

Siemens Enterprise Communications turns to Acme Packet E-SBCs for global UC deployment

case study

Executive summary

Siemens Enterprise Communications sought to replace its legacy TDM telephony infrastructure with a global IP private cloud-based communications infrastructure to improve collaboration, increase workforce productivity and reduce communications expenses. They required a session border control solution to overcome security, interoperability and reliability issues in end-to-end IP communications. After a rigorous evaluation process, the company selected and deployed Acme Packet Enterprise Session Border Controllers to protect and control their private and public IP network borders. Siemens Enterprise Communications now enjoys a more efficient and cost-effective IP communications network that lets employees leverage all the features and benefits of their OpenScape unified communications product portfolio – anywhere, anytime.

Customer environment

Like many global enterprises, Siemens Enterprise Communications relied on the PSTN and a legacy TDM-based telephony network for internal and external communications. The company sought to implement a global IP communications network based on a private-cloud to improve collaboration, productivity and business agility; reduce worldwide communications expenses; and showcase its OpenScape solutions and OpenSmart best practices approach. In particular the company set out to:

- **Construct a global IP communications network:** Replace the legacy TDM voice network with a more efficient and cost-effective, converged IP network, and leverage SIP endpoints, applications and services.
- **Improve productivity and communications:** Utilize OpenScape UCC tools for real-time collaboration across the globe; use the Internet to reach small offices, home-based workers, and mobile professionals; reduce travel-related expenses and productivity loss.
- **Reduce communications expenditures:** Implement SIP trunking for toll-free site-to-site calling and lower PSTN termination fees; reduce CAPEX and OPEX by consolidating infrastructure and simplifying operations, administration and maintenance.
- **Showcase OpenScape solutions and OpenSmart best practices:** Promote OpenScape UCC features, functions and benefits by demonstrating the product portfolio in action – any where, any time, and its unique best practices for deploying a large UCC production system in a live enterprise.

Business challenge

End-to-end IP communications introduces security, interoperability and reliability issues with applications and network services. Conventional IP networking products such as firewalls, routers and gateways weren't conceived with interactive IP communications in mind. They leave the enterprise vulnerable to security threats and unpredictable end-user experiences. Siemens Enterprise Communications sought an Enterprise Session Border Controller (E-SBC) to mitigate multi-vendor, multi-protocol interoperability issues; safeguard user confidentiality and privacy; and ensure service quality and integrity. E-SBCs are specifically designed to address the unique security,

Customer background

Siemens Enterprise Communications is a global leader in end-to-end enterprise unified communications and collaboration (UCC) solutions. Its award-winning OpenScape portfolio provides comprehensive communication and collaboration solutions for organizations of all sizes. The company has a presence in more than 90 countries and enjoys the number one market position in Europe, Germany, Latin America, Brazil and India. It operates major R&D facilities in Germany, USA and Brazil, and employs 10,000+ employees around the world.

interoperability and reliability challenges businesses often encounter when delivering IP telephony, interactive video and unified communications across IP networks.

“By implementing SIP trunking and Acme Packet E-SBCs, Siemens Enterprise Communications was able to reduce PSTN access costs by over 60% without sacrificing security or reliability”

Raik Miercke
Global Voice Service Manager
Siemens Enterprise Communications

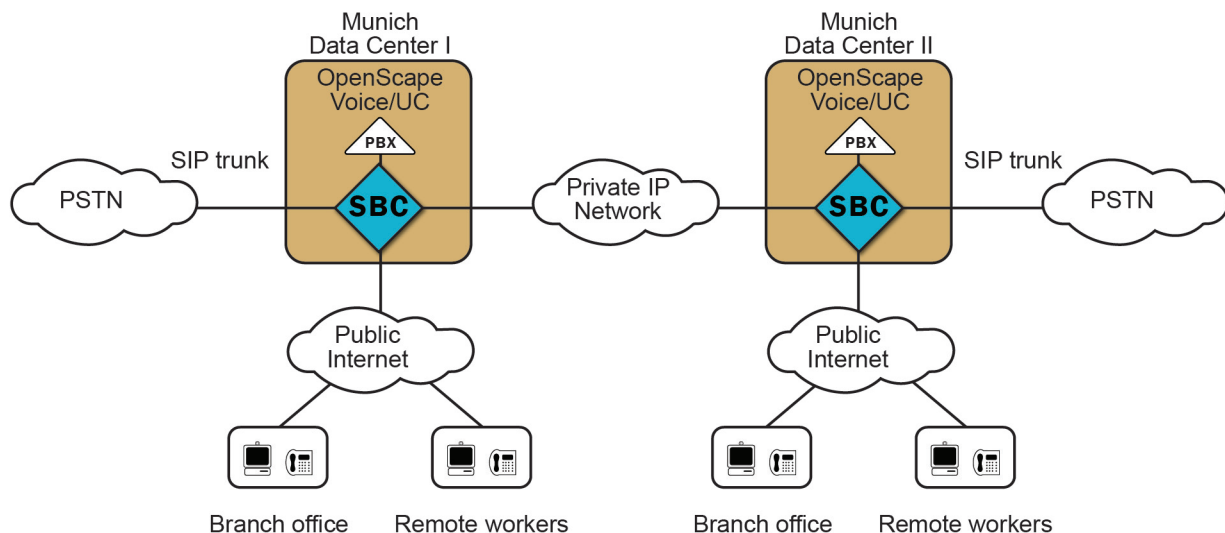
Acme Packet solution

After an exhaustive evaluation process the company chose Acme Packet Enterprise SBCs as the foundation for their new end-to-end IP communications network. Only Acme Packet fully addressed the company’s extensive security, interoperability and reliability requirements:

