



How Cisco IT Integrated Web Collaboration into the Technical Assistance Center

Cisco contact management and web collaboration solutions add flexibility and features for increased customer satisfaction.

Cisco IT Case Study / IP Contact Center / Technical Support Web Collaboration: This case study describes Cisco IT's internal use of Cisco IP Contact Center solutions within the Technical Assistance Center, serving both Cisco customers and Cisco employees. Cisco TAC is part of the Cisco global network, a leading-edge enterprise environment that is one of the largest and most complex in the world. Cisco customers can draw on Cisco IT's real-world experience in this area to help support similar enterprise needs.

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— La Vita Gibbs, Senior Manager, Cisco Global Contact Centers

BACKGROUND

Given the importance of network reliability to businesses, quick and easy customer support provided by highly knowledgeable support engineers is a crucial need. Cisco Systems® customers have come to rely on the Cisco® Technical Assistance Center (TAC) for technical support in managing their Cisco-powered networks, from the front-line support of the Customer Response Center, which fields telephone calls, to the customer support engineers who provide technical support. Cisco TAC has implemented several contact center software solutions, including Cisco Web Collaboration Option, Cisco Media Blender, and Cisco Intelligent Contact Management (ICM) software. Customers can now receive immediate assistance by telephone or the Web.

CHALLENGE

Cisco TAC is a worldwide organization with contact centers located in five U.S. cities (San Jose, Salt Lake City, Houston, Raleigh, and Las Vegas) as well as London, Amsterdam, Brussels, Beijing, Tokyo, and Sydney. With the TAC averaging more than 100,000 inquiries per month through a combination of phone calls, e-mails, and Web requests, Cisco wanted a system that was capable of quickly and intelligently routing each inquiry to the best available TAC representative. And with its 11 contact centers, the ability to integrate resources from all sites was crucial to Cisco TAC's success. "Originally, we were using a model where our contact centers operated on a normal business day based on the time zones in each contact center location," says La Vita Gibbs, senior manager of the Cisco global contact center. "This resulted in all U.S. support representatives being released from duty at 5:00 p.m. Pacific Time and all service and support inquiries then being directed to our Sydney location. Using this model limited our agent availability, making agents accessible only during normal business hours in their particular time zone—which could result in inquiries not being handled by the best agent available. We knew that to provide top-notch customer service, we needed a better way to handle all inquiries routed into each contact center."

SOLUTION

Intelligent Routing

A solution was needed that would virtually connect all the geographically dispersed contact centers and effectively enable inquiries to be routed to the best resource in the network. So, in February 1999 Cisco TAC implemented the Cisco Intelligent Contact Management (ICM) solution to link its 11 contact centers.

Cisco ICM software intelligently routes contact requests originating from the Internet or public switched telephone network (PSTN) to the best resource, allowing an organization to optimize service levels, provide a consistent customer experience across all communication channels, and improve the efficiency of the contact center. Further, it enables a company to implement a single set of business rules that uniformly address customer needs across all contact channels and multiple, geographically dispersed contact centers.

"I had the ICM solution in my business plan for a number of reasons," says Gibbs. "Scalability issues, the need to better utilize my workforce, and the many acquisitions Cisco is involved in—all of which bring new locations into the equation—contributed to my looking toward the ICM solution to improve the efficiency and effectiveness of my organization."

Using simple, skills-based routing rules, Cisco TAC configured the software to make routing decisions based on the agent status data supplied by the automatic call distributors (ACDs) located in each contact center. With agents located around the world in Salt Lake City, San Jose, Raleigh, Amsterdam, London, Brussels, Sydney, and other cities, inquiries can be instantly routed to the best-qualified agent based on language skills and location.

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"For example, during the Sydney Olympics we didn't know if our agents would be able to make it into the Sydney office due to traffic. With our previous model, we would have had no choice but to keep the entire team in San Jose working overtime for the entire duration of the Olympics. But with the Cisco ICM solution, as reps made it in to the Sydney office, I could immediately begin routing calls to these reps and send an equal number of reps home from the San Jose office to alleviate overtime and burnout. We couldn't have done this without Cisco ICM."

Cisco ICM software's ability to integrate with all types of ACDs was yet another benefit. "Cisco is involved in many acquisitions, and we found that if we acquired a company that used a different manufacturer's ACD, it took a large amount of time and effort to integrate it into our existing infrastructure. The Cisco ICM software opened up our ability to integrate much faster," Gibbs says.

Cisco TAC also benefited from the transparent nature of the software, Gibbs says. "The Cisco ICM software is transparent to both customers and agents. The customer doesn't know the logic we're following to route it to the right individual, and the agent is still doing the same job so no additional training is needed. That's just one of the beauties of the Cisco ICM product." Gibbs found that the software also allowed for better use of agent skills: "We have changed very little at the agent level. The changes were made behind the scenes and provide us with the ability to better manage our workforce."

