Case Study of Synway VoIP Gateway 2017

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Case Study of Synway VoIP Gateway 2017

Synway SMG Gateway and Multimedia Switch Facilitate Alibaba UC Applications

Synway
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SIP Trunking, IP-PBX Hosting and Media Gateway on A Single Platform

Synway successfully implemented the migration of Alibaba's customer service system from legacy TDM infrastructure to a complete VOIP system. The Synway SMG gateway and multimedia switch SPBX were selected to perform critical functions in the new enterprise network communication and enable seamless interconnection between communication system and business needs.

Background

Alibaba Group is world-class E-business titanic player headquartered in Hangzhou, China. Apart from traditional international trade platform, it also encompasses many other online trade platforms such as the well-known Taobao, TMALL, Aliexpress etc. For decades, Alibaba has developed any collaborated with billions of customers who calls for high demanding and high traffic customer services. Obviously, the legacy customer service system could not keep up with the booming business any longer and so need a whole new VOIP system to better interconnect with the current business platform and enable connection between SIP trunk and the legacy digital trunk, besides ensuring high efficiency and stability of the entire customer service system.

Synway SMG Gateway and Multimedia Switch Facilitate Alibaba UC Applications

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Challenges

The internal communication system stayed among the long-existing problems for Alibaba Group during the process of its recognition as the leader of China E-business and offering almost everything with its almighty trade platform—Taobao.

For the scratch, the group possessed over 300 branches across the globe and has established 5 branch offices in its headquarter—Hangzhou. How to communicate and associate with each other more efficiently and effortlessly in the group becomes the top issue.

Secondly, the large scalability can never be ignored especially when the arising huge traffic and high density surging calls, which left the customer service system unreliable and the inside communication blocked frequently after the noted 11.11 event, with daily income over 3 billion.

The third key point is environmental-friendly issue. With a complex traditional communication system and independent branches, it would be a great waste to rebuild a new communication system and completely retire the old one, which undoubtedly is what the executives hate to see. Most importantly, the previous communication systems are still incompatible with current business platforms for both the legacy PBX-based communication devices and more than 90% of Alibaba businesses are adopting the mobile internet as the interface access. Therefore, the hard work for the executives is to find an appropriate way to integrate the communication system with its existing enormous business system.

Solution

Early in the year 2010, Synway as well as its solution partner collaborated to build a dialing system, which is tailored to Alibaba's needs and seamlessly interconnected with Alibaba's platform, and it also features WEB Call, Network Callback, Network Fax, Group Call, Automatic Queuing, Load Balancing, Automatic Routing etc., and remain stable in high density calling. However, with the rapid development of Alibaba's business over the recent years, especially the high-speed spread of the two giant trade platform—Taobao and Alipay, it becomes rather difficult for the previous communication system to catch up with various needs for booming businesses. Meanwhile, the leading VOIP technology is springing up and enjoys a wide range of applications and deployments. Alibaba hence introduced more applications like Mobile Internet Access, Data Infrastructure, Firewall, VoIP solutions and so on for its customers.

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Synway SMG Gateway and Multimedia Switch Facilitate Alibaba UC Applications

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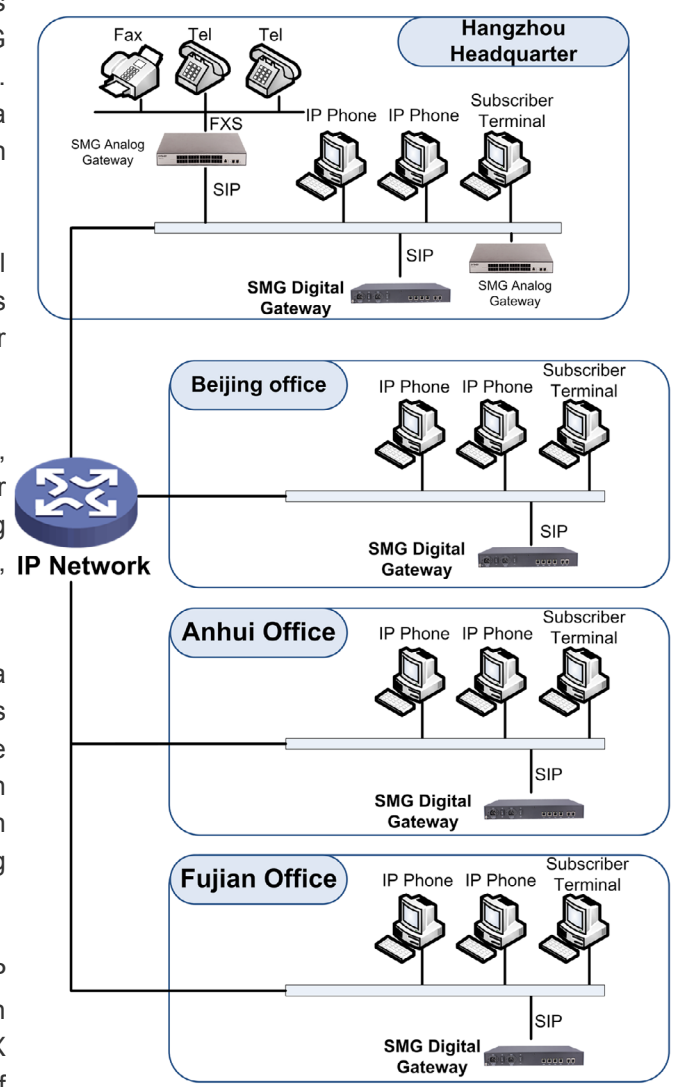
The VOIP solution Alibaba has chosen for its customers is Synway's newly launched SMG Gateway combined with multimedia SPBX. The SMG Gateway features compact size in a 1 U chassis and can support up to 120-480ch concurrent calls.

Besides high compatibility with hybrid digital trunk and SIP trunk interfaces, it also possesses standard Ethernet port and dual-power design for redundancy backup.

The Synway Multimedia SPBX, on the other hand, proves to be good for the overall VOIP system for its integration with softswitch technology, featuring versatile characteristics such as high flexibility, programmability and unlimited scalability abilities.



Supporting up to 20 E1 interfaces, the Multimedia SPBX is highly interconnected with various devices and allows for 30,000 IP access in a single machine. During the well-known 11.11 promotion campaign in 2013, it played a significant role as an efficient solution for high capacity surging dialing support for 100 million users.

Above from the large capacities of 30,000 IP access, another vital part of the VOIP solution is that the SMG Gateway and Multimedia SPBX can be deployed seamlessly, with the benefit of centralized management. It greatly facilitates the whole deployment as Alibaba's customer systems are distributed around the world – China and overseas branches. Therefore, to adopt a hybrid IP solution, i.e., a complete SIP-based solution was the most ideal choice for Alibaba Group.

