

# CASE STUDY

## NATIONAL SHENYANG ANIMATION BASE

»TO BE HONEST, THE FUJITSU BLADE SERVERS ARE REALLY VERY RELIABLE. WE HAVE USED THEM FOR MORE THAN HALF A YEAR, AND THERE HAS BEEN NO PROBLEM«

**Mr. Ren, Responsible for IT Platforms and Infrastructure, National Shenyang Animation Base**



### THE CUSTOMER

Shenyang is the largest city in Liaoning Province, north-east China and among the top 10 largest cities in China. It covers over 13,000 square kilometers and has a population catchment of 7.2 million, with an urban population of 4 million.

The Shenyang government plans to build the city into “the animation & comics capital in China.” The planning for this project began in May, 2004 and was approved as a national project in June, 2006. The aim was not only to cover the needs of animation & comic creation but also those of on-line and mobile computer games developers. An educational institute, advertising businesses and other related business functions would also be developed. So far, in addition to local company startups, enterprises from Korea and Hong Kong have also set up development centers within this base.

Although several animation companies had established in the Hunnan New District of Shenyang in 2002, few people were aware of the potential opportunities in the animation industry. Even at the beginning of 2007 when more than 20 animation enterprises had set up in the district, the city government was still treating them just like any other software enterprise. But as awareness and recognition of the animation industry increased, city and district governments began to also note how rapidly the industry was growing. This resulted in the creation of an animation industry office, set up to conduct overall unified management of all animation enterprises in the city.

It was at this time that Shenyang also started to build itself as the national animation city, as well as actively state its goal of becoming the leader in the animation industry in China. However, completing the perfect animation base project to meet this vision was not so easy. A major problem already existed for the animation companies. Due to the lack of local high-end animation support technology, they constantly spent a great deal of time and money on business trips to Beijing and Shanghai, where they leased professional animation equipment.

### THE CUSTOMER

Country: The People's Republic of China  
 Industry: Entertainment  
 Founded: 2007  
 Employees in the area: 5,000  
 Website: [www.sydmd.gov.cn](http://www.sydmd.gov.cn)

### THE CHALLENGE

As a key government sponsored project, the IT systems within the base were required to be supported by excellent platform products with high reliability and the best possible price/performance ratio. Blade servers were recognized as the best solution to solving such problems at the customer site.

### THE SOLUTION

Fujitsu provided a prototype machine for testing. At the same time the Fujitsu ETERNUS4000, M500 disk storage systems also demonstrated far superior results during the testing. The resulting bundled solution of Fujitsu PRIMERGY and Fujitsu ETERNUS became the key to Fujitsu gaining the advantage in terms of a cost-effective total platform solution.

**THE BENEFIT**

- Solved both space and heat problems in the datacenter
- Reinforced Shengyang's leading position in information technology infrastructure in China
- Fujitsu's top-line support capability
- Reduced costs for the customer and the customer's customers

**PRODUCTS AND SERVICES**

- Fujitsu PRIMERGY BX620 blade servers x60
- Fujitsu ETERNUS 4000 M500 storage system

This high cost structure, imposed on the animation companies, also placed a great deal of pressure on Mr. Ren and his team who were responsible for all the equipment including the IT platforms and infrastructure. Mr. Ren says, "Because such professional machines were not available anywhere in Liaoning Province, animation companies within our base had to go to Beijing and Shanghai for high-end support. This included the use of imported editing machines, motion capture systems and rendering systems." Such equipment is very expensive and the fees for their use, especially in Beijing, are particularly expensive. The cost of renting high-definition motion editing machines and large rendering cluster systems for example is in the order of tens of thousands of RMB per machine per day. As a result, Shenyang city considered having a professional technology platform of its own."

**THE CHALLENGE**

As a key government sponsored project, the IT systems within the base were required to be supported by excellent platform products with high reliability and the best possible price/performance ratio. This was to ensure a solid foundation for the project that would allow it to develop successfully. The IT systems required to construct the public animation technology platform would also provide the motion capture systems, render farm clustering systems, sound synthesis/generation systems, game evaluation systems, and operational systems for the various enterprises.

With the Shenyang Animation Base growing rapidly, existing platforms would not meet the application needs of the enterprises in the base. Systems expansion, especially for the render farm clustering system, would be urgently demanded. Blade servers were recognized as the best solution to solving such problems at the customer site.

For phase II of the project, Mr. Ren says "We were also confronted with many hurdles, first of which was the initial plan. Because of the rapid growth of the animation enterprises in our base we were afraid that the planned platforms would not meet future needs. Second was the implementation and application costs, they would have to be carefully considered. Third was the overall management. Due to the extensive needs of machine room management, centralized management, thermal management, and wiring and layout design of the machine room it was essential that the right levels of cooling and expansion management were addressed." This required that many potential problems and difficulties had to be taken into account, especially the challenge of scalability, stability and performance.

Mr. Ren was already aware of Fujitsu's PRIMERGY server products and its support and service capability. So, when the opportunity arose, Fujitsu were seen as a potential candidate for the Phase II Shenyang animation technology platform project

**THE SOLUTION**

Fujitsu proposed Fujitsu PRIMERGY BX620 S4 blade servers and expressly promoted the thermal design concepts and Fujitsu's approach to chassis and server development. As a result they were granted permission for the Fujitsu products to be tested.

Well aware of the good performance characteristics of both the phase I and competitor's servers, Fujitsu provided a prototype machine for testing. Through the dedication and perseverance of the sales staff coupled with excellent technical support from pre-sales engineers, Fujitsu ensured successfully testing of the prototype blade server infrastructure and the customer was very impressed with Fujitsu's high reliability, stability and the unique thermal design.. This they hoped would win recognition by the customer.

