Huawei Server
Success Stories V2.0

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Contents

Government & Public Utilities

Huawei Helps Deltares Institute Improve Hydrology Science

> " Huawei's solution provides stronger computing capability than other solutions of the same cost and outperforms other solutions in simplified management and time saving, and helps us gain more value from the investment.
>
> — Gert-Jan Schotmeijer, Deltares Chief IT Director "

Challenges

Deltares in the Netherlands is a world-famous hydrology and infrastructure research institute with some 800 employees. Deltares is devoted to solutions, innovation, and applications for flood control and prevention such as coastal and water resource management, and floodwall and flood warning systems.

- Collection, analysis, and simulation of massive hydrology data require higher performance of computing and storage resources to respond to incidents more quickly and expand the research capacity on demand, which the existing station failed to fulfill.

- Deltares staffers — all experts in their fields — are located in the Netherlands, Singapore, and North and South America. That is why the institute needs to make information and data sharing easier and quicker.

Solution

Huawei's solution uses the E9000 converged server and S5600T storage devices to deploy 15 computing nodes and 60 high-performance Virtual Machines (VMs) for each research station. The network uses 10 GE/Fibre Channel/InfiniBand ports that can be flexibly expanded. Each VM provides over 300 GB storage space and 1,500 IOPS.

Customer Benefits

- Computing performance of the original IT system has been improved by 4 times, significantly improving Deltares's flood prevention and warning capabilities.

- Computing and storage are integrated for accurate computing, which is important for modeling, planning, and analysis.

- This solution slashes TCO and improves management efficiency. The 12U blade servers and 4U storage controllers reduce the equipment room footprint by 50 percent.

03/04

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Safe Pensions in Russia

Challenges

The Pension Fund of the Russian Federation (PFR) is the largest social services system in Russia.

- The security and service continuity of key IT systems must be able to provide reliable and highly efficient services for the general public.

- Inadequate space inside the equipment room complicated plans for expansion.

- As the density and quantity of servers increased, installation, commissioning, operations, and management were becoming too complex and costly.

Solution

- To meet the need for high reliability, compliance with industry standards, and to conserve space, the customer chose Huawei's E6000 blade servers. The E6000 permits no single point of failure and ensures long-term, stable operations.

- The E6000 is an 8U blade server system that supports up to 10 server blades and 6 switch modules.

Customer Benefits

- The E6000 fully optimizes space requirements and simplifies system networking with on-demand configuration and capacity expansion.

- The chassis, server blades, and switch modules can be centrally monitored and remotely managed.

05/06

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Madrid Hospital Heals IT System

Challenges

As a leading healthcare provider, Madrid Hospital plays an important role in Spain. The hospital has six affiliated hospitals operating out of Madrid. Each hospital has an internal Patient Information Management system (PIMS) and IT systems. To share data between mobile office applications throughout Madrid Hospital's network, a huge server integration project has been designed.

- The existing IT systems are separately deployed by each branch, which causes various problems such as low resource usage, complex management, and potential data leakage and security risks.

- These systems are frequently accessed and process a large amount of data, which imposes high performance requirements on physical servers.

Solutions

Integrated application servers must seamlessly interconnect with the digital hospital patient information management system and office systems such as SAP and OA. Core service systems of the six branches were configured and integrated by using Huawei's RH2285 V2 rack servers and VMware virtualization technology.

- RH2285 V2 servers provide superior multi-threaded concurrent processing to ensure high availability system performance and effectively process massive user access requests.

- Each RH2285 V2 server provides up to 38 TB of local storage space, plus I/O expansion capability.

Customer Benefits

- The entire IT system architecture of Madrid Hospital was simplified.

- Results were almost instantaneous, with increased resource usage, reduced management complexity, and improved system efficiency.

07/08

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Accelerating Indonesia onto the Information Highway

Solutions

Huawei provided an end-to-end, one-stop solution with its RH2285 storage server. The server provided a cost-effective solution that combined storage with computing to reduce costs and improve scalability.

Challenges

To improve network service quality and infrastructure and reduce network delays and costs, the Indonesian government decided to consolidate its IT operations.

- The design called for 25 state-of-the-art data centers located in major cities and Jakarta, the capital. The data centers needed to be centrally managed and maintained, with the goal of improving O&M efficiency and delivering cost savings.

- To meet the requirements for data storage, the system needed large-capacity, high performance servers.

Customer Benefits

- Huawei's end-to-end, one-stop solution simplified the system architecture while also improving energy efficiency.

- The high-performance, highly reliable solution supports easy capacity expansion. Professional technical services and support are available.

09/10

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Malaysian Government Builds a Data Center Voting System with Huawei

Challenges

- Build a voting system to support the 2013 Malaysian general election.
- Take less time to collect voting information from all over Malaysia.
- Voting information security is a very sensitive subject.

Solutions

- Huawei provided a complete L2 hardware platform for two data centers, including servers and storage, security, and data backup systems.
- Huawei's RH2288 V2 and E6000 servers acted as the voting system's computing platform.

Customer Benefits

- Huawei ICT products provided a secure, fully redundant design.
- Huawei's RH2288 V2 rack server and E6000 blade server provided high processing performance and high reliability for the data centers.

11/12

Karnataka Health & Family Welfare Project in India

Challenges

- The Department of Health of the Indian state of Karnataka plans to implement a Hospital Management System (HMS) in all 1,200 hospitals spread across the state in order to improve the state's health and family welfare project.

- Plans are for a decentralized, distributed model in which each hospital will have its own server in each location and will be connected to a central data center.

Customer Benefits

- Better system specifications and performance parameters.

- Better commercial advantage.

Solutions

- Huawei's RH2285 server will be provided in Phase 1 to each of 70 hospitals across the state and deployed in the HMS distributed architecture.

