

Welcome to the ISCnews!

Welcome to the ISCnews, a quarterly publication of and for members of the International Softswitch Consortium.

A newsletter is yet another way to keep our members informed about the activities of both the Consortium itself and others in the industry. And while there is lots to report, there is only so much we can cover in a 4-page newsletter published just 4 times a year. So consider this to be your "Executive Summary" giving you highlights of the news at a high level. Details about the ISC and all of its activities are available on the Web at www.softswitch.org.

As you will note from the articles in this premiere edition of the ISCnews, the Consortium is well on the way to fulfilling its mission to accelerate the advancement and adoption of next-generation packet, frame and cell networks that support voice, data and multimedia communications. The ISC co-sponsored the industry's first major interoperability event, our many Working Groups are hard at work improving the pertinent standards, and our carrier members like Global Crossing are now deploying softswitches for commercial use.

Thank you all for your hard work and continued support of the Consortium. And enjoy reading your newsletter, brought to you by our very own Marketing Working Group.

Sincerely,

Ike Elliott, President

ISC Co-sponsors Megaco Interoperability Event

The International Softswitch Consortium (ISC) and the Multiservice Switching Forum (MSF) co-sponsored a Megaco/H.248 Interop event at the University of New Hampshire, Durham, NH on August 28-31, 2000. Supporting interoperability is a major objective of both MSF and ISC. This event, hosted by Marconi, is the first of its kind designed to achieve ISC's objective to help assure that products and services based on Megaco interoperate fully and globally.

This Phase One Interop event, designed to test the protocol and its documentation rather than individual implementations, was open to active participants with a Megaco-based gateway, controller, parser or test box. It is the industry's first such test of the protocol. Participants included software and hardware vendors, as well as carriers who have developed test setups for evaluating equipment.

"The MSF is pleased to be able to work with the ISC toward the goal of enabling the separation of call control and media gateway functionality," noted Morgan Littlewood, President of the MSF.

"Interoperability events like this are what propel us forward as an industry.

The International Softswitch Consortium is very pleased to help lead the effort to validate the protocols that will make the softswitch architecture a reality," commented Ike Elliott, President of the ISC. "We encourage full participation from all member companies in events such as these, and we will continue to sponsor even more activities that benefit our members and the industry."

More than 45 people attended the MSF/ISC interop event representing 17 participating vendors, including Broadcom, Alcatel, Agilent Technologies, Nortel Networks, T!Semantics Inc, Marconi Communications, RadiSys Corporation, Hughes Software Systems, CCL/ITRI, Ericsson Computer Science Laboratory, GN Nettet, Excite!, ipDialog, Inc., RADCOM Equipment, Inc., ipGen Inc., Pernix, and Radvision.

We are very pleased with the results of this first Megaco/H.248 interoperability event, as it demonstrated the successful implementation of the proposed standard by many different vendors," explained Brian Rosen, Office of the CTO, Marconi, MSF Interoperability Working Group Chair and Technical Advisory Council of the ISC."

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The ISC@Work

The ISC's seven Working Groups endeavor to advance the use of softswitches. Here is an update of the progress for three of these hard@work groups.

Application Working Group

The Application Working Group continues to fulfill its charter to specify softswitch service access and control interfaces with the completion of a draft Enhanced Services Framework document. The framework establishes an overall architecture and defines the critical role of the application server as the means for implementing next-generation services via softswitches. The draft document, which is available on ISC's Web site, has been submitted to the Technical Advisory Council for final review and approval.

The framework document specifies SIP as the recommended protocol for communications between the application server and the softswitch, but work continues to validate SIP and refine the nature of the application server interface. On yet another front, the group has just begun work on a requirements document for a robust interface to the application server that supports features like redundancy, load sharing, failover and more. These folks are really cooking!

For more information contact Scott Hoffpauir at scott@broadsoft.com or (301) 977-4295.

SIP Working Group

With its primary purpose to promote the interworking of signaling between softswitches and the PSTN, the group is helping to advance the cause of the Session Initiation Protocol (SIP) standard defined in IETF RFC 2543. While not a standards body itself, the group will participate in the standards process by reviewing and commenting on all proposed drafts emerging from the IETF, as well as by defining best current practices for SIP. The group will also leverage the SIP-T effort to create a

"profile" for how to implement softswitch-to-softswitch communications.