RESULTS

Reduced Routing Costs

Through use of Cisco ICM software, Cisco TAC reduced costs by US\$30,000 per month on tie lines between San Jose and Raleigh and eliminated \$19,000 per month spent on carrier routing. In addition, it significantly reduced IT and administrative support costs and enabled Cisco to dramatically cut phone transport expenses.

Adding Cisco Web Collaboration Option

Cisco customers also can receive assistance through the Cisco TAC Website, which provides immediate access to the same interactive technical support tools, resources, and information used by Cisco TAC experts when providing phone support. Customers can access critical information quickly and effectively and, in many cases, resolve their issues on their own.

"A crucial ingredient in bringing our customers unmatched online technical support was to continue improving and expanding our array of self-help tools and other support materials, while also opening up a new contact medium in the form of a 'click-to-talk' service," says Chris Del Grande, IT analyst for Cisco TAC. "Those customers who cannot find the answer they are looking for on our Website have the option of escalating their request into the TAC. Improving ease of access to live support representatives was a step in the right direction."

To support this effort, in April 1999 Cisco TAC added Cisco Web Collaboration Option (which enables contact center agents to share Web pages with customers while conducting a voice or text chat conversation, as well as to collaboratively complete online forms and to share any Windows desktop application using a Web browser) and Cisco Media Blender (which enables the agent to transfer the Web session (even if it's chat) over to another agent, simply by transferring the call on their phone as they do today) to its system, enabling customers to contact live agents, as needed, directly from the Cisco Website.

Del Grande adds, "We evaluated Web collaboration solutions from eight to ten different vendors and chose Collaboration Server, before it was a Cisco product. Our decision was made in part due to its ability to tightly integrate with a variety of ACDs and the fact that it included a collaboration software development kit that would allow us to customize the application to meet our unique business needs. Additionally, we aimed to make Web collaboration quick and easy for customers to initiate. The Web Collaboration Option was one of the few applications that did not require the use of browser plug-ins or significant software downloads to achieve powerful results."

Enhancing Support Through Customized Interactions

Using Cisco Web Collaboration Option software, Cisco TAC created Cisco Live!, a click-to-talk service that allows customers using the Website to request assistance from a live agent in the form of an immediate callback, a voice-over-the-Internet conversation, or a text chat session. Using the software's browser synchronization capability, Cisco support personnel can guide customers' browsers to the location on the Website that has the answer to their question. For customers phoning Cisco TAC, interaction can take place using the Meet Me feature of Cisco Web Collaboration Option, allowing the support engineer to supplement the conversation with Web-based visual collaboration that is tailored to the customer's needs.

"Our big win with Cisco Web Collaboration Option is the fact that, in essence, we are teaching our customers to fish rather than just giving them one fish," says Gibbs. "The fact that they come to us with a question and we can, very comfortably and at the customers' own pace, show them how to find the answers on the Web means there is a greater chance that, in the future, those customers will use the Web proactively for self-service. We really believe this is going to help us scale because it is making the customer want to go to the Web, as opposed to immediately picking up the phone to call us."

NEXT STEPS

Using the Cisco Web Collaboration Option software development kit, Cisco TAC has deployed two collaborative Java applets to dramatically increase efficiency of problem resolution for many types of technical support inquiries. One of these applets, the Cisco Live! Collaborative Whiteboard, allows support engineers and remote customers to collaborate on a network topology diagram for network design, discovery, or troubleshooting purposes. The applet can be downloaded to all participants' browsers upon demand during a Cisco Live! session, providing an easy-to-use palette of networking shapes, icons, text, and colors.

The other custom Java applet, in early stages of deployment, is the Cisco Live! Collaborative Telnet feature. It enables Cisco support engineers to connect to a customer's network device by telnet and begin troubleshooting exercises. The customer can watch the support engineer's actions and also actively participate in the troubleshooting session, creating a valuable learning experience. As with the Cisco Live! Collaborative Whiteboard, the Cisco Live! Collaborative Telnet applet runs locally on each computer, allowing all participants to save and print the session.

As expected, the addition of Web collaboration and live human interaction to Cisco TAC's customer care offerings has boosted customer satisfaction levels. Currently, on a scale of 1 to 5, customer satisfaction scores for Cisco Live! interactions are 0.2 point higher than telephone calls only and 0.4 point higher than e-mail-only interactions. And with the Cisco solutions implemented into Cisco TAC's infrastructure, the center's goal has been realized—greater ease of access for customers.

FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT www.cisco.com/go/ciscoit

NOTE

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Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

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