- Each hospital user accessing the local server in the client-server architecture, and the local servers, will communicate to the headquarters server for data synchronization.

13/14

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Helps Build Population Database for China

Challenges

The Chinese Ministry of Human Resources and Social Security makes plans and policies for national human resources and social security, implements plans, and inspects and supervises processes.

- It is difficult to centrally manage population information due to the complexity of divisions and functions in the ministry. The ministry urgently needs to build a unified, shared national database of population information that uses citizen IDs as the sole code. This requires servers that can provide high performance and reliability.

Solutions

- Huawei's E9000 blade server uses the Lustre concurrent file system, integrates computing, networks, and storage, and provides high performance for application systems. The server has also bettered the time records of many SPEC performance tests.

- The E9000 server's redundant architecture operates under an ambient temperature of 40°C. It is proven capable of providing a reliable operating environment for any application system.

Customer Benefits

- A unified population database platform can be built to implement the centralized management of national population information.

- The maintenance cycle has been shortened from 30 to 10 days, improving work efficiency.

- The security design encompasses computing, storage, network, applications, and data. Different security policies are available for different subjects, which ensures the platform's secure and reliable operation.

15/16

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Finance

U.K. Insurance Broker Puts a Premium on Efficiency

Challenges

To reduce investment in IT devices and maintenance, while improving and optimizing IT usage of resources, an insurance brokerage firm in the United Kingdom decided to deploy VMware office virtualization systems in all its branches.

- Office rental fees for many branches made it important that the IT infrastructure be compact and efficient.
- The insurance brokerage also needed flexible, cost-effective expansion solutions for server capacity in order to meet the increasing requirements and reliability of its services. In particular, the company needed to support more than 100 concurrent virtual desktops.

Solutions

By using Huawei's X6000 high-density servers, a 2U rack space can support two full-width or four half-width X6000 server nodes.

Customer Benefits

- Deployment density increased by up to four times, reducing system space needs. Sufficient space can be reserved for subsequent service expansion.
- In virtual OA scenarios, differentiated configurations and unified management of both virtual and physical servers can be employed to meet performance requirements.

19/20

Government &
Public Utilities

Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

SK Bank in Poland Uses Huawei Servers to Build a Virtualization Platform

Challenges

- SK Bank is one of the three largest cooperative banks in Poland. It is a modern financial institution that offers a variety of products and maintains high quality of service.

- More applications need to be migrated to a virtual platform, but existing server performance is inadequate.

Solutions

- The Huawei RH1288 V2 rack server provides high computing density and 768 GB memory capacity in 1U of space, meeting various virtualization requirements.

- The RH1288 V2 also offers high read/write efficiency with SAS disks, enhancing I/O performance.

Customer Benefits

- The RH1288 V2 uses less equipment room space, improving computing density.

- The RH1288 V2 offers high computing performance, fully meeting virtualization application requirements.

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Bank of China European Branches Gain Returns from the Information Center

Challenges

As banking services increase, so do the IT resources required to keep up with data growth, capacity expansion, and IT equipment replacement. This has become an urgent matter for European Bank of China (BOC) branches.

- Communications and service systems running on outdated desktop PCs include the network management systems of non-banking trading systems. Capacity expansion costs are enormously high — and are rife with operational inefficiencies, lack of server availability, and poor resource monitoring capabilities.

- Current third-party servers can operate only on network management systems belonging to the core equipment, which complicates the requirements and standards required for the security and reliability of the servers.

Solutions

Huawei RH2285 V2 servers replaced the third-party midrange computers to operate the network management systems that remotely monitor and maintain the IT devices in all branches.

Customer Benefits

- The costs of purchased services and capacity expansion have been reduced.

- The servers ensure high reliability and security of network management systems with fully redundant components and data-protection technologies such as secure computing, hard disk encryption, and RAID disks.

23/24

Huawei Helps Hong Kong Infocast Build a Next-Generation Security Analysis System

Challenges

- Facing the cut-throat competition in the financial industry of Hong Kong, Infocast, a leading solutions provider for the securities industry, urgently requires a next-generation hardware platform to enable faster services for application software and to reduce O&M costs.

- The company's iInvestor, a quote analysis system, has been introduced to provide real-time quotes of Hong Kong stocks, financial news, and information about listed companies.

Solutions

- An appliance platform based on Huawei E9000 server has been adopted as the hardware and virtualization platform for the iInvestor system. This platform enables concurrent access from over 300 customers and permits real-time communication with Hong Kong Exchanges and Clearing Limited (HKEx).

- The E9000 server's converged architecture integrates computing, storage, network, and virtual resources to enable resource sharing between multiple applications, improving the resource utilization rate. The E9000 server also permits access from thin clients, which cut down on maintenance costs.

- Deployed in the data center of the HKEx, the E9000 server satisfies customer requirements by providing high reliability and no latency in the iInvestor system.

Customer Benefits

- The no-latency of the E9000 server enables real-time, efficient release of transaction data; the server is capable of handling hundreds of concurrent access requests per second.

- Huawei provides components and services such as DSWare, iNIC, and database optimization to ensure reliable operation of a high-performance system.

- Parts can be preinstalled in the E9000 server.

- The server's high scalability enables rapid service rollout and easy capacity expansion.

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Huawei Helps People's Bank of China Build a Virtualized Application Platform

Challenges

The People's Bank of China, the central bank of the People's Republic of China, controls monetary policy and regulates financial institutions, including financial risk prevention and resolution, statistics, bank cards, and financial regulations.

- The People's Bank of China's servers have a low usage rate and efficiency is unsatisfactory.

- The bank requires an easy-to-deploy, highly reliable, high-performance system to ensure stable operation of its application systems.

Solutions

- The Huawei data center virtualization IT system, built on four-socket servers, can be efficiently deployed and provides high performance, high reliability, and good scalability, which has resulted in high customer satisfaction.

