AudioCodes

BT Global Services Case Study

BT Global Services and AudioCodes help business customers to maximize the benefits of Microsoft Unified Communications Solutions
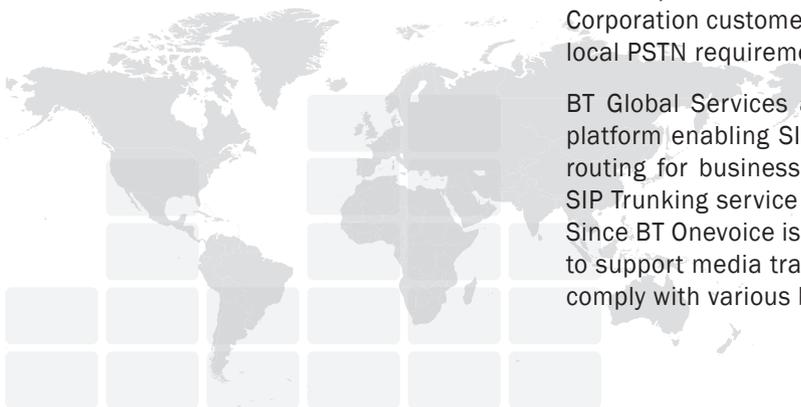
About BT Global Services

BT Global Services, a part of BT Group plc, is a leading provider of communications solutions and services, delivering managed networked IT services for business and government organizations, including specialized services related to unified communications. Based in London, BT Global Services helps multi-sited, multinational organizations master the complexity of business communications, serving corporate and government customers in over 170 countries worldwide. It has more than 24,000 employees in 53 countries across all continents. The combination of network, IT and professional services allows BT Global Services to bring together managed solutions that help customers to be more productive, and their organizations to operate more efficiently.

Challenges

In today's business climate, organizations must increase their workforce productivity in order to preserve their competitive edge. BT Global Services was one of the first service providers to identify this need, and selected Microsoft Office Communications Server as a way of increasing efficiency, lowering travel costs, and reducing carbon footprint for their business customers. BT Global Services was looking for a partner with vast experience in integrating business solutions based on Microsoft Office Communications Server to successfully tackle the inherent challenges of unified communication implementations.

A particular challenge was the integration of customers' existing legacy and IP-based telephony systems with the Microsoft solution. To address this, BT Global Services was looking for an integration partner with a proven track record of interoperability with as many of the legacy and IP Telephony vendors as possible. Another significant challenge was overcoming media codec incompatibilities inherent in different business network environments, thus mandating support for flexible media and codec transcoding functions in the customer premises equipment (CPE). In addition, being a leading global service provider, BT Global Services needed to provide their Multi-National Corporation customers with the ability to support PSTN connectivity, including local PSTN requirements within the individual countries concerned.

BT Global Services also offers BT Onevoice, a converged communications platform enabling SIP Trunking, PBX integration, and global least-cost voice routing for business customers. BT Global Services wanted to certify their SIP Trunking service for Microsoft Office Communications Server customers. Since BT Onevoice is based on BT Global Service's MPLS network, BT needed to support media transcoding and protocol mediation capabilities in order to comply with various business customer codecs requirements.

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"AudioCodes' Mediant platform makes it possible to perform the transcoding at the customer's premises, simplifying the integration of OCS, and now Lync, with other enterprise telephony platforms, and with cloud-based SIP services, such as BT Onevoice."

