FUJITSU

CASE STUDY
PEOPLE'S HOSPITAL OF CHIZHOU

»HIS & PACS SYSTEM AT PEOPLE'S HOSPITAL OF CHIZHOU
THE SYSTEM CREATES SYNERGY ACROSS ALL OUR DEPARTMENTS«
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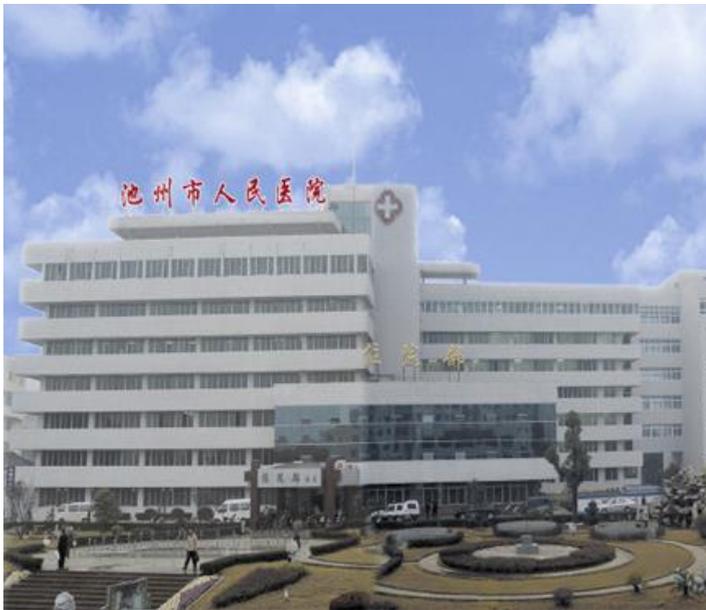
THE CUSTOMER

The People's Hospital of Chizhou, is a comprehensive Grade A high-tier city hospital, under China's grading system. Located in Chizhou city, Anhui Province, it is also a strong, large-scale, full-discipline institution with advanced facilities and broad medical competency to provide medical service to a population of around 1.6 million. With over 800 staff and covering an area of 80,000 square meters, the hospital provides 600 beds and handles 300,000 outpatients, 20,000 admissions and 7,500 surgeries per annum.

THE CHALLENGE

"Informationization" of medical systems in China is still in its infancy. This was the case at Chizhou. Typically, business and information flows were manually processed. These highly labor-intensive activities were the cause of inefficient workloads and processes which detracted from professional treatment and diagnosis. The results included long wait-times, inefficient queues and complex conversion processes between disciplines.
In addition, searching for a patient's records, pathology, diagnoses, and medical images, was time and labor intensive, as well as difficult to manage. As a result important information was not always able to be fully utilized for medical research and analysis.
Further, continual development and expansion of the hospital, and increasing numbers of patients, meant staff workloads remained at a maximum. A new solution, that would fundamentally resolve the current situation and guarantee a good medical service environment, was urgently needed.

THE SOLUTION

Previous analysis of the respective characteristics of HIS and PACS systems, by The People's Hospital of Chizhou, had set the major direction in "informationization." This included a "perfect" HIS system, with extended hospital network coverage, and expanded HIS application scope. With help from Fujitsu and its medical solutions partner, the hospital planned the establishment of a complete HIS and PACS system. Expectations were that systems would include centralized record storage using a high-speed Fibre Channel storage network (SAN). After evaluation, Fujitsu proposed a cluster of SPARC Enterprise M3000 servers. These would ensure the reliability of the host HIS system. They also proposed Fujitsu ETERNUS DX440 disk arrays with both high-speed Fibre Channel (FC) online storage disks and large capacity near-line storage SATA disks in the same cabinets. These would provide fast access to data, as well as long-time archival storage of the centralized

THE CUSTOMER

Country: the People's Republic of China
Industry: Healthcare
Founded: 1970
Employees: 803
Website: www.chizhouhospital.com

THE CHALLENGE

Hospital information was typically processed manually. This was highly labor intensive with low work efficiency.   Medical personnel and management staff at the hospital had to focus too much on non-medical affairs which limited capability for medical service.

THE SOLUTION

Introduction of an integrated HIS system based on a highly reliable computing platform consisting of clustered Fujitsu SPARC Enterprise M3000 servers, and Fujitsu ETERNUS DX440 disk arrays for online and near-line storage enabled digitization of medical information at source, with instant access to all medical records and related information 24 hours a day.