Alibaba used to ask Avaya for solutions, but it turned out to be non-customized solution and could't integrate with Alibaba's business platforms, besides high upgrading cost process. Under this circumstance, Synway's technologies and services were chosen for its perfect convergence with Alibaba's whole business platform and saved capital expenditure. With Synway SMG Gateway, the new Alibaba communication system could bring its customers total different communication experiences and effortlessly and efficiently introduce IP features.

Values

Thanks to Synway's expertise in enterprise communications and the versatility of SMG Gateway along with Multimedia SPBX, Alibaba were able to complete the migration successfully within three months. The whole VOIP solution not only improved Alibaba's entire communication architecture but also developed a new business model via integrating business processes with communication systems together, which allows its subsidiaries to open new business among virtual operators in domestic market.

The benefits offered by Synway VOIP solution include:

1. Interconnectivity
Interconnect the distributed branches to maximize efficiency while driving costs down;

2. Scalability
The combination of SMG Gateway and Multimedia SPBX allows for unlimited expandability and can work steadily in high density usage of over 30,000 chs;

3. Robust NGN technology
NGN-based VOIP technology to seamlessly integrate with Alibaba's business platform;

4. Tele-grade reliability
High cost performance and Telco dual-power redundancy and can efficiently balance the calling overload.

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Connect Synway

As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. Since 1995, over 3,000 service providers, software developers and system integrators have deployed Synway's offerings to deliver a broad range of TDM and VoIP-based applications worldwide, including Unified Communications, SIP Trunking, Call Center, Mobile VAS, Faxing, Conferencing, Call Recording as well as Asterisk-based Open Source Applications. With dedicated teammates and well-known premium services, Synway makes consistent efforts to deliver partners with a variety of customizable, high-performance and cost effective voice communications products.

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China Huaneng Group Built Next Generation Distributed Unified Communications Network across China and its overseas Branches on Synway's Platform

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Executive Summary:

Synway successfully upgraded China Huaneng's communications system from legacy TDM infrastructure to a complete Hybrid VOIP/TDM system. The Synway multimedia switcher SPBX was selected to perform critical functions in the new enterprise network communication and enable seamless interconnection between communication system and business needs.

CHINA HUANENG

Background:

China Huaneng Group(http://www.chng.com.cn/eng/) is a key state-owned company established with the approval of the State Council. With registered capital of 20 billion RMB, the Company is mainly engaged in the following business: development, investment, construction, operation and management of power sources; production and sale of power and heat; development, investment, construction, production, and sale of businesses and products related to finance, energy transportation, renewable energy, and environmental protection; industrial investment, operation and management.

Challenges:

The complete internal communication systems becomes more and more complex and vital for China Huaneng Group during the process of its business expansion and more and more branches offices came out across the world.

Firstly, the group possessed over 250 branches across the globe, and most of them are located in Asian and African. How to communicate and associate with each other more efficiently and effortlessly in the group becomes the top issue. A coordinated, robust and future-oriented communications system became more and more important.

Secondly, with a complex traditional communication system and independent branches, some important new communication methods were required, email, SMS, presence alert, call center and IVR in different terminal devices, including intelligent mobile, tablelet, IPAD and so on. So the new communication had to make all these features and functionality available for all of Huaneng's employees.

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China Huaneng Group Built Next Generation Distributed Unified Communications Network across China and its overseas Branches on Synway's Platform

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Solution:

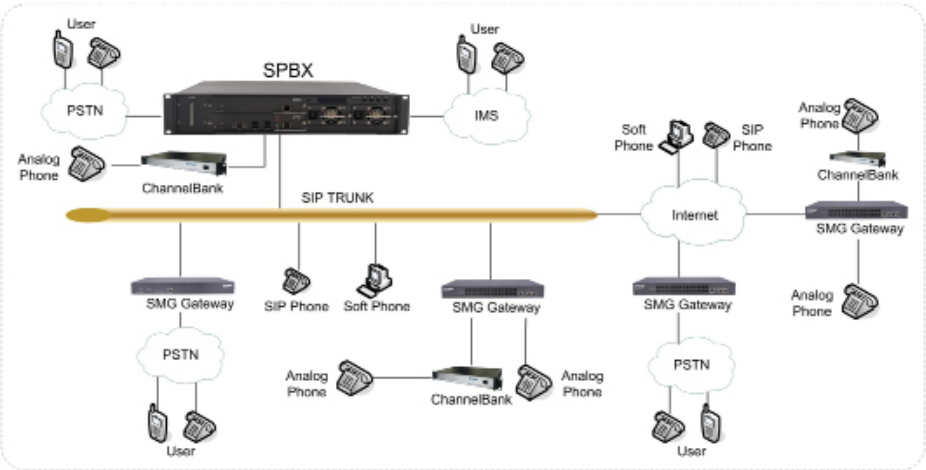
Early in the year 2010, Synway had partnered with its solution partner to build some unified communication systems, and it could be tailored to China Huaneng's needs and seamlessly interconnected with China Huaneng's platform, and it also features WEB Call, Network Callback, Network Fax, Group Call, Automatic Queuing, Load Balancing, Automatic Routing etc., and remained stable in high density calling in a distributed architecture. With the rapid development of China Huaneng's business over the recent years, it becomes rather difficult for the previous communication system to catch up with various needs for booming businesses. Meanwhile, the leading VOIP technology was springing up and experienced deployments. China Huaneng hence introduced more applications like Mobile Internet Access, Data Infrastructure, Firewall, VoIP solutions and so on for its customers.

The Synway Multimedia SPBX proved to be good for the overall VOIP/TDM system for its integration with soft switching technology, featuring versatile characteristics such as high flexibility, programmability and unlimited scalability abilities. It could be controlled and operated in a single system, although hundreds of them were distributed in different branches.

Besides high compatibility with hybrid digital trunk, FXO/FXS and SIP trunk interfaces, it also possesses standard Ethernet port and dual-power design for redundancy backup, which perfectly fulfilled Huaneng's high requirements for modern communications. Like Huaneng's senior information manager David Hu said: "Synway's new generation SPBX not only cut our information system cost to minimum bottom, but also make all what we really needs available more efficiently and flexibly".

Supporting up to 20 E1 interfaces, the Multimedia SPBX is highly interconnected with various devices and allows for 30,000 IP access in a single system. With years of expertise of technical support service worldwide, Synway's engineers offer Huaneng responsive and efficient development, deployment, and design support to help developers rapidly deliver sophisticated revenue-generating applications.

Typical Application:



China Huaneng Group Built Next Generation Distributed Unified Communications Network across China and its overseas Branches on Synway's Platform

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Value:

In hybrid IP and PSTN networks, a new range of applications can be realized by Synway's SPBX series, which combines IP and PSTN access technologies, such as gateway, hosted call center, IVR, prepaid card service, voice mail, faxmail, unified messaging, auto attendance, conferencing and more. Synway's IP and PSTN architecture provide customers with matchless cost advantage, powerful signaling protocols and multimedia resources in most demanding applications.