Solution for On-Premise Managed Services

BT Global Services worked together with Microsoft and AudioCodes to develop voice-specific reference architectures for their on-premise, managed services, based on AudioCodes' Mediant 1000 and Mediant 2000 media gateways and Microsoft Office Communication Server 2007 and now Microsoft Lync 2010. This simplified the installation process and enabled smooth integration into customers' existing telephony system environments.
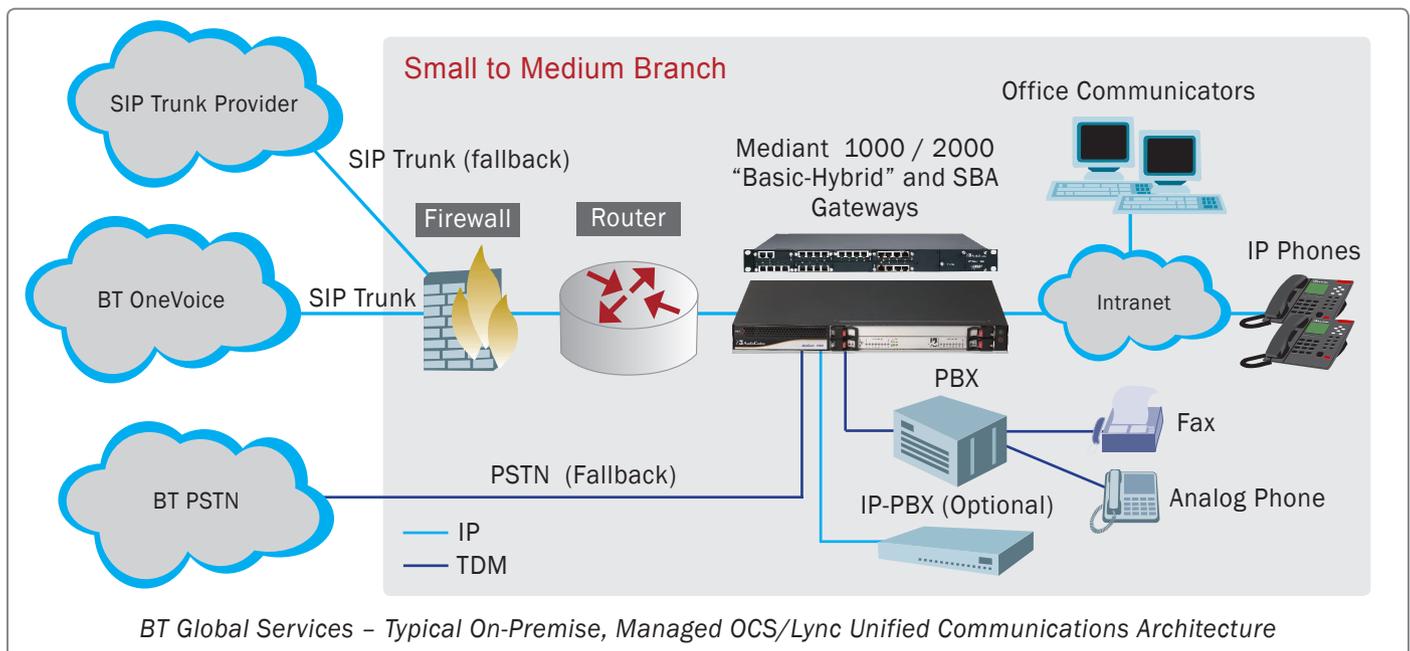
"The potential for Unified Communications and Collaboration Solutions with business customers has never been greater", said Mark Summerson, General Manager, Unified Communications at BT Global Services. "However, the complex integration requirements within existing enterprise frameworks required us to design a compatible solution set ahead of time. As a result, we built a Microsoft Unified Communications architecture coupled with AudioCodes' gateway portfolio. This allowed us to provide flexible and cost-effective resolutions for the voice integration challenges of our business customers."
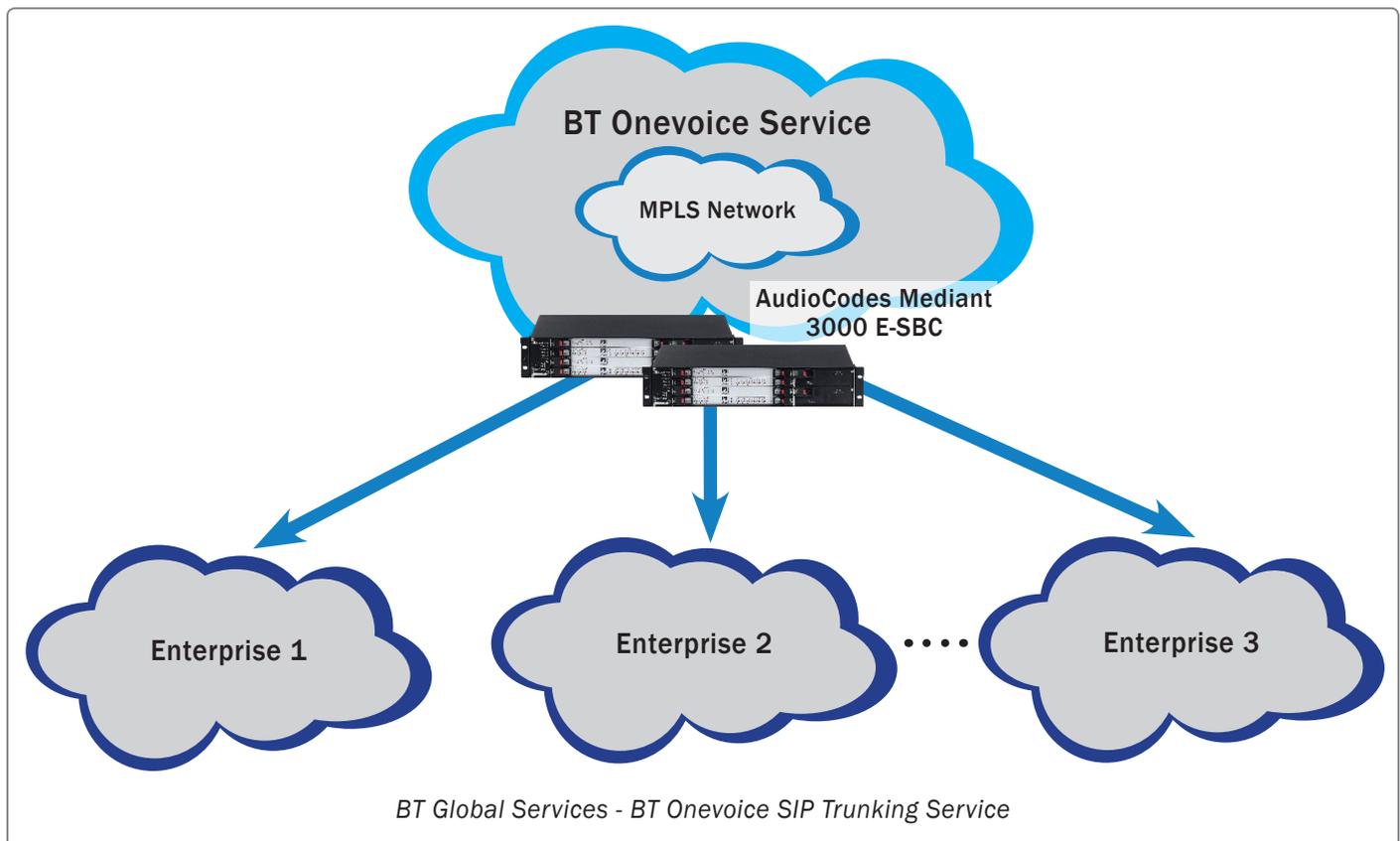
The Mediant 1000, with its built-in E-SBC technology, and media processing functionalities enables the direct connection of the enterprises' Microsoft Unified Communication platforms with BT Global Services' SIP Trunking services.

