

Improving taxation system in China's Zhoushan Island

SAT-Zhoushan builds a more efficient, secure, and reliable taxation system with the Intel® vPro™ Platform

"In recent years, SAT-Zhoushan has explored a variety of new technologies to improve our taxation system, including the comprehensive application of Intel® architecture-based virtual technology and an Intel® vPro™ platform-based remote management system. Using these technologies allowed us to enhance our taxation system and provide services faster, more efficiently, and with hardware-enhanced security."

Chen Lei
Information Center Director
SAT-Zhoushan

China's island-based Zhoushan City has seen rapid social and economic development in recent years. With Zhoushan City's rapid economic development, the business volume of the Zhoushan Office of SAT (SAT-Zhoushan) has also increased. In 2011, the Zhoushan Municipality earned a tax income of 5.693 billion Yuan, a growth of 36.67 percent over the previous year. It also had to deal with handling the export tax refund of 3.553 billion Yuan, as well as a variety of tax reductions and exemptions amounting to 45.6 million Yuan. To handle these services more efficiently, SAT-Zhoushan needed to improve the way it handles its various businesses. To measure the improvement, the Zhejiang Provincial Government's Discipline Office commissioned a third party to conduct an opinion poll to rate SAT-Zhoushan's performance. The results showed a 92.59 percent administration and industry satisfaction rating, which earned SAT-Zhoushan the No. 1 spot among the 10 administrative systems of the Zhoushan Municipality and No. 2 among the 11 regional/municipal-level SAT systems of the Zhejiang Province.

CHALLENGES

- **Improve the taxation system.** As demands for service quality and information security grew, the district needed to develop a highly efficient, integrated tax payment platform for a safe and convenient self-service taxation area with enhanced security and management capabilities and an improved experience for taxpayers.
- **Enhance tax system maintenance.** SAT-Zhoushan had always been faced with high IT maintenance costs and deficiencies which caused severe impact on the tax system.

SOLUTIONS

- **Use Intel® vPro™ platform-based remote management.** The Intel vPro platform solves the productivity and security issues, particularly the inability handle maintenance across islands, with scattered service points and inconvenient inter-island transportation.
- **Provide efficient self-service tax platform.** Using Intel® architecture-based virtual desktop technology allowed the district to develop self-service taxation applications, diversifying tax services and greatly relieving workloads in the tax service hall's front desks and speeding taxpayers through the process.

IMPACT

- **Enhanced tax system operations.** The district successfully constructed a safe and reliable new-generation tax service platform with remote management and self-service, improving the quality of the tax services experience for citizens.
- **Harnessed information technology.** Successfully deploying the new tax service platform is a good example of how information technology can improve tax system operation.

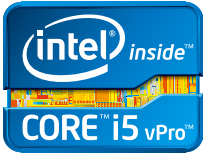
Handling the taxation system of a city nestled in an island posed a big challenge for SAT-Zhoushan. Explained Bi Shaofeng, head of the Discipline Inspection at SAT-Zhoushan, "The geographical environment of Zhoushan Islands is quite unique. There are more than 1,000 islands in our city, but only 11 islands have a population of over 10,000. Previously, if any problems occurred to the taxation system in the islands, the taxpayers had to wait. Obviously, it was a great inconvenience to the taxpayers."

Meanwhile, with the rapid development of Zhoushan's economy, there are more than 49,000

taxpayers in the state tax system. Such large business volume challenged SAT-Zhoushan to work out a more efficient way to handle daily tax jobs and improve its tax service platform.

SAT-Zhoushan needed to address two aspects:

- Build a remote management platform to create a centralized operation and maintenance management for the scattered computers of the tax system
- Develop a self-service taxation platform to efficiently diversify the taxation service, and improve the taxation business service



SAT-Zhoushan built a safe, reliable new-generation tax service system based on the Intel® vPro™ platform, improving services for taxpayers

The self-service taxation service mode enables taxpayers to deal with taxation business themselves, without involving tax workers. Taxpayers do not need to submit tax information stand in line, or wait to be called. In 2007, SAT-Zhoushan set up self-service tax service areas in four locations: Dinghai, Putuo, Daishan, and Shengsi. Taxpayers are offered self-service taxation businesses such as declaration, tax report, authentication, and online invoicing. Using a remote management platform enables enhanced security and manageability in handling all the tax system machines.