Synway's IP signaling and media processing technologies cater to ultimate demands of pure IP-based applications in the ever changeable environment. Synway's underling thinking of product design is to make this ultimate IP-based demands and PSTN-based applications closely interconnected as well as completely independent.

Snway's SPBX forms a .complete, flexible, high perform turkey solution for VoIP applications to who need to connect their service or applications to legacy PSTN networks. This combination brings highly scalable, flexible PSTN to IP transport and signaling functionality, standard PSTN trunks and NIC interfaces and supports for SIP, SS7 (ISUP/TCAP/TUP/MTP), SCCP(MAP), ISDN variants, CAS as well as a wide range of media processing capabilities. In addition, this evolutionary combination makes it easy add cost effective to offer SIP-based services to traditional telephony users, or connect traditional PSTN applications to IP telephony subscribers.

The benefits offered by Synway UC enterprise solution include:

1. Interoperability: Interconnect the distributed branches to maximize efficiency while driving costs down;
2. Scalability: the Multimedia SPBX allows for unlimited expandability and can work steadily in high density usage of over 30,000 chs in a distributed flexible environment;
3. Robust NGN technology: NGN-based VOIP technology to seamlessly integrate with China Huaneng's existing business platform;
4. Tele-grade reliability: High cost performance and Telco dual-power redundancy and can efficiently balance the calling overload.

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National Bank of Thailand installed SMG4000 to communicate with subscribers more efficiently and cost effectively.

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Case Study

ธนาคารแห่งประเทศไทย
BANK OF THAILAND

Customer background analysis and challenges:

National bank of Thailand has purchased OBD (OUTBOUND) system from its system vendor locally. For the bank headquarter initially adopted this OBD system and improved clients satisfaction much. Then many bank branches decided to move forward with this OBD systems. With a growing number of credit card subscribers, the existing system could not meet the ever increasing dialing traffic;

The following challenges were laid before the National Bank of Thailand:

- System latency and response speed did not match the surging dialing of increasing subscriber base;
- System cannot remain high performance with the high density incoming calls occur;
- Cannot retain the cost advantage, since existing system expandability is a constrain;
- The dialing logic have to been optimized for better backup;

Solution:

For these reasons,the National Bank of Thailand decided to change its legacy system, using SYNWAY SMG4000 gateway.

SMG4000 has attracted over 100 system integrators to use, although it has not emerged in the market for a firmly long time. Based upon users' feedback and comparison analysis of other brands, GSM4000 has faster system response speed than its rivals. It could connect to the IP/WIRELESS networks with minimum latency, improving the operation efficiency of the system, and increasing dialing numbers and calling frequency. In addition, SMG4000 also could detect low wireless signals promptly and convert the wireless signals into high definition IP audio and text reliably. Besides, SMG adopts a variety of brand name hardware-components, and its embedded system has been optimized continually in the field, ensuing SMG4000 maintains a better stability under the circumstance of durable high-capacity running.

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National Bank of Thailand installed SMG4000 to communicate with subscribers more efficiently and cost effectively.

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Moreover, SMG4000 adopts synway`s SUPERFORM EHCO CANCELLATION to optimize the voice quality, and supports all kinds of voice optimization technology ,including CNG,AGC and Adaptive dynamic buffer. And it also adopts DSP-ENABLED Codecs, including G.711,G.722,G.723,G.729,ILBC, AMR, ect, making the voice performance and processing power unique and being able to satisfy all kinds of applying requirements Under extreme circumstances . In addition, SMG4000 can transfer TEXT information to achieve any expected performance on both voice and data.

SMG4000 Series gateway system adopts carrier-grade system structure. Compared to rival products, its compact size and power consumption are unparalleled. Compatible with different soft switching platforms (IP-PBX, UC), it also adapts open architecture, could be upgraded to fit into specific customer needs. In specific environments, SMG4000 can use and activate multiple SIM cards circularly, improve system security, make full use of bandwidth, and increase ROI.

Results:

- High-speed response and connectivity in the extreme network environments, with better run efficiency;
- Telecom grade reliability and continuous high performance in fully loaded capacity and in the long run;
- Homegrown hardware and software technologies to guarantee relevant upgrading and customization;
- DSP-enabled voice optimization to assure crystal voice quality and maximize bandwidth efficiency;
- High security and privacy for users via automatic-exchange of different SIM cards and Networks;
- More compact hardware design to save space and ensure advantages of power consumption and cost ;

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Global BPO Provider Huayun Data Chose Synway SMG Gateway to Achieve Ultra-low Cost and Highly-Reliable VOIP Solutions for Multiple Offshore Service Centers

Synway
Case Study

High Availability, Compatible and Scalable SIP Media Gateways for International Customer Care Contact Center Operations

Founded in 1998 and headquartered in USA, Huayun Data, a leading provider of global Business Process Outsourcing (BPO) services, deployed Synway SMG 2000 media gateways at its locations in the US to enable a one-stop, cost-effective and reliable VoIP connections between its affiliated agencies across the world. Based on Synway's VOIP-based gateway, Huayun Data lowered the operating costs down by 30% via adopting the brand-new VOIP-based IP communication system(Software Platform+VOIP Gateway) and ceasing the usage of the expensive international PSTN lines along with its legacy phones.

Background

Huayun Data is a leading global business process solutions company which offers business value to 500+ global clients by combining operational excellence with deep domain expertise in key industry verticals, including Travel, Insurance, Banking and Financial Services, Manufacturing, Shipping and Logistics, Healthcare and Utilities. Huayun Data delivers an entire spectrum of business process outsourcing services such as customer care, research and analytics and industry-specific back-office and front-office processes. Huayun Data has affiliated agencies worldwide, including China, India, UK and US.

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Global BPO Provider Huayun Data Chose Synway SMG Gateway to Achieve Ultra-low Cost and Highly-Reliable VOIP Solutions for Multiple Offshore Service Centers

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Challenges

Huayun Data's international customer contact center operations had been running very successfully for years. International traffic was collected at two PSTN interconnection points in the US, and the UK by using an Avaya contact center solution based at several sites in India, Europe, Asia. At each of these locations, a legacy phone switch was installed which was connected on one side to the local PSTN provider via T1/E1 connections and on the other to international leased PSTN lines. This solution, despite the high voice quality, is naturally limited in terms of high-capacity, flexible deployments and future upgradability. Besides, the cost of running the international leased PSTN lines is rather high as one of Huayun Data's capital expenditure and they were hoping to lower the operating costs by 30% or more via system upgradation.