- Huawei's RH5885 V2 servers provide a highly stable virtualization computing platform as well as good scalability and high performance. Its extensive RAS features ensure system stability. Functions such as alarm reporting and online remote maintenance are highly accessible and provide convenient and reliable system security maintenance.

- The RH5885 V2 server is certified by many virtualization system and application software providers and is a good fit for the bank's IT system.

Customer Benefits

- IT system deployment efficiency has been doubled and service performance enhanced by 30 percent.

- The server provides 35 RAS features and permits no risk to mission-critical services.

_27/28_

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Huawei Helps the Agricultural Bank of China Build an Open Financial Platform

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Huawei PC servers catch people's eyes. Thanks to their reliability, high performance, and accessibility, Huawei servers fulfill requirements of server types and configurations for the construction of an open platform in ABC. They were ranked first in the bidding and ensured the reliable and efficient running of the application system and improved the user experience of the open platform.

— Technical platform of Agricultural Bank of China
"

Challenges

The Agricultural Bank of China (ABC) is one of China's Big Four Banks. It has 23,400 branches throughout China and provides many kinds of banking and retailing products and services for enterprises. In 2013, Fortune rated it number 64 among the top global 500 companies.

- The emergence of Internet financial services challenges traditional bank services. For example, the services of online banks, WeChat bank, mobile banks, and financial management are exploding.

- ABC planned to purchase x86 servers provide the high performance and reliability it needs for its planned new application services environment.

Solutions

- Thousands of Huawei two-socket and four-socket servers were deployed to fulfill current and future service requirements for all the bank's data centers and 36 provincial branch offices, and to facilitate the expansion of its IT system.

- Huawei servers have bettered more than 100 SPEC performance test records, enjoy the lowest average fault rate in the industry (15 percent less) and ensure a high-quality, comprehensive integrated project delivery process.

Customer Benefits

- A reliable, efficient business system has improved the bank's financial IT service quality and enhanced customer satisfaction.

- The x86 servers reduced dependence on midrange computers, which lowered TCO, enhanced IT competence, and improved long-term development.

29/30

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Education

Huawei Helps Newcastle University (U.K.) Establish the First HPC System

> " We are impressed by Huawei's HPC solution that integrates computing, storage, and networking resources. Huawei's HPC solution provides us with an easy-to-expand and cost-effective HPC cluster. This is the solution we need. "
>
> — Jason Bain, Deputy Dean of IT Infrastructure and Architecture Department, Newcastle University

Challenges

Founded early in the 19th century, Newcastle University has earned its fame by providing high-quality teaching and research courses. It belongs to an elite association of research-intensive U.K. universities with outstanding scientific research capabilities and an international reputation.

- The memory capacity of a single compute node is required to be more than 512 GB, and overall computing performance is required to be higher than 88 TFLOPS.

- The I/O read/write bandwidth is required to be higher than 1 GB/s.

- This project is to be implemented in a few phases. The system needs to be easily expanded.

Solutions

- Huawei provided a High-Performance Computing (HPC) solution that incorporates the E9000 blade server; S5500T storage device; full 10 GE high-speed network; Huawei FusionCluster; and Lustre high-performance, parallel storage.

- The all-in-one HPC modular solution meets requirements for follow-up expansion.

Customer Benefits

- Rapid deployment: integrated computing, networking, and storage resources enable service deployment time to be reduced to three days.

- Simplified management: unified management minimizes maintenance workloads.

- Easy expansion: Huawei's HPC solution expansion capability will reduce later expansion costs and meet expansion requirements for the next five years.

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Turkey's ULAKBIM Picks Huawei for a High-Performance Computing Platform

Challenges

The Turkish Academic Network and Information Center (ULAKBIM), founded in 1996, needed a high-speed computer network to enable interaction with other Turkish scientific organizations and to provide information technology support and information services to aid scientific production.

- With the explosive increase of computing data, the existing High-Performance Computing (HPC) platform cannot address user requirements.

- A low network bandwidth decreases computing efficiency and deteriorates service quality.

- The existing data center has poor heat dissipation and power supply capabilities and cannot easily expand capacity.

Solutions

- The Huawei RH1288 V2 rack server expands the capacity of the HPC platform.

- Compute nodes are interconnected over a 56G InfiniBand network to set up a non-blocking, high-speed computing network.

- The existing heat dissipation and power supply resources are used for easier capacity expansion.

Customer Benefits

- Huawei system improved computing capabilities by four times and boosted service capabilities, addressing ever-increasing user demand.

- Improved computing network capabilities, enhancing computing and user efficiency.

- Fully utilizes existing resources, minimizing capacity expansion costs.

35/36

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Indonesian Universities Learn About Huawei

Challenges

- Universitas Negeri Semarang (UNESS) and Universitas Jendral Soedirman (UNSOED) in Indonesia have their own data centers. With the rapid development of information science and technology, these universities' data centers need to be expanded to meet the new requirement of IT systems.

- Larger capacity, higher performance, and better services are needed for the OA and teaching systems.

Solutions

Huawei provided the Tecal RH2285 and E6000 servers to satisfy business requirements as well as the OA and teaching systems.

Customer Benefits

- Huawei servers provide high computing performance and high reliability.

- The total cost-effective solution not only meets the current requirements, but also will support expansion over the next three to five years.

37/38

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Pakistan NUST Gets Top Honors in Exams

Challenges

With the development of office automation and information technology, National University of Sciences and Technology (NUST) needed to upgrade its IT system.

- NUST wanted to develop a better IT platform to support an online examination system for at least 500 persons, plus an office and management system.

- The new platform needed to provide steady performance and sustainable expansion both in computing and storage capability.

