Case Study -- NCTCOG

Integrating Cisco UC and Microsoft Exchange Online Unified Messaging

Ingate® Systems and eTechHelp, a global technology consulting firm, have helped North Central Texas Council of Governments (NCTCOG) integrate an enterprise Cisco Unified Communications (UC) environment with Microsoft Exchange Online Unified Messaging (UM) for presence and voicemail.

By integrating these two complex UC environments, Ingate and eTechHelp leveraged the best of both worlds for NCTCOG while maintaining the security of their large, extended network.

Merging different UC environments has become a challenge for many organizations, one that grows in complexity as business grows, i.e., adding satellite offices or remote workers, or simply adding on more IP phones.

NCTCOG was using Cisco Unified Communications with more than 900 Cisco IP phones for voice, voicemail and presence, all of which were spread out over 14 remote locations. NCTCOG wanted to streamline their UC solution by integrating it with Microsoft's cloud-based UC solution, Office 365 UM.

eTechHelp installed an Ingate SIParator® Enterprise Session Border Controller (E-SBC) to achieve this complex SIP integration. With this solution NCTCOG was able to remain platform-agnostic, allowing them to leverage both Cisco UCS as well the Office 365 Exchange Online environment.

Additionally, the SIParator E-SBC:

• Manages the SIP traffic between NCTCOG's internal network and the cloud-based Microsoft Office 365.

• Encrypts NCTCOG's SIP traffic with Transport Layer Security (TLS) for secure ISP signaling. It also supports and transcodes Secure Real-Time Transport Protocol (SRTP) for encrypted voice and video.

• Adds authentication to shield users from eavesdroppers, hackers and spoofers.

Since NCTCOG was connecting to a cloud environment, another key function of the SIParator was to protect the enterprise and VoIP/UC solution from unauthorized SIP traffic coming in from the open Internet. It also protects against theft of service and Denial of Service (DOS) attacks, a common issue.

eTechHelp, which managed the project from design to completion, also installed a secondary SIParator as a failover unit in NCTCOG's disaster recovery location in the event of a power interruption or PBX failure at the primary location.

NCTCOG has been growing their integrated network, benefitting from the full potential of the cloud-based Microsoft environment while preserving their initial Cisco investment, utilizing the best features for NCTCOG from both worlds. The next phase of the project will include connecting Skype for Business.

Statistics

• 900+ Cisco IP phones

• 14 remote locations worldwide

• Ingate SIParator E-SBC