assembly and test solutions provider. With over US\$1 billion in revenues in 2005, STATS ChipPAC is a leader in mixed signal testing and advanced packaging technology for semiconductors used in diverse end-market applications, boasts a global blue-chip roster of major semiconductor customers, and owns a manufacturing footprint spanning Singapore, South Korea, China, Malaysia and Taiwan.

However, the merger has also resulted in significant business challenges for the new entity. STATS ChipPAC operates in the highly volatile communications and digital consumer electronics segments, which means that it has to retain the agility to cope with rapid and sudden changes in demand, without sacrificing any of the economics of scale offered by significantly larger operations. As such, the company would have to consolidate its operations so that it could operate more effectively as a single entity, which requires the integration of diverse IT systems into one unified platform.

Mr. Lee Teck Guan, Corporate IT Director, explained, "To achieve our post-merger corporate objectives, we needed to consolidate many different IT infrastructure and systems into a single platform. Undertaking this process would represent a huge challenge given the size and global spread of our combined operations. We focused our initial efforts on consolidating our server platforms and email applications, and phased the roll-out country by country in order to

make the process more manageable for us."

Given the phased deployment, STATS ChipPAC required the server and email system to be highly scalable and easily deployable, since it would need to accommodate a growing number of users as more countries came onboard. Security was another major consideration, as the semiconductor industry lives and dies by intellectually property such as chip designs and processes. Therefore, STATS ChipPAC wanted the server and email system to be proof against possible data loss, corruption or unauthorised access during the deployment stage.

## **Unifying server platforms onto Microsoft Windows Server 2003**

Prior to the merger, STATS was running on Microsoft Windows Server 2003, while ChipPAC operated with Microsoft Windows Server 2000 for their respective server platforms. The merged company decided to begin the migration and consolidation process in its Singapore operations, given its importance as the corporate headquarters and manufacturing facility within the STATS ChipPAC network. Since the former companies have a significant Microsoft footprint for their server platforms, STATS ChipPAC decided that the most cost-effective and easiest approach would be to consolidate both servers onto Windows Server 2003, starting with Singapore, before moving on to other countries.

"We needed to move almost 1,500 users in Singapore quickly onto the consolidated system and without

noticeable disruption to day-to-day business. That's an immense challenge given the mission-critical nature of the servers and email applications, and the number of users affected by the move," said Mr. Lee. "We selected Windows Server 2003 because it was already a proven platform for us in terms of providing enterprise-class availability, scalability, and performance. Our past experience has also shown it to be an easily deployable and manageable solution."

Despite the scale of the project and the tight timelines, STATS ChipPAC was able to complete the consolidation to Windows Server 2003, with minimal disruption and virtually no down time. More impressively, it took only one person to upgrade the entire system. This was made possible with the help of Quest, the Microsoft partner who provided a unique migration solution that allowed STATS ChipPAC administrators to centrally access and upgrade each individual user terminal, instead of having to manually change file objects PC by PC. This minimized the disruption to individual users, and reduced the possibility of errors arising from manual upgrading.

"Normally, upgrading the servers for our large user base would take a couple of months of work, even if we were to dedicate a team of full-time IT administrators on the project." said Sean Lim, System Engineer, STATS ChipPAC, "We could not afford any delays for Singapore because it would adversely affect the planned deployment for other countries further down the line. Hence, taking just two weeks with 1 person was nothing short of a miracle!"

## **Consolidating all messaging needs onto Microsoft Exchange Server 2003**

When it came to the evaluation of the messaging system, the choice came down to Lotus Notes 6.5 (which STATS had been using as its email messaging platform), and Microsoft Exchange 2003. In the end, Exchange 2003 was selected as the messaging platform of choice.

"Our own internal evaluation showed Exchange 2003 to be cheaper to maintain than Lotus Notes in terms of total cost of operations (TCO). ChipPAC was already running Exchange 2000, and have found it to be a cost-effective platform for collaboration," explained Mr. Lim. "What's more, the functionality offered by Exchange 2003 was a critical overall element of STATS ChipPAC ability to operate globally, so we were confident that moving to Exchange 2003 was the right choice."

