A CASE STUDY

ejabberd exceeds expectations at SIPPhone

SIPPhone is a strong advocate of industry standards.

Based in San Diego in the USA, the company provides a range of voice over IP (VoIP) services for consumers and businesses. It decided to introduce new instant messaging capabilities for its customers and realised that the use of industry-recognised protocols would be the key to its success.

''We believe that industry standards are the way forwards for this industry,'' says Matthew Reilly Software Engineer at SIPPhone. ''The compatibility of our solutions with other established systems helps us to compete very strongly with proprietary solutions from other vendors.''

SIPPhone wanted to establish a new instant messaging service that would be highly available and robust. To gain the trust of new users, its solution had to be both easy to use and reliable.

Meeting the brief precisely

The company carried out an extensive market review to find the most suitable instant messaging server with which to deliver its new service. Reliance on industry standards was, of course, a prime requirement. In addition, however, SIPPhone needed a server that could support large numbers of concurrent users per node, to limit hardware and administration costs. It also needed to be able to customise the server easily and integrate instant messaging capabilities seamlessly with its VoIP provision.

ejabberd met the brief precisely. Based on the widely accepted eXtensible Messaging and Presence Protocol (XMPP), standardised by the Internet Engineering Task Force, ejabberd is a high-performance instant messaging server. It is an open source solution, so SIPPhone was able to licence the technology free of charge. It is also highly robust and offers a large number of built-in features for improving the performance of instant messaging services.

Goals

■ **Integrate an instant messaging service with VoIP**

■ **Provide high availability and reliability for customers**

■ **Adopt industry standards to future-proof the service**

Solution

■ **ejabberd instant messaging server**

Benefits

■ **Easy to customise and integrate with existing VoIP system**

■ **Compatible with other messaging systems, due to the use of industry standards**

■ **Scalable to meet future business growth**

■ **Fault tolerant, ensuring high availability for users**

Process One specialises in developing high-performance messaging solutions based on the ejabberd server and provided SIPPhone with assistance to acquire the solution. SIPPhone had a strong team of software engineers who were able to customise the server and build a bespoke solution in-house. However, experts from Process One were available throughout the project to provide the team with advice and support when required.

Delivering a robust and scalable service

Engineers at SIPPhone soon realised that ejabberd was a very effective toolbox. They quickly developed a highly robust messaging service in line with business expectations and integrated it easily into the company's existing VoIP infrastructure. Throughout the project, the company experienced no segmentation faults or buffer overloads.

"Simply put, it works," says Reilly.

It was very important for the messaging solution to support large numbers of users. ejabberd scales naturally to handle thousands of simultaneous users connected on a single ejabberd node, but also has an in-built clustering feature. Through the use of clustering, companies can make their solutions even more scalable and increase fault tolerance at the same time.

Maintaining high availability

SIPPhone launched its new messaging capability as a feature of Gizmo Project, a free-to-use VoIP service for consumers and businesses. Now, users of Gizmo Project can exchange messages instantly with friends, family and colleagues. Due to the use of industry standards and gateways, the service allows users to 'chat' with users of compatible systems too, such as Yahoo Messenger, Windows Live, Google Talk and other Jabber-based systems.

Since going live, the solution has been very reliable. ejabberd allows engineers to perform updates on code without loosing the connection or needing to restart the server. As a result, SIPPhone is able to troubleshoot the system and perform maintenance, while keeping users connected and chatting. "This is a very important benefit, as it allows us to maintain a high level of availability for our customers," says Reilly.

He concludes: "We have now been using ejabberd for over three years and it has performed beyond our expectations."

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Matthew Reilly
Software Engineer
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