Customer Benefits

- The E6000 servers helped NUST construct a multi-functional IT platform with high reliability and performance.

- Students do not need to worry about the online learning and examination system, and teachers enjoyed a better user experience of the operations, administration, and management system.

Solutions

Huawei provided a Virtual Desktop Infrastructure (VDI) solution based on E6000 servers, which included tens of BH620 blades.

39/40

Government &
Public Utilities

Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Huawei IT Solution Helps Kellett School Establish an Online Education System

Challenges

Kellett School is a private school founded in 1976 in Hong Kong. It provides a high-quality, British-style education. It has a well-deserved reputation for excellence.

- Kellett School wants to establish an online education system for its branch school in Kowloon Bay, Hong Kong, to improve its education facilities.

Solutions

- Huawei provided an integrated solution that comprises computing, network, and storage resources to address platform compatibility and unified operation and maintenance issues, enabling fast responses to customer requirements.

- Huawei provided the high-performance E6000 blade server as a critical application server, and deployed a large-capacity S2600T storage unit and an 802.11n high-speed wireless network that covers the entire campus.

Customer Benefits

- The E6000 blade server helped the customer save equipment room space and cable costs.

- Huawei's solution provided a one-stop design and delivery of an end-to-end IT platform that simplified system architecture, provided optimal integration of all modules, shortened deployment time, and minimized customer investment, while improving system availability.

41/42

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Helps Peking University's Big Data Research

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

> Huawei's innovative SSD high-speed storage card improves the I/O performance of the appliance by five times and reduces hardware investments by 60 percent for the key laboratory of the University. More importantly, the HANA appliance that runs on Huawei's high-performance RH5885 V2 server helps us achieve more than we expected and lead the domestic research of the smart, Big Data field.
>
> — **Director of the key laboratory at Peking University**

Challenges

Peking University is frequently listed as one of the top universities in China and is also well-known worldwide.

- Peking University's School of Electronics Engineering and Computing Science, was SAP's first choice as a HANA Independent Software Vendor in China. The School leads the country's Big Data applications for governmental security.

- The governmental security industry requires SAP HANA certification of the servers.

- The hardware platform requires high reliability and computing performance due to the special attributes and software features of the security industry.

Solutions

- Huawei's RH5885 V2 rack servers were used to build the SAP HANA appliance at the university. The RH5885 V2 server is the first server certified by SAP HANA in China, employs 35 RAS features, supports Intel E7 series processors, and provides high reliability and performance.

- The RH5885 V2 is configured with dual 10 GE NICs and multiple GE NICs to expand network bandwidth; it also employs Huawei ES3000 PCIe SSD card to improve storage I/O performance and to ensure high-speed service operations.

Customer Benefits

- The hardware application requirements of the governmental security industry are fulfilled by the high reliability and performance compatibility of the SAP HANA appliance.

- Huawei's innovative SSD card improves the appliance's I/O performance by five times, saves on hardware investments by 60 percent, enhancing the appliance's advantages.

43/44

Huawei Enables Tsinghua University to Build a Big Data Platform

Challenges

Tsinghua University is ranked among the top academic institutions in China and is one of the most prestigious universities in Asia and the world.

- Tsinghua University's Institute for Interdisciplinary Information Sciences wants to build a world-class interdisciplinary information research center and talent-fostering base. The Institute has not been established long and has no equipment room.

- Hadoop Big Data platform research is a brand-new project for the Institute, which requires high computing and I/O performance from the server.

Solutions

- To address the customer's difficulties in equipment room design, Huawei provided reformation solutions for data center planning, weak and strong power, and a fire extinguishing system.

- To address system requirements for the Hadoop Big Data platform, Huawei provides RH2288 V2 servers and corresponding drive services. The RH2288 V2 server uses the latest Intel processor, configured with twelve 3T and two 1T hard disks and Huawei's 10 GE NICs to provide high-performance computing, large storage, and high system I/O.

Customer Benefits

- The solution helped build a more improved equipment room environment in which the devices can run reliably and the research system platform can operate stably.

- The good performance of the Huawei server-based Hadoop Big Data platform fully satisfied research requirements and ensured the efficient development of all research projects.

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Media & ISP

Huawei Helps Construct a High-Performance Rendering Platform for Digital Domain (U.S.)

Challenges

Based in Venice in Los Angeles, California, Digital Domain is one of the world's top film studios. The company's work has been awarded with two Oscar awards for Best Visual Effects and Scientific and Technical Achievement for the movies "Titanic" and "What Dreams May Come."

- Post-production and rendering consume massive computing, storage, and networking resources. The existing devices could not support continuous service development.

- Existing devices required high energy consumption, large space, and high maintenance costs, which generated a high TCO.

Solutions

- Huawei provided an integrated computing and rendering solution using the X6000 high-density server and a high-performance switch.

- A single X6000 supports four XH320 V2 server nodes, with the density twice that of a 1U rack server. A rack supports up to 160 processors, providing super-high computing density.

- The X6000 provides a centralized power supply and heat dissipation with three energy-efficient fan modules. By using server nodes isolated from PSU ventilation channels, intelligent fan speed adjustment, and intelligent CPU frequency adjustment, the X6000 improves energy efficiency.

Customer Benefits

- Computing density was increased by 25 percent. Each rack supports up to 160 processors, forming a high-density computing platform that saves equipment room space.

- Energy consumption has been reduced by 15 percent per rack, greatly reducing OPEX.

- The multiple-node X6000 architecture enables easy addition of new compute nodes to expand capacity while maximizing the ROI.

