



SUN AND CHENGDU HANDSEEING INFORMATION TECHNOLOGY CO.,LTD.

ENABLING A RICH AND ENGAGING ONLINE COMMUNITY

Industry

Online Community

Customer

Hainan Tianya Online Network Technology

Business Issues

- Unattractive website design and user interface
- Low website viewership
- Poor knowledge of target audience
- Inability to cope with high web traffic
- Low business revenue

Solution

A comprehensive suite of Rich Internet Applications (RIAs) was created to offer richer and more interactive content to Tianya Online visitors. RIAs were developed with Handseeing's powerful JGnet development engine, based on Java applications, running on highly compatible Sun products and technology.

Business Results

Cost Savings

- Reduced product operating and maintenance costs
- Reduced input costs by 10%
- Saved development costs by 30%

Increased efficiency

- Increased operation efficiency and staff productivity

Notable Effects

- Pioneered China's first client-class real combat Webgame business model
- Began China's first RIA Community profit model
- Achieved higher security level by 20%

Products/Services/Solutions

- Sun Fire T1000 Server
- Solaris OS
- Java
- JGnet

URL Reference

<http://partneradvantage.sun.com>
<http://partner.sun.com.cn>

Hainan Tianya Online Network Technology used to be a comprehensive but traditional web portal that serves a diverse array of social networking channels and tools for its community members.

Faced with low web viewerships due to a lack of engaging content and unattractive user interface, Tianya Online sought help from Chengdu Handseeing Information Technology Co., Ltd., a partner of Sun Microsystems to overcome these challenges.

Sun partners Chengdu Handseeing Information Technology Co.,Ltd. to deliver a richer virtual world

Launching a comprehensive study into Tianya Online's problems, Handseeing established three key goals together with Sun to help solve Tianya Online's challenges and needs. First of which was to deliver a rich and interactive multi-media content to users; second, to optimize users' experience through Java-compatible applications; and lastly, to enable stable and efficient operation even during peak usage periods.

Challenges facing Tianya Online

While China's online gaming and social networking community is seeing robust growth, it did not seem to be the case for Tianya Online. According to China Online Market Report (2007-2008), the online gaming and social networking industry was estimated to be worth RMB\$6.88 billion to Chinese online game developers. Future growth forecast is also promising given the 65% year-on-year industry revenue from 2007 to 2008. In such a strong market, Tianya Online should have been experiencing a 23% growth proportionate to market trends. However, visits to its site were very much below target.

To improve its market share, Tianya Online would first have to increase its user base by providing a better user experience. The lack of engaging content and an unattractive user interface were main factors contributing to its low viewership and participation. Another hurdle was the inability to cope with demand for bandwidth-intensive high-resolution graphics interfaces.

To overcome these challenges, Tianya Online needed to gain the capability to provide captivating and interactive user interfaces and rich multimedia content that is not so highly dependent on a high bandwidth to run smoothly. The answer to this lies in Rich Internet Applications (RIAs).

Choosing the best solution provider

Handseeing was established in 2005 by a group of entrepreneurs with more than 10 years of experience in the web gaming industry. It is the first large-scale gaming company in Chengdu, China and one of the top three web gaming companies in the Huanan region.

After the technical study, Handseeing went straight into action, designing a suite of complete "super-community" solutions deploying Sun products and technologies for Tianya Online.

Handseeing used its Java-based application, JGnet, to revamp Tianya Online's website for a new look and feel. JGnet is China's first RIA system, and incorporates both client- and server-side applications on a common platform. It is developed entirely on Java, and is able to support multiple platforms, and therefore handle data that is encoded in various formats. JGnet's powerful capabilities made it the ideal tool for developing large-scale and complex sites that are accessible through various platforms – exactly what the Tianya Online site required.

In doing so, Handseeing helped Tianya Online to create a new revenue generation model through improved features. The site now features blogs, classified advertising, photo sharing, news, sports, and university information. It also boasts of new offerings like travel and tour portals, an internet lottery sales platform, a 2D Massive Multiplayer On-line Role Playing Game (MMORPG) PK1937, an online search tool for looking up friends like the Tianya Laiba, and a forum platform such as the Tianya Wenda. The new features were effectively conceptualized to improve Tianya Online's advertising campaigns and subscription transactions.