Specific issues under consideration by the ISC's SIP Working Group include ISUP to SIP mapping, ISUP version negotiation, ISUP encapsulation, STN signaling negotiation, and transport options (UDP/TCP or SCTP). Interoperability and certification issues are also being carefully considered, including creation of test suites and sponsorship of testing events.

For more information contact Eric Zimmerer at ezimmerer@lboard.com or (408)241-4535.

Device Control Working Group

This vital group is progressing steadily toward its goal to facilitate interoperability of softswitches through standard interfaces. The current priority is enhancements to the IETF's Media Gateway Control Protocol (RFC 2705), which is scheduled for an update by the end of 2000. The groups MGCP implementation guide includes clarifications and resolution of inconsistencies, including naming conventions and message flows. The group is advocating a series of extensions involving ATM and RSVP.

The group is also helping to advance Channel Associated Signaling (CAS) efforts, particularly H.248 Megaco framework—a joint activity of the ITU and IETF. Future areas of focus for the group involve MIB support and common packages for both MGCP and H.248, as well as other packages for IP phones, T.37 store and forward, T.38 fax, modem and TDD.

For more information contact Bill Foster at bfoster@cisco.com or (408) 527-8791.

Timely Topics

*by Paul Ritchie,
ISC's Executive Director*

Has it really been just over a year since the first ISC member meeting in July 1999? Has the membership really grown to over 175 businesses with over 500 participants using the ISC email lists? Is there value to an ISC membership? Yes, to all three, and here are just a few accomplishments and future plans to keep you "in the know".

In September, the ISC web site was redesigned with new color scheme and enhanced navigation. Also, each user now has their own login & password for added security. Visit the members only side for updates from each WG and early review of their working papers and presentations.

The ISC has sponsored or participated in numerous events with more on the horizon. The ISC co-sponsored Megaco event was the third interop for ISC during the past 12 months. Watch the current events section of the web if you want to get involved with the next ISC interop, or join a working group before the next member meeting.

ISC representatives have been speaking out about Softswitch technology and here are two upcoming events sponsored and endorsed by the ISC.

- Softswitches for Next Generation Services – A Conference in New Orleans, LA. Nov. 28-30, 2000. Keynote speech provided by ISC Member Allen Adams, IPCell Technologies.
- International Softswitching Congress, Amsterdam, Netherlands, Dec. 11-13, 2000. More than 20 ISC Member companies will be presenting.

Preparations are underway for a great 2001. The ISC recently retained a Public Relations firm to improve the visibility of the ISC mission and objectives. Test scripts are being written in preparation for the next ISC interop event. And, a new work group on Legal Intercept and CALEA was formed to represent ISC members. For more 'timely' information check the web site at www.softswitch.org or contact me directly at pritchie@inventures.com

Ready for Prime Time at Global Crossing

By John Chapman, Global Crossing's Senior Director of VoIP Services

As the communications industry enters the world of next-generation networks, the push is on to move voice via packets, frames and cells. However, when it comes to Voice over IP (VoIP), it seems everyone is working with a slightly different definition. Global Crossing is deploying VoIP not as a product, but as an enabling infrastructure that provides for geographic expansion and new service development. By putting voice and data onto one network, we will be able to offer a host of value-added services and products that traditional phone networks cannot provide, such as unified messaging, managed care and converged services.

Global Crossing is deploying VoIP over our ATM backbone and utilizing our SS7 network to integrate existing traffic from the PSTN onto our VoIP infrastructure at specific Service Control Points. The network is being built to support connectivity between the gateways and the PSTN with Feature Group D or Class 4 services.

In the US, Global Crossing sees roughly three billion minutes of use per month; tandem switching accounts for nearly 80 percent of that currently and we are experiencing about 40 percent growth in traffic per year. Our VoIP backbone must be carrier-class in terms of reliability, performance and scalability.

At the same time, we had to choose a flexible and manageable architecture, so we chose a solution based on softswitches. The softswitch allows for intelligent call routing and control, as well as the ability to provision services more quickly.