49/50

Government &
Public Utilities

Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

LeaseWeb and Huawei Join Hands to Enable Green Data Center Operation

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

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> " A complete test conducted by our engineering department on Huawei servers shows that these servers have good performance and high energy efficiency, and meet our customers' requirements for high-performance, dedicated servers. Apparently, Huawei attaches great importance to green technology, and has 46 percent of its human capital engaged in R&D activities.
>
> — René Olde Olthof, Director of Operations, LeaseWeb "

Challenges

LeaseWeb is a leading IT hosting provider that offers IT infrastructure solutions such as dedicated servers, cloud computing, and managed hosting.

- The power consumption cost of over 60,000 servers deployed globally accounts for over 12 percent of the TCO, and continues to increase.

- A dedicated server product line provides highly reliable, multiple-brand servers to satisfy stringent user requirements.

Solutions

In the first phase, Huawei deployed thousands of RH1288 V2 rack servers to improve the LeaseWeb infrastructure.

- Industry-leading energy efficiency: Huawei servers use Platinum PSUs with an intra-board DC-DC conversion efficiency of 94 percent and Huawei's patented energy-saving technologies such as dynamic power control and power capping, which rank No.1 in the SPEC Power test.

- 40°C ambient temperature environment: using proprietary thermal technology (such as an aluminum board embedded with copper heat sinks, MIMO, and vector airflow management), Huawei servers can stably operate for a long term at an ambient temperature of 40°C.

- Failure rate 15 percent lower than the industry level: Huawei server components use a carrier-class derating design, follow the IPD process throughout the R&D and production stages, and have been verified and optimized by a complete product testing and certification system.

Customer Benefits

- Energy-efficient servers significantly reduce energy consumption cost, enabling green operation of the data center.

- LeaseWeb can choose from many dedicated servers for a product portfolio of the highest quality.

- Joint innovation enhances innovation capabilities.

IMG Wins Gold Medal in Media Delivery

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I was very impressed with Huawei's high-quality solutions and the innovative spirit of their engineers. When communicating with other industry vendors, they insisted that our requirements just could not be met. However, Huawei made great efforts in not only learning about the media industry, but also going the extra mile to make sure they delivered the solutions that we indeed needed.

— Shane Warden, General Manager of IMG

"

Challenges

IMG Media is a leading global sports and media company. IMG processes video and data from a multitude of systems in a complex IT environment to deliver high-quality, real-time digital content. The real-time feature is critical to television signal production and creates strict demands for server selection.

- Servers must support massive data processing during special-effects processing and code conversion of video signals in media applications. Space in the equipment room needs to be fully utilized, and servers must be easily manageable.

- Each step during media production is essential for the proper operation of services. Reliability must be ensured in order for the system to avoid any loss of data or errors in content transmission caused by service interruption.

Solutions

- Huawei offers an integrated IT solution that consists of the E6000 blade server and Network Attached Storage (NAS) system.

- The E6000 is used as the media server and computing platform for the replay system.

- The E6000 enables ten 4-socket BH640 V2 server blades to work simultaneously; blades with different configurations can be deployed in the same chassis to meet the diverse configuration requirements of service systems.

Customer Benefits

- The E6000 provides the excellent performance the customer requires, occupies less space, and supports unified management.

- The E6000 has a fully redundant architecture with hot-swap components, ensuring that services are not interrupted when hardware failures occur and providing always-on server solutions.

- The E6000-based solution enabled IMG to broadcast live coverage of some of the world's most spectacular events, living up to its industry reputation as a high-quality, reliable supplier for high-definition digital media.

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

European ISP Search Finds Success

Challenges

A European search engine provider offers Internet services including search, news, maps, email, e-commerce, and Web-based advertising. It operates more than 100,000 servers.

- In 2012, an additional 10,000 servers were added. This dramatic growth stretched the capacity of their data center.

- To continue their success, they must find servers that can be rapidly deployed and reduce purchase, management, and operational costs, particularly for power and support.

Solutions

Huawei provided the highly compact, 1U, high-density RH1285 rack server for the search engine.

Customer Benefits

- The high-density RH1285 rack server automatically supports energy efficiency through advanced engineering technology.

- The rack server is also easy to use and manage, which helped the ISP reduce their operating costs and deliver content at competitive prices.

55/56

Government &
Public Utilities

Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Online Game Provider Wins Big in Indonesia

Challenges

Online gaming has rapidly grown in Indonesia along with the rising development of broadband Internet access. One of the country's leading online game services was growing quickly, with annual sales exceeding USD $80 million.

- Supporting the continuous launch of new games and services required the company to reduce energy costs and utilize resources more efficiently, while still expanding capacity and optimizing the game platform.

- The solution was to use high-density servers to save data center space.

Solutions

Huawei's X6000 server platform was specifically designed for Internet services, particularly for online gaming.

Customer Benefits

- Using an ISP-optimized architecture, the X6000 provided a high-density, energy-saving, cost-efficient solution. The server also provided a broad range of needed services.

- The high-density server platform not only reduced overall power consumption by 12 percent and CAPEX rollout by 16 percent, but also maximized ROI.

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Huawei Ensures the Efficient Deployment of 100,000 Servers for Tencent

" For Tencent, Huawei servers are highly advantageous in terms of technology and service. Huawei's powerful R&D capability enables the fast implementation and high reliability of our customized requirements. Huawei always responds actively and quickly in case of faults and takes efficient action.

— Tencent

"

Challenges

Tencent ranks as the largest Internet enterprise in Asia and third-largest worldwide, after Google and Amazon.

- Tencent has more than 300,000 live servers, and spends USD $160 million per year on electricity. The company required that electricity and rack rental costs be reduced.

- Server reliability is critical to Tencent since servers are its production line. No batch faults are permitted.

- Faced with the surge of the Internet services, the servers are required to respond quickly to customer demands and ensure quick delivery.

Solutions

- Huawei's X6000, the industry's first 2U server with multiple nodes, integrates racks of all models into a 2U chassis. Different configuration nodes share the same chassis, power system, and fans.