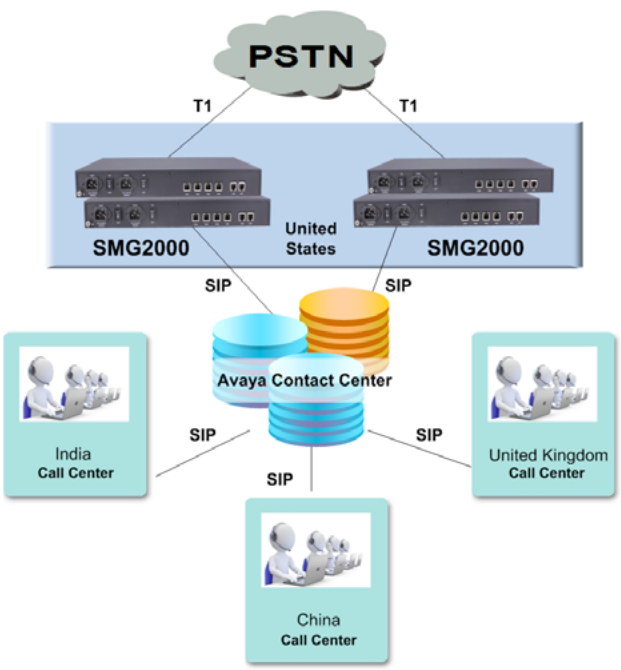
Huayun Data was faced with the challenge of managing its legacy communication systems that were at full capacity and reaching end-of-life. Huayun Data needed a cost-effective solution with a future-proof roadmap designed to support IP/MPLS and VoIP technology. The replacement solution had to offer scalability and reliability and ensure high voice quality. Furthermore, the solution would have to enable future integration with CTI, SIP IVR and other adjunct applications to deliver best-in-class customer service.

Solution

Synway SMG VOIP Gateway can help Huayun Data realise：

1. The replacement of its legacy voice equipments from expensive leased lines to a packet switched network based on VOIP-based IP solutions.

2. Featuring automatic routing and resource balancing, i.e., when there is network failure or communication jam, the calls can be directed to other calling branches such as Chia, UK and so on to guarantee the stability and reliability of the whole calling service system.



Global BPO Provider Huayun Data Chose Synway SMG Gateway to Achieve Ultra-low Cost and Highly-Reliable VOIP Solutions for Multiple Offshore Service Centers

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With the network infrastructure moving to IP, Huayun Data chose to replace its voice systems with VoIP devices to deliver more efficient services to customers. In the two target sites in the US, Huayun Data deployed Synway SMG 2000 high-density and high-availability media gateways. Each SMG 2000 can support up to 120 channels per chassis, reducing overall equipment costs. They are housed in a compact 1U chassis, resulting in savings in rack space, power consumption and cooling requirements. The SMG 2000 supports high availability of carrier-grade, including redundant power supplies, network interfaces, ensuring the highest degree of reliability.

Synway SMG Gateways are fully inter-operable with many third-party systems, both TDM and VoIP. As a result, integration with both the Avaya Session Manager and the respective PSTN operators was achieved smoothly.

The high performance VOIP infrastructure meant that the SIP signaling could be passed between the Session Manager in India and the SMG 2000 gateways reliably. In parallel, the voice packet streams were also securely transported by the IP network between the US and the various customer contact center locations. All of this ensured that despite the large geographic distances, very high call quality could be maintained, thereby enhancing the user experience of Huayun Data's customers.

The benefits delivered to Huayun Data include:

- Scalability & Compatibility

Distributed architecture allows for various SIP application platform, operator network and other IP devices like IP-PBX.

- Lower Bandwidth Utilization

SMG2000's advanced call processing capabilities maintain low bandwidth consumption while ensuring high voice quality.

- Scientific Design

SMG2000 hardware platform(1U Chassis,19inch) frees up costly rack space and reduces power and cooling costs.

- Reduced Capital Expenditure

A single high-capacity SMG2000 can replace several smaller devices.

- Carrier-grade Reliability

Built-in redundancy(Dual backup for ISDN/SS7 TDM signaling, dual power supply, double Ethernet ports) at various levels ensures business continuity and customer satisfaction.

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SMG2000S VoIP Gateway was applied into call center of Finnish Tourist Board to bridge TDM network with SIP trunks

Synway
Case Study

Finland, a country where there are thousands of islands dotted with lakes intertwined and covered by forests, attracts thousands of tourists from all over the world to come here to feel this pure land. With the increasing number of tourists, existing traditional call center communication system is not able to meet the requirements of visitors. Obviously, Finnish Tourist Board has to squeeze operating costs, improve communications efficiency by bypassing some irrelevant regulatory, and Connect the existing TDM switch to the IP network for upgrading their legacy systems under the limited budget.

Background:

Finnish Tourist Board expects high performance, reasonably priced equipment to seamlessly connect with the IP network, and they aim to convert legacy PBX into IP-PBX without changing in-place WIRING. There are lots of available VoIP gateway products in the market for option, but many of them are actually manufactured by terminal devices makers who have limited designing capabilities to fulfill enterprises' requirements.

Solutions:

For the above reasons, the Finnish Tourist Board call center decides to upgrade its traditional system, by adopting Synway's SMG2000S.

SMG2000S adopts long standing field-proven voice processing technologies, based on continually optimized algorithm of dedicated chipsets in diverse networks. It could offer high audio quality, despite of low bandwidth in extreme environment. For that, enterprise users could enjoy smooth communications effortlessly and efficiently, in situations of restricted bandwidth and high density switching.

SMG2000S could help integrators and enterprises to enjoy cost-effective & Reliable telecom applications, including IP-PBX, call center and more. In case of bandwidth limit, SMG2000S outperforms its rivals in fully loading situations, reliably transitioning between TDM and IP. According to the user`s experience and comparison analysis, SMG2000S features faster system response speed, and connects with the IP/TDM network faster and more reliably, with very low latency, and increases numbers of trunking frequency. SMG can implement full load communication effectively in the case of low bandwidth, and convert TDM to high definition VoIP reliably. SMG adopts a variety of brands components, optimizes embedded system continually during using, assuring the products can maintain a better stability under the circumstance of long time and high-density usage.

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Moreover, SMG2000S adopts synway`s SUPERFORM EHCO CANCELLATION to optimize the voice quality, and supports all kinds of voice optimization technology ,including CNG,AGC and Adaptive dynamic buffer. And it also adopts DSP-ENABLED Codecs, including G.711,G.722,G.723,G.729,ILBC, AMR, ect, making the voice performance and processing power unique and being able to satisfy all kinds of applying requirements Under extreme circumstances.