- **Security:** Acme Packet E-SBCs protect and control interactive IP communications infrastructure, services and applications, ensuring confidentiality, integrity and availability. They prevent fraud and service theft, and guard against malicious attacks and non-malicious incidents such as IP telephony spam.
- **Interoperability:** Acme Packet E-SBCs mitigate multi-vendor interoperability issues businesses often encounter when implementing SIP applications and services, enable protocol interworking for integration with legacy systems, and overcome NAT and firewall traversal challenges for Internet workers.
- **Reliability:** Acme Packet E-SBCs ensure PSTN-like availability and service quality for IP communications. They enforce QoS, balance loads across trunks, and reroute sessions around interface failures to optimize network performance, circumvent equipment and facility problems, and ensure business continuity.

Deployment model

Siemens Enterprise Communications deployed Acme Packet Net-Net E-SBCs in central data centers in Europe and North America. The solutions protect and control IP networking borders enabling SIP trunking, site-to-site interworking and secure Internet access. The company leveraged Acme Packet’s comprehensive security features to safeguard confidentiality and defend against Internet threats and vulnerabilities, NAT and firewall traversal features to simplify access for Internet users, SIP normalization functions to overcome SIP trunking service interoperability issues, redundant SBCs and trunks for high availability, and centralized management and control to streamline administration and operations.



Acme Packet E-SBCs in Siemens' Munich data centers

Results

The new IP communications network helps Siemens Enterprise Communications reduce communications expenses, increase productivity, and improve business agility:

- **Lower costs:** Siemens Enterprise Communications saves CAPEX and OPEX by consolidating infrastructure and centralizing management and operations functions. The end-to-end IP network significantly reduces voice transport costs. Internal calls traverse the IP network, bypassing the PSTN. Remote workers gain access to corporate communications services over the Internet reducing mobile and home telephone expenses. A SIP trunk service provides more cost-effective PSTN connectivity.
- **Greater productivity:** Acme Packet E-SBCs provide Siemens Enterprise Communications' global workforce with convenient and reliable access to the full range of OpenScape solutions so they can collaborate with colleagues and stay engaged with customers from home or the road. By extending corporate communications services to Internet users the company can reduce travel-related expenses and productivity loss, improve customer service, plus maintain normal business communications during emergency office closings.
- **Improved business agility:** The new IP network can be expanded and reconfigured much more quickly and easily than the old TDM network. Siemens Enterprise Communications can scale SIP trunking capacity on-demand (compared to days or even weeks for PRIs) to address rapidly evolving business requirements, and use SIP trunk "bursting" to temporarily throttle capacity to accommodate intermittent traffic spikes. SIP trunking also simplifies network engineering and capacity planning tasks.

Reduce CAPEX and OPEX	Improve Collaboration and Productivity
<ul style="list-style-type: none">• Centralize and consolidate equipment and trunking facilities• Use IP network for toll-free intra-enterprise communications• Simplify operations, administration and maintenance• Retire legacy PSTN media gateways• Reduce PSTN origination/termination fees	<ul style="list-style-type: none">• Enable presence-based voice, video and multimedia• Reach small offices, home workers, and mobile users• Interconnect diverse systems and equipment vendors• Implement unified dial plans and user-centric policies• Cut travel-related expenses and productivity loss
Eliminate Inefficiencies	Enhance Business Agility
<ul style="list-style-type: none">• Converge voice, video, and data onto a common IP infrastructure• Eliminate needless IP-TDM conversions• Make more efficient use of WAN bandwidth	<ul style="list-style-type: none">• Scale trunking capacity quickly and easily• Provision users and features dynamically• Address rapidly-evolving business requirements• Free IT resources to focus on business innovation

End-to-end IP communications network benefits

Summary

Acme Packet helped Siemens Enterprise Communications overcome the complex security, reliability and interoperability issues they encountered when implementing an end-to-end IP communications network. Acme Packet E-SBCs enable the company to exploit Internet reach and economies of scale to extend corporate telecommunications services to remote users and small offices; leverage SIP trunking services to reduce PSTN access fees and improve business agility; and utilize the IP data network for worldwide unified communications. By combining all forms of communications into a single, manageable interface, OpenScape UCC simplifies the way employees share information, and improves collaboration with customers, partners and colleagues.

But that's just the beginning. Over time SIP will enable a wide range of innovative voice, video and multimedia solutions, cloud-based services, and communication-enabled applications and business practices. Acme Packet E-SBCs provide a solid foundation for future applications and services, as Siemens Enterprise Communications explores new ways to increase productivity, improve communications, and reduce expenses.



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