- Huawei's solution simplifies 28 types of configurations to just 5. Delicate components are designed with carrier-class specifications.

- The cabinet is delivered as a whole. Users need only connect power cables and network cables on-site.

Customer Benefits

- Equipment room space was reduced by 50 percent, energy consumption by 15 percent, and TCO by 30 percent.

- Tencent statistics showed that Huawei servers enjoyed the lowest fault rate of all company servers.

- Twenty servers in one cabinet can be deployed within 10 minutes, instead of the 5 hours required previously.

59/60

Government &
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Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Huawei Server Success Stories V2.0

Huawei Helps Alibaba Advance into the Big Data Era

Challenges

- Alibaba is committing itself to building a Big Data platform that supports user search, browse, and payment, and can form an extensive trading link. Current data capacity is 30 PB, which requires high reliability and performance for the simultaneous access of massive numbers of small files.

- There are a huge number of distributed servers, which consume tremendous energy, make equipment room deployment complex, and require DC supply for some of the servers.

- Rapid business development calls for more servers, which requires a longer deployment cycle. Customized delivery is required.

Solutions

- Huawei develops various servers such as the RH2288 V2, RH2285 V2, and X6000 to fulfill the requirements of searching, filing, and access. The powerful performance of these servers facilitates the simultaneous access of massive numbers of files.

- Diverse technologies are supported such as vector flow management, double-faced cellular boards, DEMT dynamic energy-saving, and power capping. Customized HVDC electric power solutions are available to control energy consumption.

- Integrated cabinets and preinstalled delivery improve deployment efficiency and shorten the deployment cycle.

Customer Benefits

- The servers' high reliability and performance satisfied the customized requirements of power supply and deployment at scale, and helped Alibaba establish a stable Big Data platform that can successfully handle the large consumer traffic on China's Singles' Day.

- Energy efficiency is improved by at least 10 percent, saving Alibaba electricity fees of several tens of millions USD per year.

- On-site delivery of the servers takes just three to five days, which accelerates business rollout.

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Finance

Education

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Energy & Transportation

Large-Scale Enterprise

Huawei Helps Baidu with the Deployment of Search Engines on a Large Scale

Solutions

- The Huawei ES3000 is a PCIe card-based SSD card and highly applicable to searching services. It provides 770,000 IOPS read performance, which is equivalent to the concurrent reading and writing of about one thousand hard disks.

- Huawei's RH2285 rack server and the ES3000 PCIe SSD card build a search platform with ultra-high speed. Each server is configured with a 1.2 TB ES3000, improving not only service performance, but also server usage rates.

Customer Benefits

- Up to 5 billion access requests are accessed, compared with the previous 600 million.

- The number of servers used, the footprint of equipment rooms, energy consumption, and cooling fees have all been reduced. TCO has been lowered by 30 percent.

- The simpler networking architecture has reduced the number of devices and facilitated maintenance.

Challenges

- Baidu, a Web services company, has China's largest search engine. Some 600 million access requests are processed each day, which requires a great number of servers that continually increase TCO.

- Searching services involve high concurrent requests for small files. The servers have severe bottlenecks in terms of hardware I/O performance and the server usage rate is low.

63/64

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Energy & Transportation

Moldova Government Taps Huawei to Build a Traffic Surveillance System

Challenges

- Real-time traffic monitoring and roadside information is practically unmanageable and uncoordinated because of the lack of surveillance devices on major intersections.

- The Moldova government urgently needs an advanced traffic management system to improve the traffic status of the capital, Chişinău.

Solutions

- High-performance Huawei RH5485 rack servers are used to manage video systems.

- The RH2285 is fully equipped to manage and capture moving traffic violations and vehicle identification data from both the behavior surveillance and intelligent transportation systems.

Customer Benefits

- The traffic management solution has improved traffic flow, alleviated traffic congestion, and substantially decreased accident rates.

- Safety awareness of drivers has been reinforced and good driving habits are being formed.

67/68

Government &
Public Utilities

Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Nicaragua RR&E Sees Efficiency Improvement by OA Upgrade

Challenges

Nicaragua's Ring Ring and Energy (RR&E) is a major supplier of telecommunications, media, and energy products and services to Latin America. As business has expanded, the existing OA applications system has become unable to meet business requirements.

- Supporting customers and employees requires high reliability and ever-larger amounts of storage and computing.

- The current system became increasingly unreliable, with inefficient fault handling and alarm identification, which impacted both customers and employees.

Solutions

Huawei RH2288 V2 servers provided ultra-large local storage capacity and high performance needed for improved office efficiency.

Customer Benefits

- The modular system design and simplified architecture made the monitoring and maintenance of legacy network devices easier, reduced fault recovery times, and improved operating efficiency.

- Huawei teams provided prompt, high-quality services during installation, deployment, and maintenance, and delivered a worry-free network to RR&E.

69/70

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Helps Construct Scheduling System for China State Grid

Challenges

Founded in December 2002, the State Grid Corporation of China is the largest public utility in the world. It constructs and runs power grids, and transmits and distributes power for 26 provinces, autonomous regions, and municipalities across China, covering over 88 percent of China's land area and serving more than 1.1 billion people.

- State Grid is a backbone enterprise closely related to the national energy security and economic lifeline. As such, the State Grid scheduling system underpins the national economy and the people's livelihood. System security and reliability must be ensured for stable service operation.
- The scheduling automation system has high requirements for real-time performance and strong computing capabilities of servers.

Solutions

- The grid energy scheduling system uses Huawei's 4-socket RH2485 V2 rack servers to provide high performance, reliability, and scalability. The RH2485 V2 is a strong option for enterprise-level, mission-critical applications.
- Huawei's intelligent emulation system uses Huawei's E6000 blade servers to provide industry-leading computing and network throughput capabilities.