Results:

Via leveraging SMG2000S, this customer has obtained tangible benefits, including:

- Complete range of DSP-Based voice processing resources for better communication quality;
- Telco' grade hardware design, DSP-enabling signaling with superior reliability;
- Homegrown core technologies to assure unparalleled cost for enterprises and SPs;
- Higher System responsiveness capability in extreme network for better operational results;
- High performance and stability in cases of unstable(low) bandwidth and high capacity;
- Inherited Software and Hardware architecture and customer-oriented features and functionalities;

For more information, please use the following links:

- Please refer to application notes to know more details about product:
  SMG2000S helps enterprises with legacy PBX to efficiently set up VoIP PBX
- Please refer to case study to benefit from this product, and share global best practices:
  SMG2000S VoIP Gateway was applied into call center of Finnish Tourist Board to bridge TDM network with SIP trunks
- please refer to product link if you want more details about product information and download;
- Please refer to Online Video if you need more product information;
- Please e-mail us at Info@synway.net for your inquiry, or use the other ways to contact us;
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Synway's VoIP Gateway Complies with Genesys to Deliver Robust and Hi-Performance IP Contact Center

CASE STUDY

Genesys, the world's #1 Customer Experience Platform,empowers companies to create exceptional omnichannel experiences, journeys and relationships. For over 25 years, they have put the customer at the center of all they do, and they passionately believe that great customer engagement drives great business outcomes. From 2015, Synway collaborated with Genesys to be specialized in providing complete call center solution to enterprises and ISPs.

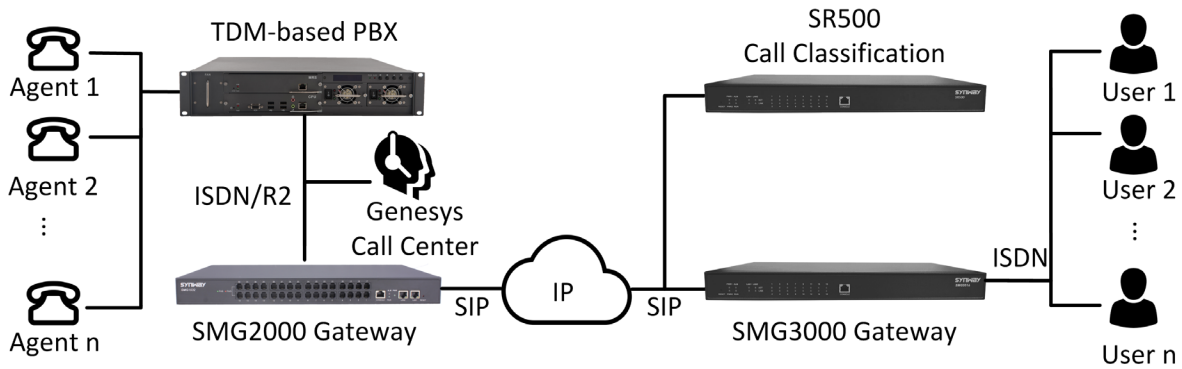
Challenges:

Genesys has long migrated its contact center to IP architecture. However, many call centers are still depended legacy PSTN networks, including E1/T1/Wireless/FXO/FXS interfaces. Genesys have partnered with some brandname VoIP gateway vendors, including Avaya, Audicodes and Cisco, to connect its call center to SIP trunking. Genesys call center business steadily grown in size year after year. The products of those existing VoIP gateway vendors had served its purpose very well for as number of years, but Genesys's distributors and partners expected to take things a step further. They wanted the similar quality gateway while reducing its hardware costs. Moreover, they required limited time to implement the new interoperable gateway.

Solutions:

Synway and Genesys' partners managed to deliver a robust and better-cost solution, which would allow Genesys to continue delivering call center business with perfect performance and unparalleled cost advantage .SMG2000 E1/T1 gateway series and SMG3000 carrier-grade E1/T1 gateway series were chose to interface with Genesys's call center system. The new solution can meet requirements of large sized or small sized call centers.

Synway®



SMG3000 carrier-grade E1/T1 gateway was assigned especially for telco-grade ISPs and large enterprises, it processes signaling and multimedia in a single chassis and can deliver SIP services into SS7, PRI, and other PSTN networks. And SMG2000 E1/T1 gateway, for SMB, converts digital PSTN message into IP formats and secures sessions across IP and mixed network boundaries to support the seamless delivery of services in a compact 1U form factor appliance.

Moreover, Synway's VoIP gateways possess highly efficient call classification function, which is vital to improve dialing efficiency and minimize operational cost for Genesys's call center modules, such as high-density OBD, predictive dialing, dialer, telemarketing and more. It helps not only minimize dialing cost but also maximize the value of dialing (human and network) resources. With call classification, OBD applications could improve Genesys's dialing efficiency by up to 60% and deliver high satisfaction for both agents and subscribers. The solution also includes an integrated and highly intuitive management system that gives full control over the platform.

Results:

- *Significant saving on operational cost and after sales costs, improved efficiency and effectiveness;*
- *Telecom grade reliability and continuous high performance in fully loaded capacity and in the long run;*
- *Homegrown hardware, with Genesys software, to guarantee relevant upgrading and customization;*
- *High-speed response and connectivity in the extreme network environments, with better run efficiency;*

About Synway

As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. www.synway.net

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Synway compact and economical E1/T1 gateway helps education center to upgrade the legacy PBX to IP PBX

CASE STUDY

Based in Hangzhou, China. **The YQ Training Institute (YTI) Education Center** is a national network of non-profit organizations authorized by YQ Training Institute to deliver occupational safety and health training to public and private sector workers, supervisors, and employers on behalf of YQ.

Challenges:

YTI Education Center is a relatively new program of YQ, steadily growing in size year after year. Like many organizations of a similar size, YTI Education Center's communications infrastructure centered around a small, open-source PBX platform. It had served its purpose very well for a number of years but now YTI Education Center was looking to take things a step further. It wanted to benefit from the latest in unified communications while at the same time reducing its ongoing costs. The new solution had to offer full voice communications with user collaboration, instant messaging and presence. At the same time, YTI Education Center had limited space available so it needed a compact solution which would not require multiple servers and dedicated racks.

Solutions:

SMG2030L/2060L are unparalleledly cost effective and compliant with PRI ISDN, R2 and SS7 packets, and adopt the equivalent hardware architecture like Telco' grade SMG3000 series, with dedicated DSP chipsets for processing IP/TDM signaling and optimizing voice quality. Compared to with rival products, SMG2000L features high reliability and unparalleled cost efficiency, and delivers a perfect alternative option for enterprises, operators and system integrators. Some of specific values include:

- *Flexible and efficient VoIP Gateway Solution*

With its scalable density and versatility, SMG2000L can help enable wireless and wireline service providers to add new Value Added Services (VAS) quickly, and provide a clear migration path to an all-IP network. It can scale up to 60 simultaneous IP sessions and at the same time provide media transcoding and impressive sessions per second.

