Policy-Enhanced Session Border Control and TDM Gateways via the Cisco UC Gateway Services API

What You Will Learn

Using the Cisco® Unified Communications (UC) Gateway Services API, many partners, including SecureLogix, are taking advantage of the full access to signaling and media provided by Cisco time-division multiplexing (TDM) gateways and the Cisco Unified Border Element (CUBE) on the Cisco Integrated Services Router Generation 2 (ISR G2) to develop innovative services at the network edge. This document discusses how SecureLogix is using that API and adding value to Cisco's TDM gateway and CUBE deployments through its voice policy.

Background

The enterprise network edge is currently in a state of flux with the introduction of SIP trunking in many markets around the world. An increasing number of businesses today are moving from TDM to session initiation protocol (SIP) trunking to reduce expenses and enhance their voice and unified communications services. Adoption of SIP trunking is enabled by session border control technologies, which provide essential capabilities required by today's IP networks, including session control, security, interworking, and demarcation. CUBE provides robust, secure, flexible, and reliable interconnection between IP networks.

Although many businesses are moving to SIP trunking, many others are still using TDM trunks to the public switched telephone network (PSTN) or have an environment in which some locations access the PSTN using TDM and other locations access it using SIP. Cisco is uniquely positioned to help enterprises with this transition because Cisco offers both TDM gateways and session border control functions on a single platform: Cisco ISR.

Cisco UC Gateway Services API

The Cisco UC Gateway Services API is a single web-based API that allows customer and partners to perform real-time monitoring and control of voice traffic traversing the voice network edge, whether through TDM or SIP trunking. This API is unique in that a single application can be developed for two different products on the Cisco ISR G2: Cisco TDM gateways and CUBE. Therefore, services enabled by this API can extend across all voice gateways throughout the entire enterprise globally to achieve dramatic improvements in control of the voice network edge, no matter what stage the enterprise might be in its transition from TDM to SIP trunks.

Policy-Enhanced Gateways and Session Border Control from Cisco and SecureLogix

By using the Cisco UC Gateway Services API, SecureLogix has integrated its voice-policy enforcement applications with CUBE and TDM gateways, complementing and extending their benefits (Figure 1). With the SecureLogix voice-policy application deployed on a Cisco UCS™ Express server blade, the application can sit directly on the Cisco ISR alongside the Cisco UC gateway and eliminate the need for external voice-policy appliances. This tight integration provides customers with a truly unified policy enforcement solution across their entire unified communications environments from a single management interface. This solution can protect against:

- Voice fraud and toll theft

- Phone-based social engineering schemes

- Telephony denial-of-service (TDoS) attacks

- Harassing and threatening calls

- Unauthorized voice-line access to data network resources

- Voice service misuse, abuse, and data leakage

- Voice protocol intrusion into data resources

- Other voice network threats and restricted traffic

All these voice security functions help enhance regulatory compliance and reduce financial losses and business disruption. Additionally, SecureLogix voice intelligence capabilities enhance CUBE and TDM gateways with enterprise-wide voice monitoring, reporting, and analytics. Enterprises can use this intelligence to improve the utilization of voice network, provide greater service uptime, and better network performance and planning and more. No other vendor on the market offers this full range of capabilities to enable, manage, and secure TDM and SIP trunking deployments across the enterprise.

Figure 1. The Embedded Cisco UC Gateway Services API Enables Integrated Voice Policy from SecureLogix
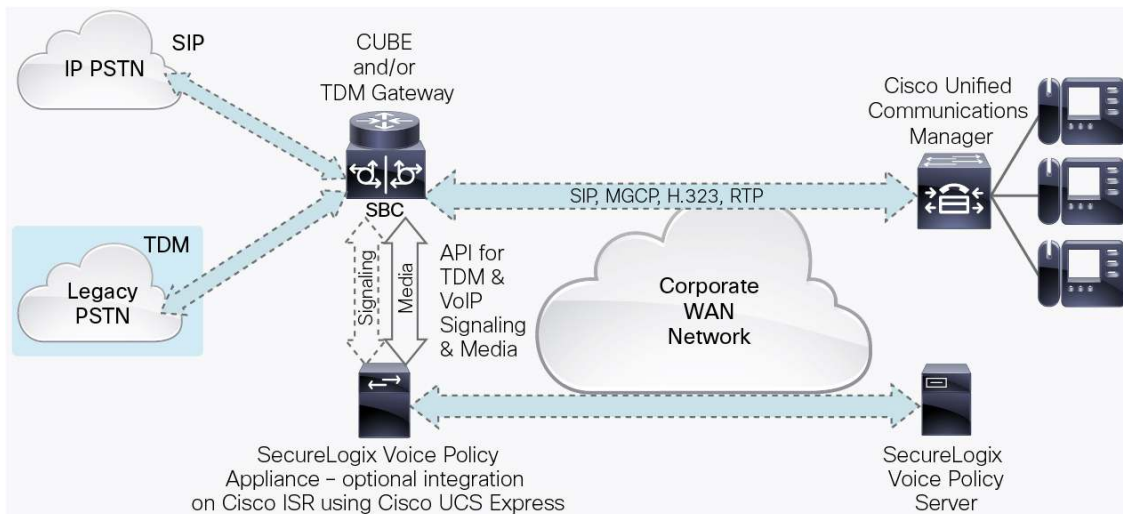
For More Information

- [SecureLogix](#)

- [Cisco Unified Border Element (CUBE)](#)

- [Cisco TDM Gateways](#)

- [Unified Communications Solutions on Cisco ISRs](#)

- [Cisco UCS Express](#)

- [Cisco UC Gateway Services API](#)

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