Customer Benefits

- Huawei servers meet national security-level requirements and can be easily optimized on-site, ensuring the security of the grid scheduling system.
- Huawei servers provide good compatibility, ensuring reliable, stable operation of online grid scheduling applications such as SCADA, EMS, and WAMS.
- Maintenance cost has been reduced by 30 percent, equipment room space by 50 percent, and devices' energy consumption by 10 percent, which lowers TCO.

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

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European Primark Dresses for Success

Challenges

Primark is an Irish clothing store chain with stores throughout Europe. To meet the fast-changing fashion market, it is critical that Primark be able to respond quickly and have a very lean supply chain.

- To support that type of operation, they need a flexible data center and application servers that can process concurrent requests in multiple threads.

- The design of their application system uses a full-featured, user-friendly UI that promotes good user experience and the company's brand image. This further increases server load and reliability requirements.

Solutions

Huawei used the Tecal RH2288 V2 rack servers to build an IT platform for Primark.

Customer Benefits

- Huawei RH2288 V2 rack servers use the latest Intel multi-core processors to meet customer requirements for concurrent request processing and multi-threaded applications.

- The redundant design for key components of RH2288 V2 servers, including advanced RAID power protection for data loss, ensures that data integrity is protected and retrieval time is minimized, ensuring system reliability and improved user experience and satisfaction.

75/76

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Bilfinger Engineers Faster Performance in Germany

Challenges

Bilfinger, an international civil engineering and construction services company based in Germany, first installed ERP and database systems in the 1980s. In spite of continuous improvements, supporting new Web-based systems were moving network capacity toward a critical tipping point.

- Specific areas needing improvement were elimination of disk storage I/O bottlenecks and support for I/O-intensive applications in a virtualized environment.

- Initial efforts to improve performance using standalone SSD devices improved performance, but at a very high cost.

Solutions

Huawei employed ES3000 plug-in SSD acceleration cards that enabled Bilfinger to optimize enterprise hotspot data in its storage system.

Customer Benefits

- Database optimization was enhanced, query performance was improved by more than four times, and the IOPS storage bottleneck was removed.

- The ES3000 cards do not occupy precious rack space and can be easily integrated into existing storage management platforms. These features helped Bilfinger improve its service distribution and platform performance, and reduce operating and maintenance costs.

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Finance
Education
Media & ISP
Energy & Transportation
Large-Scale Enterprise

Huawei Renovates the Sales Platform for Italy Unicomm

Challenges

- Unicomm, the largest retail enterprise in northeast Italy, plans to construct a sales platform for real-time response to customers.

- The existing information system, based on a traditional database, has a 2-hour delay in sales and stock management, which cannot meet requirements for real-time online services.

Solutions

- The Huawei SAP HANA appliance that uses the RH5885 and ES3000 was deployed to construct a high-performance, in-memory database.

- The RH5885 server supports a maximum of 8 processors configured with 4 TB memory. The ES3000 PCIe SSD enables efficient real-time transactions.

Customer Benefits

- The IT commodity management system synchronizes sales and inventory information in real time, cutting inventory information delay from 2 hours to less than 5 seconds.

- Huawei's solution helped this traditional retail enterprise construct an Internet e-commerce platform that enables rapid response to consumers.

- Huawei's high-reliability, easy-to-maintain hardware platform ensures service continuity.

79/80

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Pirelli Rolls to Higher Performance in Italy

Challenges

Pirelli is the world's fifth largest tire manufacturer. In order to meet customer demand, their factories operate three shifts a day, and require non-stop IT support.

- The existing IT infrastructure made this requirement difficult to meet, so Pirelli embarked on a plan to transform to a cloud data center by moving to virtualization.

- Unfortunately, their existing servers were not able to keep up with demand and were often overloaded, causing delays in processing critical jobs, which impacted key production processes.

Solutions

- Huawei replaced existing servers with its highly reliable Huawei RH2488 V2 servers.

- Each Huawei RH2488 V2 server simultaneously supports over 30 virtual machines.

Customer Benefits

- RH2488 V2 servers have fully redundant components. Their remote maintenance capabilities ensured that Pirelli would have a stable, round-the-clock operating environment for the manufacturing plant's systems.

- RH2488 V2 servers provide excellent virtualization application performance.

81/82

Government & Public Utilities

Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

DataLogic Recognizes Success in Mexico

Challenges

DataLogic, a world leader in bar code scanners and recognition devices, was experiencing substantial growth in their Latin American markets, but were hampered by an outdated IT infrastructure.

- In Mexico, DataLogic had 47 rack servers nearing the end of their lease contract. These servers took up too much space, used too much energy, and were slow.

- Even after installing VMware to remove application silos, the fact that the servers were from different manufacturers and used different management consoles and maintenance routines created a nightmare for administrators.

Solutions

- Huawei deployed a E6000 blade chassis with several BH620 blade servers at both the Mexico City and Monterrey sites.

Customer Benefits

- Migrating to a unified, reliable, and easily managed Huawei E6000 blade server system eliminated the possibility of a single point of failure and ensured business continuity.

- The E6000 provides a unified management system, offering greater O&M convenience and flexibility.

- The Huawei server solution was provided by a local partner with extensive experience in data migration and virtualization.

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

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Singapore MCC Designs Success

Challenges

China Jingye Mould Machinery Co. (MCC) is a leading designer, manufacturer, and supplier of aluminum extrusions. They opened a Singapore office to reach new markets and initially had only financial and Human Resources (HR) systems.

- Over time, they expanded their Singapore staff to include designers, who rely heavily on sophisticated 3-D modeling software, but the existing office PCs and computing infrastructure were not up to the task. Half of the PCs had exceeded their life expectancy and were running outdated software programs.