SMG2000L support voice densities ranging from 30 to 60 channels, call routing, call translation and IP transcoding in a single mini chassis for gateway operations. The integrated gateway functionality not only provides interworking between IP and TDM domains, but also automated failover from IP to TDM for outbound routing. These features help service providers looking to improve network and routing resiliency and lower TCO. These capabilities make the

SMG2000L an excellent option for mobile VAS, SIP trunking, contact center and emergency service deployments, as well as for retail, wholesale, business, and enhanced Voice over IP (VoIP) services.

- *Any-to-Any Signaling and Multimedia Connectivity*

SMG2000L provides any-to-any network connectivity through its ability to interwork multiple protocols used by telecommunications providers to deliver services to their retail, business and wholesale customers. It can provide interworking between ISDN, SS7, SIP formats.

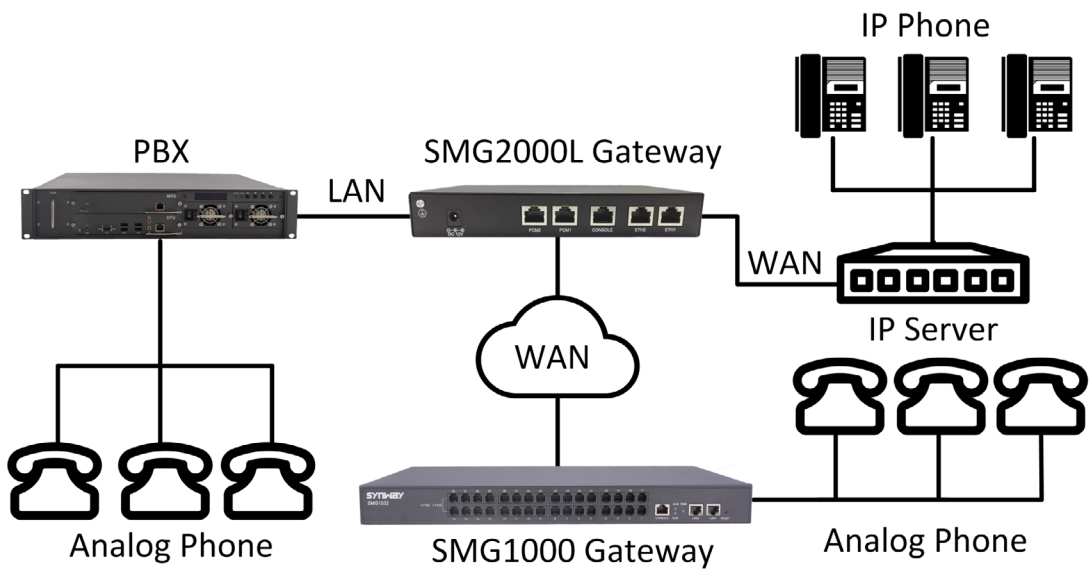
SMG2000L also supports any-to-any media transcoding for popular voice codecs. T.38 and G.711 fax interworking and support for RTP, INBAND and SIPINFO method based tones and event handling complement the media transcoding capabilities to provide a high degree of flexibility to help deliver value added services economically.

- *User-friendly management and configuration toolkits*

The Web graphical user interface (WebUI) is a real-time web toolkit to configure, monitor SMG2000L. It allows operators to configure and perform real-time monitoring and maintenance. Flexible SIP and Protocols configuration enable services providers and enterprises to seamlessly connect in hybrid networks, Helping configure SIP, SIP trunking, SIP Mediation, PCM, SS7and ISDN, Routing and more; And a broad range of gateway toolkits also help gateway's maintenance and software upgrading for Web UI, gateway services and firmware.

Results:

YTI Education Center's transition from its legacy PBX to SMG2000L was carried out very smoothly and quickly. The organization now has a fully functioning unified communications platform running on a single appliance, which minimizes the issue of infrastructure management and has led to the streamlining of its overall UC operations.



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Synway Session border controller SBC500 facilitates TOYOTA to build an effective and secure global communication system

CASE STUDY

TOYOTA, as the largest automobile manufacturer in the world, the effective communications system is vital to TOYOTA. However, it's not easy for TOYOTA to implement timely effective communication system to communicate with automobile suppliers around the world. Although the communication mode has already been IP-based, the complexity of SIP protocols and diverse signals also perplex the TOYOTA.

Challenges:

In the process of enterprise VoIP communication system construction, more and more enterprises are beginning to use IP-PBX, Softswitch, MCU and other products to boost IP communication capability, integrating with IP-based network carrying data, voice, video, business. But the security is a challenge for many enterprises in the complex network situation.

Solving problems of compatibility and security in the process of building communication system

The different communication systems are matched via communication protocols by SBC transcoding. For TOYOTA, there is a big security risk if the internal communication network connects with the undesignated external communication network. So making the internal network topology isolated is very important to avoid cyber attacks from non-trusted external communication networks.

Values of SBC in TOYOTA Communication System:

- *Protecting topology of the core network and the internal network*

SBC acts as a proxy between user terminals and core devices such as IP-PBX, softswitch, and provides security for real-time sessions. External terminal devices or endpoints access to the core network which is not visible to them via SBC. So it effectively hides the core network and the internal network of the enterprise topology, preventing cyber attack and improving the security of the entire network infrastructure.

- *The firewall function could be provided by SBC*

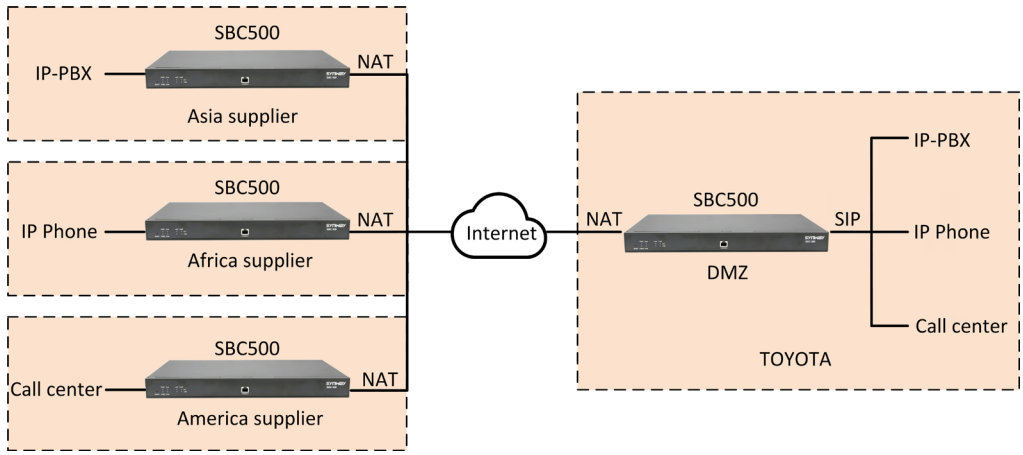
SBC provides a session-based dynamic firewall function, supports time-based ACLs, and flexible configuration of ACL rule effective time. It also provides a blacklist function, which is quickly filtered the original IP address of the packet, which shields the packets sent by the specific IP address of the blacklist entry to prevent illegal intrusion.

