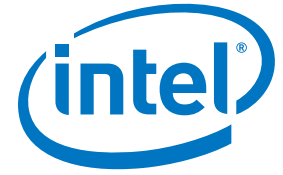


Case Study

Intel® Core™ vPro™ Processor

Intel® Active Management Technology

Security and Manageability



Improving IT operation and maintenance efficiency

Intel® Core™ vPro™ processor helps China Huadian Engineering Co., Ltd. (CHEC) achieve active and efficient desktop terminal collaborative management



CHEC achieves its goal of collaborative management for its entire network by deploying an Intel® Core™ vPro™ processor-based desktop terminal integrated management solution. This resulted in greater efficiency and accuracy in collecting statistics of its IT assets, improved IT maintenance efficiency as well as enhanced defense capability of network anomalies.

CHEC

Challenges

- **Optimize statistics and management of IT assets.** Find an efficient inventory and management solution to manage the IT assets of headquarters and branch offices.
- **Improve IT maintenance efficiency.** Get faster response speed and an efficient troubleshooting solution.
- **Enhance network security.** Monitor network traffic in real time and quickly analyze and locate network anomalies.

Solution

- **Deploy Intel® Core™ vPro™ processor-based desktop terminal integrated management solution.** This solution consists of a Lenovo* manageable PC and GeneralSoft* network abnormality investigation system, which provides CHEC with active and efficient desktop terminal collaborative management.

Impact

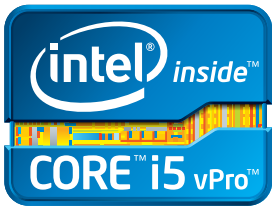
- **Increased accuracy in IT statistics reporting.** CHEC is able to obtain accurate statistics on all its IT assets across its entire network, even when PCs are shut down.
- **Improved IT maintenance efficiency:** Efficiency in IT maintenance has improved through a significant reduction in downtime and reduced IT operational costs.
- **Promoted security capability:** The enhanced network security features enabled rapid analysis and pin-pointing of anomalies in the network and significantly reduce security risks.

Introduction

There are over a thousand computer terminals located at CHEC headquarters and its 12 branch companies. However, the IT operation and maintenance for the entire CHEC Group is monitored only by a team of 15 people in its information management department. With a low IT-staff-to-assets ratio, CHEC group faced numerous challenges and a lot of pressure to keep its IT operations running smoothly. These included reliable management of its IT assets inventory, IT maintenance efficiency, network security and various other issues related to keeping the company's IT resources operating efficiently with few manpower resources.

Optimize statistics to track, protect and update IT assets

Effective security management and the efficient gathering of statistics on all IT assets are important in building up business value and productivity in an enterprise. To achieve this, CHEC not only uses various software to collect information on computer configurations and security settings of its desktop PCs, but also to frequently push patches and virus database updates. However, this method had a major drawback in that it would not work when the remote computers were powered off at the end of the day.



Improve IT maintenance efficiency

The company's PCs are used by staff in the management, administration, business and finance departments. These employees do not have any technical skills and use the PCs purely as office productivity tools. Any PC failures that occur require an IT staff member to investigate and fix the problem, since staff members are unable to fix even the simplest of PC problems on their own. When a PC fails to start up, IT staff needs to travel on-site to the affected PC's location for troubleshooting and repair. This effectively resulted in lowering IT maintenance efficiency and increasing maintenance cost.

Enhance network security

Maintaining accurate inventory statistics of IT resources within the company network is important in building up network security, as "unknown" computers are the biggest security risk in the entire network. Since CHEC office staff has no expertise and skills in network security protection, they rely on the IT maintenance staff to detect abnormal network traffic and isolate corresponding PCs to prevent the spreading of viruses in the network.

Solution

Intel® Core™ vPro™ processor-based desktop terminal integrated management solution was designed to meet the specific

demands of CHEC, and was developed by Intel in collaboration with Lenovo Group and GeneralSoft in Shenyang. Intel provided the core hardware technology platform and development interface, while Lenovo and GeneralSoft offered Lenovo* manageable PC and GeneralSoft* network abnormality investigation system, respectively. Combined with the real network environment and requirements, the customized research and development met the demands of overall management of desktop terminals in CHEC and has proceeded to the online operation stage.

Manageability

Hardware-based Intel® Active Management Technology embedded in Intel® vPro™ technology-based computers can help store the hardware and software information on desktop terminals in non-volatile RAM. The built-in manageability of Intel Active Management Technology enables IT maintenance personnel to discover and check hardware and software assets even though the remote computers have been shut down, which makes it possible to remove all the "unknown" computers in network wide.

Remote maintenance

Moreover, Intel® Active Management Technology provides out-of-band management. When the remote computers are shut down, IT maintenance personnel can wake them up from consoles and push the system patches and security software updates in real time. The IT maintenance personnel in CHEC can quickly detect problems and finish fixing the remote system, relying on the warnings and event logs without being on-site, even if the the operating system on a remote desktop terminal failed. This significantly reduces downtime

Spotlight: China Huadian Engineering Co., Ltd. (CHEC)

- CHEC was established at the end of 2002 with registered capital of CNY 1.2 billion.
- CHEC is one of the five national state-owned power generation industrial groups in China.
- In 2010, CHEC won the honor of most competitive Chinese enterprise.

and improves IT maintenance efficiency. The ability to make remote diagnoses and restart systems also decreases both the demand for on-site support from the IT department and IT maintenance costs.

Smart security

Computers based on the Intel® Core™ vPro™ processor have smart security features. The network traffic and package sending of desktop terminals in CHEC is under real-time monitoring. Once abnormal traffic appears, the network connection to suspicious computers is disconnected automatically and a warning is sent to the console. Combined with the visual interface of GeneralSoft* network abnormality investigation system, IT maintenance personnel can find the infected computers instantly and isolate them before the whole network is infected. This greatly reduces the security risks from viruses in the network.

Find a business solution that is right for your company. Contact your Intel representative or visit the Reference Room at: www.intel.com/references.

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Intel® vPro™ Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software and IT environment. To learn more visit: <http://www.intel.com/technology/vpro>

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