

Cisco IT Brief

Digitizing Technical Support in a “Virtual Room”

The Opportunity

Two years ago, Cisco IT and Cisco Technical Assistance Center (TAC) engineers decided to streamline the support process for Cisco customers and engineers. It was a process ripe for digitization. Customers called a 1-800 number or filled out a form on cisco.com, or sent an email to tac@cisco.com. Then, they waited for a phone or email response. Once the support process was underway, the customer fed critical data to the TAC by uploading their observations and files—such as photos, screen shots, config files, trace route files, and even core dumps—so that a TAC lab engineer could replicate and work to solve the problem.

A technical support case can take minutes, or several weeks to resolve, depending on its scope or severity. It also might require input from a team of subject-matter experts. So, what starts as a conversation between a customer and one engineer can quickly evolve into a problem-solving project with several experts working with shared information. And every time an engineer or customer is added to the case, or the case rotates to another time zone, all previous emails and uploaded files must be forwarded, along with contact information, to new people. Use of telephones and email quickly becomes cumbersome in this process.

The Solution

The realization that email was never designed to enable a team of people to collaborate in real time and view the same information is how our idea for a “virtual room” experience for technical support was born. The process is meant to reduce the time needed for a customer to make first contact with a TAC engineer by eliminating the need for email and phone communication. The virtual room also can help customers and engineers to solve problems faster by allowing them to text, video call, and share documents in one application space. We outlined seven rules for this experience.

1. The room is created when a case is created and accessible through a single URL.
2. The room is open 24/7 and closed with the case.
3. Everyone can join the room from the application they’re using.
4. The customer or the engineer may invite people to join the room.
5. When anyone enters or leaves the room, everyone is notified.
6. When documents are uploaded to the room, everyone is notified.
7. Every room becomes a thread: All notes, transcripts, and documents are linked to the case and searchable from the TAC’s case management system (Salesforce.com).

We used Cisco Spark as the enabling technology to build this experience. Spark’s API platform also makes it easy to embed collaboration in third-party applications like TAC’s case management system: Salesforce.com’s Service Cloud. In our solution, every time a Cisco engineer accepts a case, Service Cloud automatically creates a Spark room, names it with the case number, and invites the engineer and customer contact. When the case is closed, Service Cloud removes all users from the room and archives the content and event logs to the Salesforce.com case record, preserving confidentiality and security of the information. It also allows Cisco to mine the technical content for reuse. By using the event logs for operational metrics, we can now measure the business value of collaboration in business processes.

The Outcome

The virtual room was field tested with select Cisco partners in late June 2015, and rolled out to the Cisco production environment as a beta feature a year later. Very quickly, we saw that people were connecting faster and spending less time trying to share files and information. Arun Arunachalam, principal engineer in technical services and a former TAC engineer, led the R&D project that sponsored development of this new customer experience. “In 2-3 minutes, anyone new to a case can come up to speed quickly by accessing all the information people have shared about the problem,” he says. “They don’t need to search through emails or navigate across different applications. That’s the value Spark brings to our process.”

Arunachalam adds, “By using Spark’s APIs to embed Spark’s chat, voice, and video capabilities into business applications like TAC’s case management system, Cisco is demonstrating that collaboration can digitize previously disconnected processes and user experiences.”

For More Information

[Cisco IT Adds Spark to the Customer Support Experience](#)