- *Preventing DoS Attack*

SBC provides anti-signaling message DoS attack function, in the event of signaling packets DoS attacks can still guarantee the maximum use of normal users, but also to prevent false source IP address signaling packets DoS attacks and prevent IP address fixed of the signaling message DoS attack, you can directly discard the bad signaling messages, reduce the pressure on the soft exchange processing. To protect the entire VoIP communication system stable operation.

- *Achieving IP multimedia NAT traversal by SBC*

TOYOTA is concerned about not only the security of the communication system, but also the communication network interoperability for its distributed global suppliers, and SBC can easily help the communication system, through a variety of NAT protection, be compatible with other communication systems.



Synway SBC500, an organic component of communication solution, often is implemented as connection point between internal and external networks, being used for bridging IP-based multimedia transmission among different IP networks and ensuring high level of communication security in diverse networks of enterprises, services providers and carriers.

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Synway Carrier-Grade VoIP Gateway Helped China Telecom Build up Highly Versatile and Redundant Host VoIP Communications system

Synway
Case Study

Executive Summary:

As one of 3 top operators in China, China Telecom is a leading player in China domestic telecommunications market and also recognized as one of China's major basic telecommunications operators. To satisfy the ever-growing customers and improve the system efficiency, China Telecom selected Synway High Capacity carrier grade VoIP Gateway to connect its SMB, Enterprises, and Subscribers with its existing Huawei-based unified communications. The solution offered by Synway allowed China Telecom to remain the existing UC system and its IP PBX to maximize value at the lowest cost.

中国电信
CHINA TELECOM

Background:

China Telecommunications Corporation (China Telecom) was established on May 17, 2000, with a total registered capital of RMB 220.4 billion. At present, the size of the Company's total assets exceed RMB 600 billion, with an annual revenue level of more than RMB 380 billion. As one of the three leading telecom operators in China, China Telecom ranked 182nd in the 2013 Fortune 500 Companies, and was selected as one of the Most Admired Asian Companies as well as the one of the Best Asia Companies in terms of Corporate Governance by many international esteemed institutes for consecutive years. As an integrated information service provider, China Telecom provides integrated information service solutions including mobile services, broadband Internet access, information service applications and fixed-line telephone services.

China Telecom has many subsidiary branches in 31 provinces (municipalities and autonomous regions) and in America, Europe and the Asia-Pacific region.

Synway®

Synway Carrier-Grade VoIP Gateway Helped China Telecom Build up Highly Versatile and Redundant Host VoIP Communications system

Synway
Case Study

Challenges:

One of the advanced enterprise services is China Telecom SIP Trunk and Unified communications, which enables the integration of voice and data traffic on one single data network, and continue to maximize the value of its existing ISDN/ SS7 lines.

China Telecom SIP Trunk and Unified communications is a based on an Avaya platform. Companies connect to the network via their PBX (with a VoIP gateway) or IP-PBX equipment. One prerequisite for signing up to the service is that any equipment interfacing with China Telecom SIP trunk has to be officially certified by China Telecom to ensure compatibility and to integrate regulatory requirements.

Recently, many companies have begun used Huawai's platform as their enterprise unified communications platform, realizing the wide-ranging benefits. Companies wishing to do so need to deploy third party media gateways or protocol transcoding equipment that are qualified to ensure full compatibility. In order for a company using Huawei to connect with China Telecom VoIP infrastructure, the whole solution, including any media gateways or E-SBCs, needs to pass China Telecom's qualification testing which covers technical considerations and regulatory requirements. China Telecom, therefore, was looking for a solution that would integrate the regulator's requirements and allow SMB and enterprises that had migrated to China Telecom's integrated platform to benefit from its converged Business Trunking and UC service.

Solution:

China Telecom began to test Synway VoIP Gateway under the lab and on the site. The test experiment was carried out in Synway-located Hangzhou City, a high density calling zone for China Telecom. Through three months' experiment and a thorough comparison with other competitive products such as Synway, China Telecom finally decided to cooperate with Synway to establish a large capacity VoIP calling system.

The platform chosen by China Telecom to act as the interface between its customers' unified communication and the Business Trunking network was Synway's SMG 3000(from ISDN to IP) and SBO500(for protocols mediation).

Synway's SMG 3000 and SBO500 acts as the demarcation point between enterprise VoIP networks and the SIP trunking service provider domain, providing protocol mediation between different SIP implementations. Furthermore, the Synway's SMG 3000 and SBO500 is fully qualified for use with Huawei Platform. In China Telecom's case, this meant that customers could be sure of smooth interoperability between their Huawei UC environments network and China Telecom's IMS core network.

Two of the Synway's solution were of critical importance for China Telecom's selection.

The first of these was SBO500's ability to convert between the TCP transport protocol used in the Lync environment and the UDP protocol used in China Telecom's Business Trunking network.

The second was the SMG3000's ability to meet the China regulator's requirements for the support of emergency calls. Handling emergency calls in an IP-based communications environment. In traditional telephony networks where there is a physical connection to users' phones or PBXs, callers and their locations can be relatively easily identified, enabling emergency services to be dispatched to the correct location as quickly as possible.In VoIP based systems, however, there is no longer an automatic correlation between the caller's number and their physical location. A company's communications system may be based on a centralized UC platform which is only connected to the service provider at the company's head office. Individual workers, however, may be located at any of the company's branch offices.

China Telecom was able to overcome this challenge thanks to a combination of Huawei's Location Information Server (LIS) feature and SMG3000 ability to perform complex SIP packet header manipulation. Some of other reasons why China Telecom chose Synway's solutions were:

1. Robust enough to run 365*24 non-stop operation based on Synway's telco-grade software/hardware infrastructure: Synway VoIP Gateway is elaborately designed in a compact 1 U chassis with multiple user-friendly features such as redundant SS7/PRI/CAS/SS1 signaling, dual-power hot-swap, 2*1000M Ethernet ports, automatic diagnosis and reset as well as multiple intelligent cooling system, assuring stability and reliability of the entire system.

2. Perfect full load ability and voice quality under high density situations: Synway VoIP Gateway is capable of presenting crystal clear voice quality without delay even when concurrent calls are up to 5000chs per minutes. With exclusive software/hardware technology(EC, QoS, CNG, ToS, Jitter Buffer) for voice optimization and dedicated SIP-based chipset, it features automatic IP resources balance, overload protection, reasonable IP allocation and minimum bandwidth cost.

Result and Value:

Result and values:

- High Interoperability:

Distributed architecture allows for various SIP application platform, operator network and other IP devices to converge.