In 1999, Global Crossing created a development network (DevNet) between Rochester, Denver and Detroit enabling us to aggressively test vendor equipment for effectiveness and interoperability before implementing it in our production network. A test site in London is also operational. DevNet gives us a network validation procedure for determining operational readiness. After rigorous testing, we chose Sonus Networks' PSX6000 SoftSwitch and GSX9000 Open Services Switch. The Sonus solution will allow us to deploy VoIP at a carrier-class scale using just a handful of softswitches.

To make this architectures serve our carrier-class requirements, the softswitch needs to deliver outstanding performance. Through aggressive testing, we were able to scale the Sonus solution to 1,500 calls per second. All new Global Crossing voice traffic will ride our VoIP network while existing traffic is migrated onto the VoIP backbone.

Global Crossing is building 22 gateway centers in the US with just six softswitches. Initially we will connect

seven cities in Europe, and later extend the VoIP footprint to the rest of the world, including sites in Asia and Mexico. Internationally in 2001, we will construct 30 gateway centers using ten softswitches. The company will complete its US VoIP network by the end of 2000, with all traffic integrated onto the new backbone in 2002.

To leverage our existing investment fully, we needed to build out OSS platforms and applications to interoperate with the nextgen network. This required working through numerous compatibility issues, involving usage and packet billing systems, gateway call detail record integration with legacy billing systems, traffic reporting to accommodate internal traffic statistics and customer reporting, element management system integration for alarm and surveillance management, and modification of trouble ticketing and provisioning systems.

About Global Crossing

Global Crossing Ltd. offers services over the world's most extensive global IP-based fiber optic network, which will have more than 100,000 route-miles, serving five continents, 27 countries and more than 200 major cities. Visit Global Crossing at www.globalcrossing.com on the Web.

www.softswitch.org

10-20-00 - Melbourne, FL INTELLINET JOINS THE INTERNATIONAL SOFTSWITCH CONSORTIUM

IntelliNet Technologies, a provider of SS7oIP Signaling Gateways (an important softswitch element), announced today that they have become a new member of the International Softswitch Consortium. The addition of IntelliNet Technologies strengthens the Consortium by adding backing from an industry leader.

9-19-00 - Roseville, CA NetStream Executive to Chair the ISC's Working Group on CALEA

NetStream, Inc., a next-generation network service provider, today announced that Milt Morris, vice president and general counsel, will chair the International Softswitch Consortium's working group on the U.S. legislation commonly referred to

as CALEA and similar laws. The working group is responsible for assisting ISC members with compliance of the CALEA requirements and standards.

9-12-00 - Fremont, CA First Megaco/H.248 InterOp Event Validates Widespread Interoperability of Proposed Standard for Converged Networks

The Multiservice Switching Forum (MSF) and the International Softswitch Consortium (ISC) today announced the results of the first Megaco/H.248 Interop event held at the University of New Hampshire (UNH) last month. The phase one interop "bake-off," co-sponsored by the MSF, ISC and the UNH Interoperability Lab and hosted by Marconi, united a broad range of participating vendors, and was the first major step in validating the interoperability of the proposed Megaco/H.248 protocol standard.

8-22-00 - San Jose, CA Linux Community Elects Representative to the ISC.

The Linux development community and open source community elected David Sugar as their representative to participate on the International Softswitch Consortium (ISC). Vovida Networks sponsored the open election and has contributed the yearly ISC membership fee, travel and lodging for a member of the Linux development/open source community to participate on the ISC.

**FOR THE FULL TEXT OF THE ABOVE PRESS
RELEASES PLUS MORE INFORMATION
REGARDING THE ISC, PLEASE VISIT
WWW.SOFTSWITCH.ORG**

ISC calendar of events

November 28-30, 2000

Softswitches for Next
Generation Services
New Orleans, LA

December 11-13, 2000

International Softswitching
Congress
Amsterdam, Netherlands

January 23-24, 2001

ISC Semi-Annual Member
Meeting
San Francisco, CA

July, 2001

ISC Annual Meeting
Location to be announced

The ISCnews is published quarterly by the International Softswitch Consortium. The articles on these pages do not constitute an endorsement or confirmation by the ISC of any claims made in those articles. For more information on the ISC contact:

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