BOSCH

👥 Customer
Bosch Group

🖥 Website
www.bosch.com

📍 Location
EMEA

🏢 Industry
Technology and services

Customer Profile

The Bosch Group is a leading global supplier of technology and services. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology.

Challenges

- Avoiding user disruption during the migration to Microsoft Teams
- Ensuring reliable local PSTN and SIP trunk connectivity
- Integration of legacy analog devices, including fax machines
- Simplified, central device and call routing management

AudioCodes Solutions

- Mediant Direct Routing SBCs
- MediaPack Analog Gateways
- One Voice Operations Center management solution

Benefits

- Smooth global migration to Microsoft Teams
- Unified enterprise telecom infrastructure boosts productivity and collaboration
- Reliable, high quality Teams voice calling with Direct Routing and Local Media Optimization
- Centralized management and monitoring reduces operational efforts and maintenance costs
- Highly experienced professional services team assist from design and planning, through implementation and support
- Direct Routing as a Service plus optional applications and devicesMinimization of the overall total cost of ownership
- Highly responsive and experienced global professional services team

Bosch Group

Global Migration to Reliable Microsoft Teams Voice Calling with Direct Routing and Local Media Optimization

To maximize productivity and collaboration among its global workforce, Bosch took the decision to migrate its communications infrastructure to a single unified communications platform, Microsoft Teams. Bosch turned to AudioCodes to ensure a smooth migration from its legacy voice solutions and deliver reliable and high-quality Teams calling for all its employees.

Background

The Bosch Group is a leading global supplier of technology and services. It employs roughly 395,000 associates worldwide (as of December 31, 2020). Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. The Bosch Group comprises Robert Bosch GmbH and roughly 440 subsidiary and regional companies in 60 countries.

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Challenges

Like many major multinational companies, Bosch's voice network infrastructure had over the years become a collection of communications silos, with a variety of vendor solutions in use. With efficient and reliable internal and external communications of paramount importance to the success of the company's activities, Bosch's management took the decision to standardize its communications infrastructure on a single unified communications solution.

The desire to maximize productivity and collaboration among its global workforce, coupled with a policy of adopting cost-effective and easy-to-manage cloud-based solutions, led Bosch to decide to migrate its communications infrastructure to a single unified communications platform, Microsoft Teams. The implementation of Teams on a global basis for the company was not a trivial matter and posed several challenges:

- Coexistence of platforms and avoiding user disruption during the migration
- Ensuring reliable local PSTN and SIP trunk connectivity at its global offices
- Integration of legacy analog devices, including fax machines
- Simplified, central device and call routing management

Bosch needed a solution that would ensure that its Teams migration could be achieved smoothly and at a controlled pace. The solution needed to unify the existing multi-vendor infrastructure into a global voice communications network that would reduce operational effort and maintenance costs, while at the same time enhancing the overall communications experience for its users.

Solution

Even before this project, Bosch and AudioCodes had enjoyed a long history of collaboration. For several years AudioCodes had been providing voice connectivity solutions for Bosch's existing IP-PBXs and, more recently, Skype for Business. Bosch's positive experience with AudioCodes, along with the fact that AudioCodes' solutions were certified for interoperability with Microsoft Teams, were central factors in Bosch's decision to select AudioCodes for this project. The broad range of Microsoft-certified voice products offered by AudioCodes meant that Bosch had all possible scenarios covered and it could be confident that the migration to Teams would be a success.

The main component of the AudioCodes solution was its [Mediant session border controllers (SBCs)](#) which would facilitate seamless voice connectivity between Microsoft Teams, the existing Skype for Business platform, Bosch's legacy IP-PBXs, the PSTN and SIP trunking networks. The flexibility offered by the Mediant family of SBCs ensured a cost-effective solution for all of Bosch's locations whatever the local requirements demanded:

- Hybrid SBCs with IP and traditional TDM-based telephony interfaces for locations where PSTN connections were still based on ISDN technology

- Scalable platforms ensured Bosch could deploy a suitable SBC model to meet local capacity requirements

- Comprehensive SIP interoperability ensured smooth connectivity between Teams, Skype for Business, legacy IP-PBXs and SIP trunks from a wide range of global service providers

- Bosch could continue using Skype for Business and its legacy IP-PBXs in coexistence with Teams as users were moved to the new platform, eliminating the potential disruption of a rip-and-replace style migration

- Most of Bosch's SBCs were deployed in a redundant, active-active configuration to ensure enterprise-class service high availability.

With the introduction of Microsoft Teams, Bosch added a pair of [Mediant 4000 SBCs](#) in AudioCodes high availability mode at three regional datacenters across the world to provide Direct Routing connectivity between Teams, SIP trunks, the PSTN and the existing AudioCodes SBCs already deployed at its branch offices. Thanks to AudioCodes SBCs' support for Teams Local Media Optimization, voice traffic from local calls (e.g. from a Teams client in the Stuttgart office to a local PSTN number in Stuttgart) is kept within the branch office, thereby improving reliability, maintaining high voice quality and ensuring data security.

Bosch was still using a variety of legacy analog devices such as phones and fax machines in its offices around the world. Bosch deployed AudioCodes' Teams-certified [MediaPack analog gateways](#) to integrate these devices into the new Teams UC environment simply and seamlessly.

The benefits of a unified global communications solution could not be fully realized without the ability to manage and monitor the entire network simply and effectively. Fortunately, AudioCodes was able to solve this challenge as well through its [One Voice Operations Center (OVOC) management solution.](#) OVOC enables network administrators to configure and troubleshoot devices remotely, as well as monitor voice quality in the network in real time so that potentially service-affecting issues can be detected and resolved promptly. In addition, Bosch is evaluating the [AudioCodes Routing Manager (ARM)](#) solution to centrally manage call routing and policy across the entire global network.

Along with the technological solutions that AudioCodes provided, Bosch also benefitted from AudioCodes' extensive professional services and technical support offerings. The AudioCodes team assisted in tasks such as designing reference implementations and carrying out a successful security audit with an independent, third-party vendor. The global nature of this project raised some particularly complex scenarios and requirements which Bosch was able to overcome thanks to the AudioCodes team. Furthermore, AudioCodes trained Bosch's own internal technical teams to install, manage and support the voice equipment. As a result of this, Bosch is now more or less self-sufficient as far as day-to-day operations and most technical support issues are concerned.

Results

Thanks to the AudioCodes One Voice portfolio of voice networking products and solutions, Bosch was able to unify its complex global voice network and standardize communications for all its employees based on Microsoft Teams. AudioCodes SBCs, analog gateways and management solutions enabled a smooth migration for Bosch's usesr to the new platform, while offering simplified, centralized management to reduce operational efforts and maintenance costs.

"AudioCodes has proved to be the perfect partner to help us along the journey to a global unified communications solution," commented Frank Borchardt, Senior IT Consultant at Bosch. "By providing seamless voice connectivity between Microsoft Teams, our legacy systems and public networks, AudioCodes has enabled us to attain our goal of achieving a reliable, state-of the-art voice calling experience for all our employees whether in the office, working remotely or on the go."

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Frank Borchardt,
Senior IT Consultant at Bosch

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03/23 V.2