



CASE STUDY

Challenge

Thousands of miles and many bodies of water separate United States Army service members, and their families, while deployed in Iraq.

Utilizing existing satellite phones, personal communications between service members and their families was difficult and expensive, and the U.S. Military began searching for a cost-effective and reliable method for personal communications.



“Asterisk provides domestic calling services for military personnel in Iraq. Innovation Award Winner Intuittech provides a 10,000 concurrent call Asterisk-based solution for U.S. Military members overseas..”

Solution

Mike Spratt, from Magic Islands Solutions contacted Intuittech, a Malaysia-based Asterisk solutions provider.

Through careful planning and design, Intuittech crafted a highly-scalable and cost-effective Asterisk solution for the U.S. Army in Iraq. Now, soldiers enjoy the ability to easily and affordably communicate with loved ones in the U.S through the use of wired, wireless, and web browser-based telephones at Army bases in Iraq.

Army service members now enjoy the benefits of an ultra-modern communications solution, including voicemail-to-email, personal US-based Direct Inward Dials, and the choice of telephones.

Implementation Dr. Daniel Krahenbuhl, President and CEO of Intuittech outlined the many challenges that arose in this complex project. “Scalability and reliability were major factors,” notes Dr. Krahenbuhl. “Many back-end load-balancing and high-availability considerations were implemented through the flexibility of Asterisk.”

The Intuittech team utilized a modern and innovative approach towards system architecture that proved to be extremely successful in this project.

Through the use of over 20 blade servers located in an Iraq datacenter, Intuittech’s solution included 10 Asterisk servers, real-time billing and least cost routing systems, and MySQL database clusters containing real-time information supplying the Asterisk dial plan. Through thorough testing, Intuit Innovation estimates that each Asterisk server can handle up to 1,000 concurrent calls, allowing for unparalleled upward scalability. In the event that more demand is needed from the customer, more servers can simply be added to the system. To connect to the Public Switched Telephone Network, Intuit Innovation utilized satellite uplinks to transport calls back to the United States. Reliability of the satellite links was monitored through custom-developed Nagios integration.

Result Intuittech’s custom Asterisk-based solution proved to be invaluable to the thousands of U.S. Army service members who needed a reliable and feature-rich solution for U.S. domestic calling to-and-from Iraq.

All of the project’s goals were met and exceeded, delivering highly-available communications at low costs.

While U.S. Army service members may not immediately realize the true power behind Asterisk, the thousands of calls placed on the system every day prove that soldiers can rely on this system for their important calls to family members and loved ones.

About Intuittech Since our inception, Intuittech has been providing quality-assured, end-to-end integrated Asterisk based Telephony and Nagios Monitoring solutions.

With offices in Malaysia, USA, Singapore, Thailand, Philippines, Hong Kong and China, we design, build, implement and maintain cutting-edge telecommunications and monitoring solutions that leverage on the latest in open source technologies to empower our clients businesses, providing CIO's and technology leaders solutions that deliver business results rapidly, are value driven and affordable.

2009 Digium Innovation “Big Biz” Award Winner

2011 APICTA (Asia Pacific ICT Award) Best of Telco Applications Winner