Not Sure How to Make the Transformation to IP-Based UC?

Enterprises are currently faced with a multitude of complexities as they make the evolution from legacy to IP-based unified communication infrastructures. To be successful, they need a well thought out plan to deal with concerns such as: compatibility of legacy equipment or protocols, centralized management of complex dial plan across different IP-PBX platforms, and when (and how) to introduce secure, new unified communication applications for their end customers and geographically diverse workforce.

The answer is simple: today, SIP is at the core of all unified communications (UC) including voice, video and collaboration. Session border controllers (SBCs) are the network cornerstone for new communications and services. Enterprises need SBCs, especially if they wish to embrace the next generation of enriched enterprise communications trends such as:

- SIP trunking;
- Secure, remote worker communications;
- UC;
- Bring Your Own Device (BYOD); and
- Multimedia-enabled contact center.

How does an SBC help your enterprise make the transition to IP-based UC? Here are 5 important reasons for using an SBC in making that transition:

1) Security

Internet-based attacks can occur for a variety of reasons and from a variety of sources, and can significantly impact enterprise productivity and revenue. Some attacks are designed to bring a network down, such as a denial of service (DOS) attacks that floods a network with fake requests. To stop these IP-based attacks, you need an SBC to protect the enterprise network and ensure the security and flow of SIP sessions as they traverse between secure and non-secure points.

2) Intelligent Session Control

SBCs are not only responsible for terminating SIP sessions at the network border; they also select the optimal route to deliver that call to its final destination. This selection process, referred to as call routing, is one of many intelligent session control policies that the SBC enforces in order to ensure the smooth and efficient flow of traffic in your enterprise network. That efficiency can result in significant savings for enterprises.

3) SIP Interoperability

Another key role of an SBC is to mediate SIP communications between different devices. While SIP is an industry-standard protocol, and industry standards are designed to ensure consistency across implementations, the reality is that SIP is not consistently implemented the same by vendors. The problem lies with the way the SIP guidelines were written, allowing individual vendors to decide how to best implement SIP through suggestions rather than strict rules. As a result, an SBC from one vendor and an SBC from another vendor may "speak" SIP differently, requiring an SBC for translation (known as SIP normalization) to ensure that signaling instructions are properly communicated.

4) Media Services

Various kinds of communications networks use different codecs (coder/decoders) to convert voice signals for digital transmission. These different codecs are the reason why voices on your cell phone and your home phone sound different. Various codecs may consume a lot of bandwidth to deliver better sound quality, or use less bandwidth to provide faster transmission. Most SBCs can translate between these different codecs, a process known as media transcoding. Transcoding has two advantages for enterprise networks: it can reduce the network bandwidth that a call consumes by temporarily translating a high-bandwidth codec into a lower bandwidth codec, and it can improve voice or video quality by translating communications into a codec that the end user device natively supports. This latter advantage is especially important as more enterprises move to high-definition (HD) voice, which delivers a measurably better experience for call center customers.

5) Scalability

SIP communications traffic will continue to rise as more enterprises adopt a BYOD strategy that introduces more SIP-based smartphones and tablets into the network ecosystem. What this means is that the SBC you buy today needs to be able to handle the growing traffic needs of tomorrow, and it must scale cost-effectively. Fortunately for enterprises, Sonus offers a wide range of SBCs with different session scalability: from a few sessions to hundreds of thousands of sessions.

Conclusion

Choosing an SBC is more than an IT decision; it's a business decision. Today's enterprise SBC is a vital communications solution that enables higher-quality voice and video, in addition to providing greater flexibility in delivering multimedia applications to customers and employees while providing cost efficiencies that dramatically reduce telecommunications fees and network management complexity.

Sonus SBCs are a requirement for enterprise communications, not only for what they can enable today (SIP trunking, SIP-based applications such as Skype and videoconferencing, etc.), but also for the cloud-based services they enable tomorrow. The Sonus SBC portfolio offers the features and functions demanded by enterprise networks to support mission-critical real-time communications capabilities for years to come.