With Intel technology, SAT-Zhoushan aims to develop a new generation of tax service platform composed of a tax system remote management platform and self-service tax service platform, to improve its taxation system.

Efficient maintenance with remote management

When SAT-Zhoushan explored the idea of enhancing its tax system, the biggest issue was the difficulty of maintaining all the computers in the widely scattered tax system. In total, SAT-Zhoushan has 885 computers and 54 tax systems at 26 tax points in nine different islands, with only 14 IT staff members conducting routine maintenance of all the equipment. SAT-Zhoushan had always been faced with issues of high cost of IT maintenance and deficiencies.

After carefully comparing a number of remote management technologies, SAT-Zhoushan built an Intel vPro platform-based GeneralSoft* management platform and McAfee central control platform to manage the tax system's computers, which include Dell OptiPlex* 9010 computers in the tax system and Intel vPro platform-based computers in Daishan and Putuo. Different from traditional remote management solutions, the Intel vPro platform supports-based remote management such as remote system installation and remote power on/off. If the system fails, diagnosis is carried out remotely and the problems are resolved in real time. Even in the case of a sudden computer power-off, operating system failure, or the software proxy being disabled, maintenance personnel can still resolve the problem quickly.

With the Intel vPro platform's remote management capabilities, the IT staff can remotely review the hardware and software information in every network terminal. With a fault report, the technical personnel can immediately carry out remote diagnosis and repair, solving problems in the network terminal system within half an hour. In the past, this kind of problem took two working days to solve. Besides saving time, the remote management platform has significantly reduced tax system maintenance costs for SAT-Zhoushan, which has lowered its annual maintenance cost by 80,000 Yuan. By remotely repairing computer issues, SAT-Zhoushan no longer requires taxpayers to take boats to the nearby island to carry out taxation business. In fact, the remote management platform has helped nearly 20,000 taxpayers reduce unnecessary expenditures of approximately 1.97 million Yuan.

An easy way to handle taxation business

SAT-Zhoushan needed to simplify the taxation process for taxpayers. A complete taxation process includes tax declaration, tax report, authentication, and network invoicing. Without an integrated application platform, the taxpayers need to log into different systems for operation. As businesses expand, the taxpayers need to log in more and more systems. Sometimes, they have to enter three or four systems to complete their tax process. Since accounts and passwords may differ from system to system, it caused great inconvenience. The challenge for SAT-Zhoushan was to guarantee network and information security for taxpayers while providing safe and convenient services.

To address this problem, SAT-Zhoushan built a new self-service taxation platform using Intel



Self-service taxation area

LESSONS LEARNED

- The Intel vPro Platform offers the performance SAT-Zhoushan needed, powered by the Intel Core vPro processor combined with excellent hardware-enhanced security and manageability. Administrators have hardware-based protection measures. Even if the operating system fails, bottom-line system protection can still solve issues.

architecture-based virtual desktop technology. The integrated self-service tax service platform provides taxpayers with easy, safe, and convenient self-service tax service areas. Running on virtual desktop servers, the new self-service taxation platform uses Citrix XenDesktop* virtual desktop technology to have all the client terminals of the self-service tax service areas centrally operated on this server. Computers in the self-service taxation service areas can directly call the application client terminals of this server for taxpayers' use. When the taxpayers access the self-service taxation platform, it then accesses the respective taxation business systems corresponding to the taxation types submitted by the taxpayers. The self-service taxation platform then transmits the data among all the tax service systems. This design not only makes the self-service taxation safer, but also makes maintenance easier.

The new self-service taxation platform is widely used in the daily work of SAT-Zhoushan. For instance, the self-service taxation platform in the Putuo tax service hall handled about 3,406 tax transactions, while the taxation service hall's front desks handled only 3,369. This means the tax business conducted in the self-service taxation area efficiently handles 50 percent of all the taxpayers' taxation transactions, reducing the work that SAT-Zhoushan's employees needed to carry out because taxpayers conduct tax business themselves.

Find a solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (www.intel.com/itcasestudies) or explore the Intel.com IT Center (www.intel.com/itcenter).

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