In particular, Exchange 2003 gave STATS ChipPAC the improved ability to scale up to support a rapidly growing number of users, a significant portion of which also needed remote mobile connectivity to email and corporate network resources.

Atos Origin, the Microsoft partner in charge of the consolidation for the messaging platform, successfully moved 1,500 Lotus Notes users in Singapore to Exchange 2003, and integrated the email system with the three other ChipPAC sites running Exchange 2000 for the interim period. Thanks to Atos Origin, which already had a strong track record in migrations to Exchange from various platforms, STATS ChipPAC successfully

transitioned the large number of users to Exchange 2003 without significant disruptions to regular operations and loss of productivity.

“Atos Origin worked closely and effectively with our IT team throughout the entire period and helped tie up all the loose ends during the implementation. Overall, the transition was a smooth one,” said Mr. Lim. “We were very impressed by the dedication and professionalism of the team throughout the migration process.”

## Benefits

### High scalability and manageability significantly lowers IT costs

Mr. Lee emphasized that the main reason for choosing Windows Server 2003 and Exchange 2003 was the scalability and high level of manageability and inter-operability offered by Microsoft. What’s more, Exchange Server 2003 is deeply integrated with Windows Server 2003 for enhanced reliability of the IT environment. The merger created a company with 4,000 to 5,000 users worldwide, and a similar number of desktops, not to mention server hardware, to manage, administer and maintain. Windows Server 2003 made it simple for Mr. Lee and his team around the world to manage their IT resources. Exchange 2003 also allowed the company to serve the growing number of users at its global offices without adding as many new servers as it would have required with Lotus Notes.

According to Mr. Lee, the manageability of the Microsoft solutions was a godsend to the small IT support team within STATS ChipPAC. “Thanks to Microsoft,

my team was able to reduce the daily amount of time spent managing users and systems by 30%. And by consolidating our email messaging system to Exchange 2003 from Lotus Notes, we have even more ways to access our emails securely, either through client-, web-, mobile- or PDA-based access.”

### Robust security protects confidential and critical company data

Windows Server 2003 and Exchange 2003 have been consistently proven to be secure by design, secure by default, and secure in deployment. The solutions provided STATS ChipPAC administrators the ability to easily manage group policies, desktops, and direct access to network resources. In addition, the automation of user access policies means that administrators are freed from having to monitor every single detail, such as which groups of users have access to different databases of information.

The new operating system has also resulted in stricter compliance to security policies, as users are prevented from accessing resources outside of their jurisdiction. The built-in security features from Service Pack 1 which included a role based security configuration wizard which allowed the company’s administrators to configure services and network security and registry settings was an added bonus for STATS ChipPAC. Messaging security issues have also been resolved with the use of Active Directory and Group Policies and by moving to a single platform environment.

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### **Moving forward with Microsoft**

Mr. Lee concludes, “Thanks to Microsoft, our server and email consolidation was relatively painless, and we have gained the agility to operate and collaborate at a much higher level. We have put aside one of our biggest IT challenges, and are prepared to move forward now to achieving our corporate vision after the merger.”

## Solution

- Microsoft Windows Server 2003
- Microsoft Exchange Server 2003

## Partners

- Quest Software ([www.quest.com](http://www.quest.com))
- Atos Origin ([www.atosorigin.com](http://www.atosorigin.com))

## For More Information

To understand the value of the Microsoft Server 2003 and Microsoft Exchange 2003 platforms, please visit:

[www.microsoft.com/windowsserversystem](http://www.microsoft.com/windowsserversystem)

[www.microsoft.com/exchange](http://www.microsoft.com/exchange)

For more information about STATS ChipPAC, visit [www.statschippac.com](http://www.statschippac.com)

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