

Telecom Carrier Offers First-of-its-Kind Cloud Security Solution



Executive Summary

- **Customer Name:** BT
- **Industry:** Telecommunications
- **Location:** London, United Kingdom
- **Number of Employees:** 92,600

Challenge

- Improve security of enterprise voice networks
- No holistic view of network environment
- Bolster data security by securing the voice network

Solution

- BT Assure Analytics cloud service, a visual tool that helps identify and mitigate voice and data threats
- Cisco Integrated Services Routers Generation 2 provides voice and data services on a single platform and Cisco UC Gateway Services API allows partners to build security applications for voice traffic, whether via TDM or SIP trunking
- SecureLogix voice policy and security application

BT partners with Cisco and SecureLogix to help customers identify voice and data threats through single integrated solution.

Challenge

A leading global communications company with customers in more than 170 countries, BT offers fixed-line services, broadband, mobile and TV products and services to consumers, enterprise companies, and the public sector. BT Global Services is one of the company's four customer-facing lines of business, providing managed networked IT services for large corporate and public sector customers.

With the rise of "hacktivism," that is, the act of hacking for politically motivated purposes, cyber security has become a top priority for many of BT's customers. According to Jeff Schmidt, global head of business continuity, security, and governance for BT Global Services, "98 percent of businesses that were hit by hackers also suffered from dial through fraud. And many hackers use this fraud to fund their activities." In fact, global telecom fraud losses are estimated to be US\$40 billion annually.¹

To address this problem, BT began developing an intelligent visual data analysis engine that would improve situational awareness and identify voice and data threats in real time. The solution pulls all the information from the network, sets a baseline, and then determines where the anomalies are within the network infrastructure. By visually mapping these anomalies, BT is able to more quickly and easily identify and mitigate threats versus reviewing reams of data.



Executive Summary (continued)

Results

- Gained competitive edge as first provider to offer single voice and data security visualization dashboard to enterprise customers globally
- Delivered cloud application that can work over any service provider's SIP or TDM transport services
- Enabled enterprise customers to gain visibility and control of voice network and accelerated security problem resolution time from weeks to minutes

“Now we can offer our customers enterprise-wide voice security, regardless of their service provider and whether they are using TDM or SIP trunking. We can give them utmost visibility and control of one of the largest assets that they have in their corporation.”

– **Jeff Schmidt**
Global Head, Business
Continuity, Security and
Governance
BT Global Services

Schmidt's team began building the analytics engine for use both internally and externally for enterprise customers. The intention was to bolster its existing BT Assure Threat Monitoring Service, which at the time, primarily focused on data security services. The team knew, however, that this task required market-leading technologies in the security, data, and voice space. That's why the company turned to partners SecureLogix and Cisco.

Solution

Through integration of its voice policy and security applications with Cisco voice gateways, SecureLogix is the first Cisco technology development partner to utilize the Cisco® UC Gateway Services API. The Cisco UC Gateway Services API is a web-based application programming interface (API) that is supported on the Cisco Integrated Services Router Generation 2 (ISR G2) with Cisco Unified Border Element (CUBE) for SIP trunks and Cisco TDM Gateway for time-division multiplexing (TDM) trunks.

By using SecureLogix and Cisco, BT now has full access to data and voice, whether SIP or TDM-based, in order to provide cloud security services integrated on one platform, the Cisco ISR G2.

Joe O'Donnell, vice president of business development at SecureLogix said, “The Cisco UC Gateway Services API gives us rich data in real time that historically would have required customers to deploy dedicated security appliances. When used in conjunction with the Cisco ISR G2, the API allows us to deploy and solve our customers' problems faster, no matter where they're located.” Together, Cisco and SecureLogix are able to offer a complete solution that helps service providers and enterprises achieve a new level of visibility and control over their voice network.

“With Cisco and SecureLogix, BT can now provide the industry's first enterprise-wide security solution for both data and voice, which includes TDM and SIP trunking, integrated onto a single platform, the Cisco ISR G2,” says Schmidt. “And we can prescribe and deliver the solution set that's needed for the customer based on requirements that best suit their business, not what suits the vendor or carrier.” Therefore, their customers do not have to make drastic changes to their architecture to deploy the solution, and they can use any carrier for their edge transport services, even if it is not BT.