At the same time the Fujitsu ETERNUS4000 M500 disk storage systems also demonstrated far superior results during the testing. The resulting bundled solution of Fujitsu PRIMERGY and Fujitsu ETERNUS became the key to Fujitsu gaining the advantage in terms of a cost-effective total platform solution.

Mr. Ren, was very surprised when Fujitsu delivered a blade server system containing 10 blade servers fully installed in a single chassis. His understanding was that Fujitsu was a company that sold lots of quality notebook PCs in Europe and provided high-end servers and storage devices for mission-critical platform systems in telecoms and banks in China. He's first impression therefore, when realizing that Fujitsu had blade servers was: "Has Fujitsu expanded into new product lines with blade servers?"

However, after one month of testing, Mr. Ren and his team were totally impressed by the Fujitsu system's performance. They found that the blade servers not only provided excellent reliability for all system uses, but also performed uniquely in the areas of unified system management, cooling, small footprint, cabling convenience, and energy-saving. The team started another test that compared their previous blade servers with the Fujitsu blade servers. They found that the Fujitsu machines were very adaptable to their environment. For example they servers ran well even if just plugged in to standard untreated 220V power supply sockets in the wall. In addition, the performance was amazing. The 10 blade server system outperformed the existing 40 graphic workstations. Moreover, what delighted Mr. Ren the most was that during the one-month test, there were no machine problems, meaning not a single incident, error or shutdown occurred. The Fujitsu machines demonstrated complete reliability and ran continuously for the whole month.

Fujitsu had convinced Mr. Ren and his team by not only passing the strict tests but also by solving all other issues of concern. All this made Mr. Ren believe that Fujitsu would be the ideal partner for the phase II Shenyang public animation technology platform project.

In the ensuing six months the daily deployment and post implementation support from the Fujitsu team further strengthened the customer's belief that they had made the right choice. For Mr. Ren, who had no experience of Fujitsu blade servers, his "new choice" did not cause him any trouble whatsoever. In fact while 6 people were required to manage the 8 modules of the public animation technology platform, just one or two engineers were able to manage all the Fujitsu blade servers; without any need to even enter the datacenter.

In this the thermal design of the Fujitsu blade servers and chassis was another important factor, which led Mr. Ren to completely accept the Fujitsu products.

Typically the heat emissions from blade servers are concentrated and generate more hot spots than standard rack servers. So with the animation base needing to meet the future needs of both existing and new animation enterprises, the team needed to carefully plan and design system cooling capability and scalability. Fujitsu's efficient and lower heat thermal design helped simplify this overall design.

Mr. Ren is very confident with Fujitsu's power efficiency. "The power saving features even in the boot process, are very impressive. We did not need to increase the number of UPS in the datacenter, and overall power output only increased slightly. In addition, the quiet operation of Fujitsu blade server's is also excellent." In commenting on his good experience, Mr. Ren also says. "In particular I have a direct economic benefit; I can save money on my energy bill"

Overall Mr. Ren was very satisfied with Fujitsu's careful consideration to customers. "If there is any problem, as long as you call them, Fujitsu will immediately solve it. If they cannot do it right away, they will proceed with an internal meeting for study and discussion, and later notify you by phone or provide on-site service." His overall impression and strength of feeling is "quick response," especially the service provided by Fujitsu.

#### THE BENEFIT

Fujitsu PRIMERGY blade servers with their compact and highly efficient thermal design successfully solved the space and heat problems at the customer's datacenter. In addition, using Fujitsu's centralized blade server management and top-line customer support, the Shenyang Animation Base could now easily deal with any problem, whatever the circumstances. Other environmental-friendly features, including the energy savings and silent operation also impressed the end users very much.

Commenting on systems support, Mr. Ren says: "Every time an engineer comes to say, replace a component, they provide total support. Not only will they solve any immediate problems but they will also check other details, including configuration problems." For example, they check power supplies, related equipment, and even for possible system problems. The service is very "in place", and Mr. Ren indicates his delight at Fujitsu's meticulous approach.

#### CONCLUSION

As a result of Shenyang Animation Base finally deciding to choose Fujitsu for their phase II project, total 60 Fujitsu PRIMERGY 2-way blade servers and Fujitsu ETERNUS4000 Model 500 disk storage system were implemented for the first-phase of the rendering farm system platform.

"To be honest, the Fujitsu blade servers are really very reliable. We have used them for more than half a year, and there has been no problem" Mr. Ren says "I am satisfied by their speed and reliability"

The 60 Fujitsu PRIMERGY blade servers and Fujitsu ETERNUS storage system act as backbone support for the eight major modular systems in the National Shenyang Animation Industry Development Base.

This well positions Shenyang Animation Base in ensuring a solid base for the successful development of this project. They can also count on the high reliability and excellent cost/performance ratio of the Fujitsu platform solutions to ensure a solid base for successful development of this project, as well as ensure their leading position in information technology infrastructure in China.

A proud Mr. Ren says: "you WILL NOT find such a perfect animation platform elsewhere in China." This service now provides a first-class national animation technology platform base for more than 100 animation enterprises. Shenyang Animation Base has already acted as a benchmark for further animation industry development in China as well as building a strong base for the animation rendering market in China."

The Shenyang animation technology platform project was fully commenced in 2007. So far phase 2 of the project is now completed and 40 million RMB had been invested. Mr. Ren talks about the future. "The Shenyang city will continue to invest 20 million RMB annually for this project, for a total 100 million RMB investment over 5 years."

As well as the Shenyang Animation Base introducing ongoing expansion projects, The Liaoning provincial government is also about to set up more R&D zones for development in the animation industry.

It is Fujitsu's intension to both strengthen its customer and partner relationships and seek out further opportunities with ingoing projects within the Shenyang Animation Base and new projects at other bases.

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2009-12-22 WW-EN

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