- To improve productivity and customer service, MCC decided to take a new approach, replacing traditional PCs with a Virtual Desktop Infrastructure (VDI).

- To reduce operational costs, the new system needed to support remote management.

Solutions

Huawei provided a pre-packaged MicroDC. The micro data center utilized RH2288 V2 servers to support new virtual PCs and run office applications.

Customer Benefits

- The RH2288 V2 server is the basic platform of the VDI system. The old, physical PCs were replaced with virtual PCs, which significantly simplified maintenance.

- The RH2285 V2 server also runs software that allows it to act as the equipment room management node, supporting remote management of both Layer 1 and Layer 2 network equipment.

85/86

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Huawei Provides Virtualization Platform
for Singapore Cloud Services Company

Challenges

NEC STEE Cloud Services of Singapore needed to build a cloud data center to kick-start its cloud computing business in the Asia-Pacific region.

- Easy management was their major concern.
- IT system reliability, availability, serviceability, and business consistency are important to providing IT-as-a-Service (ITaaS).

Solutions

Huawei E6000 blade servers were used to build the necessary virtualization environment.

Customer Benefits

- A unified management tool reduced management complexity and costs.
- Full redundancy for functional modules and a passive backplane design provided high reliability.

87/88

Government &
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Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Huawei Helps Build Highly-Efficient IaaS Platform for StarHub

Challenges

StarHub is the second largest telecom carrier in Singapore and the only carrier that provides information, communications, and entertainment services over fixed, cable TV, and mobile networks, and the Internet for individual and enterprise users.

- Along with the development of the Singapore Next-Generation Nationwide Broadband Network Project (NGNBN), the number of StarHub-based enterprises has grown from 800 to more than 20,000. StarHub now requires an elastic cloud service platform to support future service growth.

- Rapid IT service development requires suppliers to provide fast, on-time delivery.

- A solution needed to provide a TCO advantage to enhance operation competitiveness.

Solutions

- Huawei provided Information-as-a-Service (IaaS) for all enterprise users by building server, network, and storage systems for Web and storage services.

- Huawei's high-performance, high-density X6000 servers were used to build a distributed cloud computing platform that supported parallel computing across millions of node clusters.

Customer Benefits

- Virtualized elastic computing: virtualized computing resources elastically support the cloud system, which will provide future service development.

- Rapid deployment for fast delivery: deploying 20 servers in a rack was reduced from over 5 hours to 10 minutes. Thousands of servers can be deployed in a few days.

- Reduced TCO: equipment room space decreased by 50 percent, power consumption by 15 percent, and TCO by over 30 percent.

89/90

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

COFCO Growth Sprouts in Thailand

Challenges

The growth of COFCO, China's largest food processing, manufacturing, and trading company, was being stunted because of an old-fashioned ERP system.

- The existing system could not support standard electronic financial accounting practices, efficient sales, or account management.

- Since the existing system was only in Chinese, its use in Thailand caused language barriers in the workflow process and disruption on the assembly lines.

Solutions

- Planting the seeds of future success involved installing a new ERP system, which needed a robust IT infrastructure.

- Huawei created the infrastructure with its RH2285 V2 server.

Customer Benefits

- The resulting system accelerated decision-making and increased the efficiency of Operations and Management (O&M).

- The speed, reliability and ease of support will help COFCO make future mergers and acquisitions successful.

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Baosteel Forges Growth in India

Challenges

Baosteel Group, a Fortune 500 iron and steel manufacturer, was expanding to India and needed a full-service office system equipped to serve a staff of 30 to 40 that would meet its project requirements and growth expectations over the next five years.

- Baosteel wanted a trusted IT vendor who could deliver a set of highly reliable solutions and provide excellent after-sales services for customers.
- The company required a set of easy-to-deploy and easy-to-manage devices.

Solutions

Huawei provided comprehensive services for an IT office system that could be expanded easily. Services included:

- An enterprise email solution based on Huawei RH2285 V2 servers
- A secure desktop solution based on Huawei RH2288 V2 servers

Customer Benefits

Huawei servers and network devices support centralized deployment and remote and unified management services that facilitate daily maintenance operations.

93/94

Government &
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Finance

Education

Media & ISP

Energy &
Transportation

Large-Scale
Enterprise

Huawei Server Success Stories V2.0

Indian Branch of Longsheng Colors Success with Email

Challenges

Zhejiang Longsheng of Shanghai specializes in chemical industry dyes. To support expansion into India, they needed a highly efficient IT platform.

- Longsheng had been using an email system with open Webmail interfaces, which was not secure or reliable, and could not keep up with daily business operations.
- Longsheng needed to build a stable, efficient, easy-to-use email system.

Solutions

Huawei provided an integrated appliance that has exchange software pre-installed on a Huawei RH2285 V2 server.

Customer Benefits

- The RH2285 V2 server with pre-installed software made implementation easier and less expansive.
- The appliance's performance is at least 30 percent better since it was tested and optimized before going to market. It can support Longsheng's business expansion over 3 to 5 years.

95/96

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Finance

Education

Media & ISP

Energy & Transportation

Large-Scale Enterprise

Huawei Server Success Stories V2.0

Data Analysis Platform for Symantec in India

Challenges

Symantec is a world-leading security and storage solutions provider. In this Big Data era, Symantec in India needs to be able to analyze massive amounts of data. Symantec requires:

- Analysis of massive amounts of data at low cost.
- Quick analysis of massive amounts of unstructured data.

Solutions

- Huawei's RH2288H V2 server provides ultra-large local storage capacity and high performance.
- Huawei ES3000 SSD acceleration cards help eliminate disk storage I/O bottlenecks.

Customer Benefits

- Query performance improved by 4 times.
- TCO reduced by 60 percent.
- Flexible configuration maximizes ROI.

97/98

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Finance

Education

Media & ISP

Energy & Transportation

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