THE BENEFITS

- Access to patient data was greatly improved
- Quality management and care was now possible
- Patient waiting times were shortened
- Manual operational errors were avoided
- Synergy between departments improved
- Information management and retrieval, significantly improved

PRODUCTS AND SERVICES

- Fujitsu SPARC Enterprise M3000 x 2
- Fujitsu ETERNUS DX440 x 2
- Fujitsu ETERNUS SF AdvancedCopy Manager

data. Data would be further protected using Fujitsu's data snapshot, replication and management software.

BENEFIT

Based on the highly robust Fujitsu clustered system platforms, the HIS and PACS systems greatly improved the quality of the hospital's medical care and management. Patient satisfaction and wait times have also improved; particularly as patients no longer need to retrieve their paper based file records before seeing a doctor.

The ability to monitor and more accurately ensure overall hospital operation has also been achieved. This includes real-time processing of doctor diagnoses, automatic data acquisition from tests and patient monitoring equipment, plus the automatic transfer of clinical testing requirements and analysis reports. Such centralized control has laid down the foundation for comprehensive management systems covering clinical/medical information, decision-making support, medical image transfers and remote consultations.

Staff also more easily work with the new system, which provides functions that more directly facilitated their operational efficiency. In the financial department of Chizhou People's Hospital, errors previously caused by manual operation are now avoided. Payment processes are also based on real-time calculations. In addition centralized management makes financial information more transparent with budgeting and expenditure calculations much easier than ever before.

With the HIS system connecting directly to each department, data can be shared everywhere in the hospital. Synergy within and between each department has improved greatly, allowing allocation of resources to be further optimized. The "one time" electronic input and registration approach has further reduced the numbers of queues and their lengths. Now patients simply sit and wait for their number to be displayed on the relevant screen.

The hospital is able to maintain a "health folder" for each patient, which can be referred to if the patient visits the hospital again. Doctors are also able to check all data stored about each patient from their PC. Because centralized patient data can be used everywhere in the hospital, errors and mistakes caused by transcription errors and lost documents has decreased dramatically. The centralized electronic storage has also saved space, time, while greatly improving the efficiency of information management and retrieval.
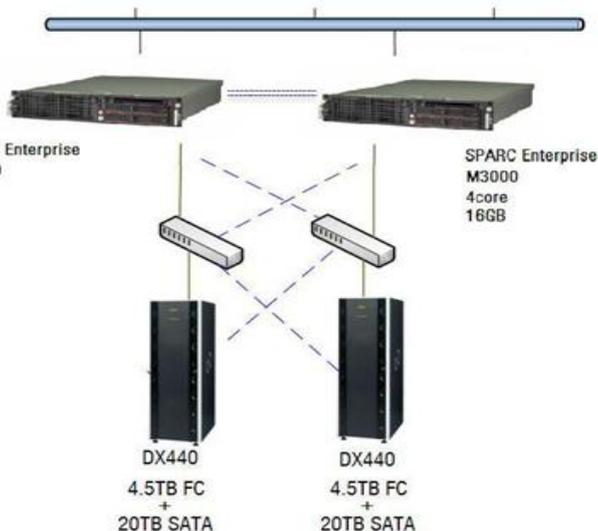
CONCLUSION

Satisfied with Fujitsu's complete and reliable product line and own independent R&D ability, the management of the People's Hospital of Chizhou saw that Fujitsu and its software partner were able to provide complete solutions right from the primary stages of the design. This included engineering, technical expertise, and communication and design of products and solutions, from a customer's point of view. This met the hospital's needs and won trust and recognition of the Fujitsu brand.

Fujitsu is further developing strength in the healthcare industry based on such successful experiences and the building of a strong customer base. Its long ICT industry expertise, and work with specific industry partners using a range of equipment and solutions is resulting in customer systems with optimized performance and reliability. A customer focused philosophy and a complete product line is also ensuring that customer requirements are met in every aspect. Fujitsu's comprehensive strength in the medical industry in China is further proved through this project.

ABOUT FUJITSU

Fujitsu is a leading provider of ICT-based business solutions for the global marketplace. With approximately 170,000 employees supporting customers in 70 countries, Fujitsu combines a worldwide corps of systems and services experts with highly reliable computing and communications products and advanced microelectronics to deliver added value to customers. Headquartered in Tokyo, Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.6 trillion yen (US$50 billion) for the fiscal year ended March 31, 2010. For more information, please see: www.fujitsu.com