China's #1 video conferencing provider implements GIPS VoiceEngine PC VoIP solution

Fast testing and implementation speeds time to market for new V2 Conference 5 videoconferencing system

When China's premier video conferencing provider was looking to improve the voice processing element of its online services, it turned to Global IP Solutions – the leading provider of embedded voice-processing solutions for the Voice over IP (VoIP) market – to deliver a fast and efficient solution.

V2 Tech is one of China's hi-tech success stories. Established in 1999, by a group of Masters degree graduates from Tsinghua University, it is one of the most dynamic tenants of the Tsinghua Incubation Center, and has for the third consecutive year been ranked China's No. 1 video conferencing solutions provider by Wainhouse Research.

Today, V2 Tech dominates the domestic videoconferencing market, having captured 25% - 30% market share in the total market. In addition, the company has successfully implemented its services overseas, with its largest single deployment for a customer with more than 100 sites in China and overseas.

With customers including branches of the Chinese Government and Chinese military, educational facilities, and telecomms providers, as well as financial and commercial enterprises, quality of service has always been of paramount importance at V2 Tech. It was this continuing drive for quality that led the company to reassess the voice processing element of its latest introduction, the online V2 Conference 5 videoconferencing system.

V2 Conference 5 videoconferencing system is based on the latest IETF XMPP standard. It is a robust, modular, distributed, highly scalable product that has been designed to be flexible enough to enable future extension and includes new functionality and features that offer users a unified and complete, total multimedia network communication solution.

The system supports a multi-server cascade deployment structure that means users are able to deploy numerous servers across different geographical locations to roll out the service. This flexibility helps to share the processing burden and offset any possible network connection bottlenecks among all available servers. Using this network topology, users are able to connect to the nearest server, for the most direct route into the system, this approach also helps to expand the whole system and it means it can accommodate more than a thousand users.

Fast testing and implementation speeds time to market for new V2 Conference 5 videoconferencing system

Supporting the use of H.323 conferencing, and enabling connection with other H.323 software and hardware equipment, including standard H.323 software/hardware terminals, H.323 MCU, videophones and other input/output devices, V2 Conference 5 is also able to offer conference security authentication with H.323 devices.

Seamlessly uniting videoconferencing and Instant Messaging on the same operating platform, the V2 Conference 5 system enables users to message each other, conduct instantaneous meetings, and schedule conferences. Further, users are able join conference sessions using a standard landline or mobile phone, meaning that users on the move, or those unable to get online, are able to participate in any discussions. It was this VoIP element of the development that proved to be the biggest challenge for V2 Tech when bringing V2 Conference 5 to market. Historically, V2 Tech had been using an in-house developed voice-processing application, with mixed results. Quality was often compromised by bottlenecks leading to packet loss and issues of echo control.

After careful consideration, V2 Tech selected the GIPS VoiceEngine PC Advanced solution to handle all the necessary voice components for VoIP, ensuring superior voice quality even under adverse network conditions. VoiceEngine supported all the existing standards and offered improved voice quality by the unique configuration of its components and improved handling of the hardware.

"We carefully assessed a number of different options for the voice element of V2 Conference 5," said [name / title] of V2 Tech. "Global IP Solutions was the technologically superior solution, as it was able to readily address our two specific challenges. But it was the obvious speed-to-market capabilities that clinched the deal.

"GIPS provided excellent local-language technical support and extremely quick response times. We worked very closely and were able to fine-tune VoiceEngine PC to suit our very specific needs. You simply don't get this level of flexibility and support from many companies and it has made a real difference to the introduction and marketing of V2 Conference 5. We were able to reduce our development lead-time significantly, taking just one month for testing and two to three months for adjustment/fine-tuning."

Fast testing and implementation speeds time to market for new V2 Conference 5 videoconferencing system

Using VoiceEngine PC, V2 Tech was able to accelerate time-to-market and reduce development costs. V2 Tech developers did not have to worry about solving complex issues, such as the lack of real-time operating systems, sound card management, clock drift and network degradation, that all affect voice quality on the PC. By implementing VoiceEngine PC, V2 Tech has been able to leverage Global IP Solutions' patented technologies and expertise to rapidly bring voice-enabled applications to market.

"Our VoiceEngine PC provided V2 Tech developers with the necessary interfaces and components to implement voice on any soft-client application via a single, high-level API," said John Fargis, General Manager - Asia Pacific, Global IP Solutions. "No additional 'plumbing' was required, allowing V2 Tech to focus on core application development rather than the complex integration and tuning of sound processing software."

V2 Tech has already earned a reputation in China as a provider of leading edge, highly reliable technology with excellent support services. Its products are in use across China, in such diverse organizations as the China Construction Bank, China Civil Air Transportation Administration, COSCO, Hainan Automobile, the Hunan, and Xuzhou Tax Administrations, Inner Mongolia Electricity Power, SINOPEC and Wal-Mart.

"In the future, we intend to build on our dominant market position, as the software-based video conferencing market still has a lot of potential, and also because it is easy to install, and the initial investment and upgrade costs are relatively low," concluded [name / title]. "We will also continue to expand our relationship with GIPS as they are one of our most reliable partners. With their assistance, and with the help of their advanced products and services, we expect to expand the market and further diversify our businesses, including investing in Ivage, the video conference rental service, as well as V2 Tone and Internet video phone, which could compete with Skype."