The Sun advantage

Handseeing recommended that Tianya Online adopt Sun's dedicated solutions and platforms in hosting the newly-developed RIAs as they would allow them to gain optimal hardware and software compatibility and realize greater operational efficiency.

To achieve the ideal price-performance ratio, Sun optimized the corresponding hardware and customized software to fit the solutions that Handseeing had developed for Tianya Online. The Sun Fire T1000 Server, with its feature-rich and comprehensive configuration, high-workload capacity and cost efficiency, was proposed as an integral piece of hardware to support Tianya Online's requirements. The unique advantages of Sun's CMT technology in running Java applications also allowed Tianya Online to achieve optimum performance, thereby reducing the scale of equipment required to increasing operational efficiency, while at the same time reducing costs.

To ensure optimal user experience, Solaris OS was selected for its ability to deliver performance, stability and security. Java technology's versatility, efficiency, platform portability, and security allowed Sun and Handseeing to create a profitable solution for Tianya Online by using a single platform with several programs running within a Web browser.

Java has greatly enhanced the development of Tianya Online's server side applications for online forums, stores and polls, among many other services.

“The Super-Community solution of Handseeing gives Tianya Online another valuable option for income generation. Handseeing technology is splendid.”

Wu Ge, Vice President of Tianya Online

Through the combination of Sun's systems and solutions, Tianya Online experienced a 10% reduction in input cost while achieving markedly higher performance. The high level of compatibility between the Java programming language and other hardware and software technologies allowed Handseeing to provide support to customers through a single configuration server. While most servers from other brands can only support two games with a user base of 3,000 people, the Sun-Handseeing single solution can support four games with a user base of 6,000.

Java's powerful capabilities also helped Tianya Online save 30% on content development costs and achieve a 20% higher security level compared to similar products written in other development languages. Compared with C++ and Flash, Java's versatility in developing Graphic User Interfaces (GUI) does not require any third-party libraries, thereby allowing the Sun-Handseeing solution to run on any platform. Its language security features, in addition, ensure protection against malicious codes, restriction to access by other memories, and verification of byte-code. Another feature of Java is the use of servlets that enable the dynamic processing of information and the generation of real-time responses for various database interactions.

During a ten-month product-testing period, neither interruptions with the programs nor glitches with hardware systems were encountered. The launch required only one maintenance personnel to be on standby for an operation hosting 20,000 people online, simultaneously.

Another manifestation of the Sun-Handseeing solution is the creation of a RIA real-time combat webpage. Designing and running a real-time, online combat video game has been a long-standing challenge of the gaming industry. The need for optimal image rendering and smooth and responsive game performance in the face of massive numbers of players can be a

daunting hurdle, and at present there are only a few companies that are able to successfully market such games.

With Java technology, Handseeing created a 2D-realtime combat webpage, Qing Cheng, which can efficiently operate within web browsers, boasting impressive graphical performance and operation. With Sun's optimized servers, hardware and Java-based software systems, Qing Cheng is an exciting product with a favourable C/P ratio, high efficiency and stability of operation.

A big leap forward: Leading the digital world and re-inventing virtual communities

With an improved interface, and more dynamic digital content, Tianya Online began to see more users coming online. Visitors numbering the thousands began to actively use its services and applications. To date, Tianya Online commands an average of 30,000 users online simultaneously at any given time. This has directly resulted a 100% increase in monthly revenue - a concrete evidence of profitability and sustainability. Today, Tianya Online is the biggest networking community in China providing a series of functions and services, such as personal space, album, music box, in-site messages, and virtual stores on top of the blogs and forums.

Tianya Online has managed to successfully overcome previous hurdles, and meet the demands of its users for interactive and engaging content. However, web portals like them must keep up with fast-paced innovations on the digital landscape and insatiable consumer appetites. With Sun's powerful and reliable solution suite, and Handseeing's innovative and cutting-edge development, Tianya Online's dream of transforming the virtual world is within reach.

Learn more

For more information about Sun, please visit www.sun.com

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