Even more importantly, adds Schmidt, is the fact that BT can now identify what is known as the especially devastating “low and slow” attacks. “These are attacks that happen over a long period of time, so they never really show up on anyone's radar,” says Schmidt. “But what the Cisco and SecureLogix solution allows us to do is look at these anomalies and the variations. The workflow then ties into ticketing systems that alert the customer that something is worth looking at and remediating.”

BT Assure Analytics, which now identifies threats for voice and data globally, also relies heavily on Cisco UCS® Express, a server blade that runs on the Cisco ISR G2. “With Cisco UCS Express on the Cisco ISR G2, we are easily able to offer a converged compute and networking platform that hosts SecureLogix and BT's critical infrastructure services,” says O'Donnell. “It allows BT to extend the reach of their cloud architecture, while increasing efficiencies in the environment all on a single platform.”

Secures more than just the enterprise

BT Assure Analytics is used not only by enterprises globally, but the security engine is also used by BT itself. The tool was originally developed as a way for BT to reduce copper cable theft. BT leveraged its analytics engine to find theft patterns in various vectors. The result: “We identified the opportunity to use the data to drive a more proactive approach to tackling cable theft, which is beginning to translate into direct cost savings,” says Schmidt. “Not to mention, better brand reputation by avoiding customer downtime due to stolen cables.” Now the tool has expanded to other security applications and services to help enterprises globally fight voice and data fraud and theft.

Product List

- Cisco UC Gateway Services API
- Cisco Unified Border Element (CUBE)
- Cisco TDM Gateways
- Cisco UCS Express
- Cisco Integrated Services Routers Generation 2 (ISR G2)
- BT Assure Analytics
- SecureLogix Voice Policy and Security Application

Results

As the first and only service provider to offer a single voice and data security view, BT now has a distinct competitive advantage in the telecom market. “Now we can offer our customers enterprise-wide voice security in addition to data security, regardless of the service provider and whether they are using TDM or SIP trunking,” says Schmidt. “We can give them utmost visibility and control of one of the largest assets that they have in their corporation.”

With Cisco and SecureLogix technology, BT and its customers using the BT Assure Analytics engine have already seen an improvement in problem resolution times. “Voice problems that may have taken us weeks or even months to address can now be resolved in a matter of minutes,” says Schmidt.

Despite the myriad of business benefits that come with BT’s new security offering, the true impact of this project has been about thwarting cyber attacks as a whole. “This is truly a global problem,” says Schmidt. “It’s pervasive. It’s devastating. And we believe that collectively, BT, Cisco, and SecureLogix are the strongest companies to help our enterprise customers to battle this phenomenon. Our goal is to standardize not only data but also voice security as an IT best practice.”

Next Steps

Looking ahead, BT Global Services will continue with the development of its BT Assure Analytics service to gain additional clarity into voice and data environments. “The more information we have being fed to us, the better we’ll get,” says Schmidt. “So it’s important that we continue to work extremely closely with our partners, Cisco and SecureLogix, to help ensure that we’re getting the right types of alerts and information from our various Cisco infrastructure components.”

For More Information

To find out more about the Cisco UC Gateway Services API, visit:

<http://developer.cisco.com/web/gsap>.

To find out more about Cisco Unified Border Element (CUBE), visit:

www.cisco.com/go/cube.

To find out more about the Cisco Cloud Intelligent Network, visit:

www.cisco.com/en/US/netsol/ns1172/networking_solutions_solution_category.html.

To find out more about Cisco ISR G2, visit: www.cisco.com/go/isr.

To find out more about Cisco UCS Express, visit: www.cisco.com/go/ucse.

To find out more about the Cisco Cloud Connected Solution, visit:

www.cisco.com/go/cloudconnected.

To find out more about SecureLogix, visit: www.SecureLogix.com.

To find out more about BT, visit: www.bt.com.



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