Both AudioCodes' Mediant 1000 and Mediant 2000 support 'basic-hybrid' and 'basic gateway" configurations for Microsoft Office Communications Server 2007 R2, while at the same time providing investment protection with a solid upgrade path to support the new Microsoft Lync 2010 unified communication solution utilizing the existing hardware. The field modular Mediant 1000 scales up to 120 concurrent PSTN calls, and the Mediant 2000 supports a fixed hardware configuration and software-scalability of up to 480 concurrent PSTN calls.

The Mediant 1000, with its built-in E-SBC technology, can protect the business network from possible external attacks, and includes advanced media processing functionality, allowing transcoding between narrowband and wideband voice coders. This unique feature combination enables the direct connection of the enterprises' Microsoft Unified Communication platforms with BT Global Services' SIP Trunking services.

"Taking into account the different bandwidth requirements of our enterprise VoIP services, we needed to support VoIP media streams using both uncompressed and compressed codecs," said Ollie Clapinson, Solutions Designer, Unified Communications at BT Global Services. "AudioCodes' Mediant platform makes it possible to perform the transcoding at the customer's premises, simplifying the integration of OCS, and now Lync, with other enterprise telephony platforms, and with cloud-based SIP services, such as BT Onevoice. Because of the modular design of the Mediant 1000, we can also provide a seamless migration path from ISDN to IP-based voice services, on the same chassis, by simply enabling the E-SBC feature.

BT Global Services – Typical On-Premise, Managed OCS/Lync Unified Communications Architecture

Solution for Onevoice SIP Trunking Service

In March 2010, BT Global Services became a Microsoft Certified SIP Trunking Service Provider for Microsoft Office Communications Server 2007 Release 2 using their BT Onevoice service. This was done using AudioCodes' Mediant 3000 with its strong integrated DSP capabilities. The gateway provides voice transcoding from G.711 to G.729, and conversion between UDP and TCP transports for SIP traffic, enabling interoperability with BT's core Onevoice IP-voice platform. The Mediant 3000 supports an extensive list of narrowband and wide-band codecs including Microsoft Real-Time Audio wide band codec (RTA-WB), with the ability to transcode between narrowband and wideband voice coders based on AudioCodes' strong DSP capabilities and in-house knowhow.

The Mediant 3000 with its E-SBC and strong integrated DSP capabilities, meets the media plane and bandwidth requirements of BT's Onevoice business customers.

BT Global Services - BT Onevoice SIP Trunking Service

Solution for BT Global Services In-House Network

The AudioCodes gateways were also chosen by BT Global Services for their in-house implementation of the Microsoft Unified Communications solution, supporting 22,000 of their employees.

Summary and Conclusions

"Through intensive technical collaboration, including network design and planning sessions, on-site technical support and quick response to BT Global Services requests, AudioCodes was able to meet all the demands for the On-Premise Managed, and OneVoice SIP trunking services", commented Nimrod Borovsky, AudioCodes VP Marketing. "We are delighted to have BT Global Services entrust us with their leading business customers and network infrastructure."

"We have qualified AudioCodes as our preferred Gateway vendor as they allow us to offer a solid migration path for our business customers from their existing telephony systems to Microsoft Office Communications Server 2007 R2 and Lync Server 2010", said Mr. Summerson. "Another important aspect in the selection of AudioCodes was their ability to provide the same user interface for their various gateway products, which enabled us to save on staff training and shorten the configuration and provisioning process. We are very happy with our choice and have been connecting customers to our network successfully."

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About AudioCodes

AudioCodes Ltd. (NasdaqGS: AUDC) designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Cable, and Enterprise networks. The company provides a range of innovative , cost-effective products including Media Gateways, Multi-Service Business Gateways, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications. AudioCodes' underlying technology, VoIPerfectHD™, relies on AudioCodes' leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user communication experience in Voice communications.

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