

## DIGIUM GATEWAY PROVIDES ASTERISK AND LYNC CONNECTIVITY FOR ENTAGROUP



CASE STUDY

DIGIUM GATEWAYS

### OVERVIEW

While Unified Communications (UC) has ingratiated itself into our everyday lives, a new corporate level UC product, Microsoft's Lync® was causing UK-based Entagroup minor headaches. Utilizing powerful open source Asterisk software, sponsored by Digium, for more than 6 years as the driving force behind their internal PBX, Entagroup had been exploring possibilities of using a Digium Gateway to help them solve a compatibility issue. Asterisk transforms a common computer into a communication server, and lets developers build applications like PBX, VoIP gateway, IVR and ACD. The Asterisk server Entagroup was deploying used Session Initiation Protocol (SIP) over User Data Protocol (UDP) while the Microsoft Lync server only supports SIP over Transmission Control Protocol (TCP).

### Entagroup significantly reduces operating costs by connecting an Asterisk server to a Lync install using the Digium Gateway.

Entagroup, located in Telford, Shropshire, consists of three separate companies – Entatech, the company's IT distribution entity; Entanet, a communications provider; and Entamedia, an online marketing and SEO provider.

**Digium's single-port and dual-port VoIP Gateways can handle both SIP over UDP and SIP over TCP systems.**

According to Scott Eastman, Entagroup's IT Network Administrator, "We needed to bridge the gap between the two systems to transcode the SIP protocols. Digium's single-port (G100) and dual-port (G200) VoIP gateways can handle both SIP over UDP and SIP over TCP systems." When two servers "speak" TCP, they do so with a formal connection that acknowledges the arrival of data from one server to the next. It even communicates problems in sending and receiving that information, and when possible, re-sends the information if it was not received the first time.

Optimized for accuracy and not timeliness, TCP is commonly used in websites and e-mail. On the other hand, optimized for sending and receiving information in a more timely fashion with little overhead, UDP provides very little accountability or formal connectivity, but it is more economical.

By connecting an Asterisk server to a Lync install using the Digium G100 Gateway, Entagroup significantly reduces operating costs by connecting a legacy business telecom system with dynamic SIP trunking.

Because Entagroup uses Asterisk to power their internal PBX, the Gateway sits between the two systems to connect Lync. Data or voice comes through Microsoft Lync, passing through the Digium Gateway, to the Asterisk server. According to Eastman, since all Entagroup employees have Lync on their computers, the Gateway also gives Entagroup instant access to Lync, and the ability to use soft phones rather than hard phone sets.

UC lets individuals check and retrieve e-mail or voicemail from any communication device at anytime, so accuracy is imperative to both real-time and non-real-time delivery of communications, and it expands beyond voicemail to data communications, video, call control and multimodal communications, presence, instant messaging, conferencing, business integration, and collaboration.

The Digium Gateway has enabled Entagroup to leverage its adoption of Microsoft Lync and its existing SIP platform. Because Lync is an enterprise-level application, thanks to Asterisk's flexibility in providing a Gateway, Entagroup has a powerful UC platform that costs less than licensing costs, while taking advantage of the technical strengths of connected SIP trunks. As Eastman concludes, "We're confident in the stability of the Gateway implementation and it's enhanced our use of the Lync application and proven the compatibility of Lync with our SIP service."



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