- Lower Bandwidth Utilization

SMG3000's advanced call processing capabilities and SBO500's DSP-enabled Transcoding maintain low bandwidth consumption while ensuring high voice quality

- Carrier-grade Reliability

Built-in redundancy (Dual backup for ISDN/SS7 TDM signaling, dual power supply, double Ethernet ports) at various levels ensures business continuity and customer satisfaction.

www.synway.net

Connect Synway

As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. Since 1995, over 3,000 service providers, software developers and system integrators have deployed Synway's offerings to deliver a broad range of TDM and VoIP-based applications worldwide, including Unified Communications, SIP Trunking, Call Center, Mobile VAS, Faxing, Conferencing, Call Recording as well as Asterisk-based Open Source Applications. With dedicated teammates and well-known premium services, Synway makes consistent efforts to deliver partners with a variety of customizable, high-performance and cost effective voice communications products.

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SIP Trunking at China Merchants Bank(Zhejiang Branch) with VOS and Synway

Synway
Case Study

Executive Summary:

China Merchants Bank (Zhejiang Branch) leases dialing system from Jinglun Hi-tech. Jinglun hi-tech is a leading provider of business process and information technology. As Jinglun grew they faced many challenges, including how best to expand to new locations and provide cost effective communications services to these new locations and its clients including Merchant Bank of China (Zhejiang Branch). To solve these challenges, JINGLUN selected VOS SIP Trunking and the Synway SMG 3000 Media Gateway to enable highly reliable and cost effective communications services. By adopting SIP Trunking with VOS and Synway, JINGLUN was able to reduce operating costs and expand their business to a number of new locations and strategically important clients.

Background:

Jinglun hi-tech is a leading provider of business process and information technology which offers comprehensive outsourcing services to its clients. JINGLUN specializes in contact center and BPO services, software development, quality assurance testing, and infrastructure outsourcing.

Founded in 1998, JINGLUN operates from 38 locations worldwide including their headquarters in Shenzhen and operations centers in China and the India. JINGLUN currently employs approximately 2,000 people around the world.

As JINGLUN grew they faced many challenges, including how expand to new locations and provide cost effective communications to these new locations. To solve these challenges, JINGLUN selected VOS SIP Trunking and the Synway SMG 3000 to enable highly reliable and cost effective communications. By adopting SIP Trunking with VOS and Synway, JINGLUN was reduce operating costs and expand their business to a number of new and strategically important clients.

SIP Trunking at China Merchants Bank(Zhejiang Branch) with VOS and Synway

Synway Case Study

Challenges:

With the incredible growth of their outsourced contact center business during 2009, JINGLUN recognized an opportunity to expand their operations into new facilities in Beijing, Shanghai. These new facilities would provide access to a skilled and cost-effective pool of agents that could serve a number of new clients. With the continued growth in their business, JINGLUN expected to employ another 1,000 agents within the next 18 months, and then open a second facility in Shanghai. One specific new client utilized a blended campaign (both inbound and outbound calling) and had significant seasonable variability in anticipated call volume, challenging both workforce management and the telecommunications infrastructure. In preparation for opening the new locations and supporting the new clients, a number of legacy TDM telecommunications service providers were explored, but their approach suffered from a number of issues:

1. Expensive dedicated T/E lines were required to interconnect the new facilities to the Shenzhen based datacenter
2. A lack of market-competitive rates for both inbound and outbound calling charges

The combination of these issues drove costs up dramatically –enough so to leave JINGLUN unable to effectively compete in a fast-paced market.

In addition to the cost issues, JINGLUN also needed to support their existing TDM-based predictive dialer that supports their Shenzhen location and a new Cisco predictive dialer for their Shanghai location. Predictive dialers are a key part of their contact center, using their client's customer database to automatically call end-customers and quickly connect them to an available agent. The predictive dialers work with the JINGLUN agents to proactively notify consumers of billing issues and upgrade offers. This activity drives a significant number of upgrades and additional revenue for the client, not to mention customer satisfaction and retention.

Solution:

To address these challenges, JINGLUN selected SIP Trunking services from VOS that offered high quality communications at extremely competitive calling rates delivered through the Cloud. JINGLUN was able to further reduce their communications expenses as VOS proactively analyzed their usage and made recommendations on how they could decrease their expenses while maintaining call quality. VOS is able to accomplish this using their on-demand platform which includes the automatic directory providing call routing intelligence for least cost With VOS's SIP Trunking, JINGLUN was able to:

• Dynamically scale capacity up or down to meet seasonal adjustments in call volumes

• Rapidly get new facilities connected to VOS SIP Trunking over the cloud without the delays and expense involved in ordering new lines from the major service providers

• Handle the significant capacity, call completion and quality demands of a dynamic contact center

• Reduce their telecommunications expense and drive greater value to compete effectively yet have the flexibility for future growth

Integrating the VOS SIP Trunking to the Cisco predictive dialer with its TDM PRI signaling physical interface required a highly-reliable, scalable media gateway with one or more DS3 interfaces. Based on past positive experience, VOS selected the Synway SMG 3000 Media Gateway as part of their solution for this application.

The SMG 3000 Media Gateway is scalable, offering for a total of 1992 ports in a compact and space-saving 1U 19" chassis. With optional High-Availability, the SMG 3000 supports complete redundant DSP resources in the case of a failure. A unique added benefit of selecting the Synway SMG 3000 is the capability to add transcoding capabilities via upgrade, providing JINGLUN with a platform that can accommodate future SIP-based predictive dialer or call center solutions from a variety of other manufacturers.

Results:

The VOS/Synway solution at JINGLUN is currently in production and continues to perform above expectations, handling thousands of calls a day for a range of JINGLUN's clients.

By choosing VOS and Synway, Jinglun hi-tech was able to:

• Leverage the existing Cisco predictive dialer and avoid costly upgrades

• Expand to new facilities and locations and not be limited by the cost

• Achieve their goal of geographic diversity

• Control the costs of their inbound and outbound calling traffic

• Deliver highly reliable communications for their clients

• Deliver high quality services to their clients

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Synway's Carrier-Grade SS7/SIGTRTAN VoIP Gateway SMG3064, Optimizes Hi-Capacity VoIP System for Germany leading Operator

CASE STUDY

E-Plus is a mobile telecommunications operator in Germany and it headquartered in Düsseldorf is a wholly-owned subsidiary of Telefónica Deutschland Holding AG. It is one of the largest telecommunication providers in Germany with over 47 million customer connections. According to mobile customer numbers, Telefónica Deutschland is the top one operator in the market. The company and its subsidiaries have licenses to operate in all of the Germany regions.

Challenge:

E-PlUS wanted to develop a more cost effective VoIP services for some SMB and medium level enterprises. As the first operator in Germany to offer mobile communications services, E-plus was looking for ways of creating demand for its services and finding multiple market sectors that could benefit from all telecommunication has to offer.

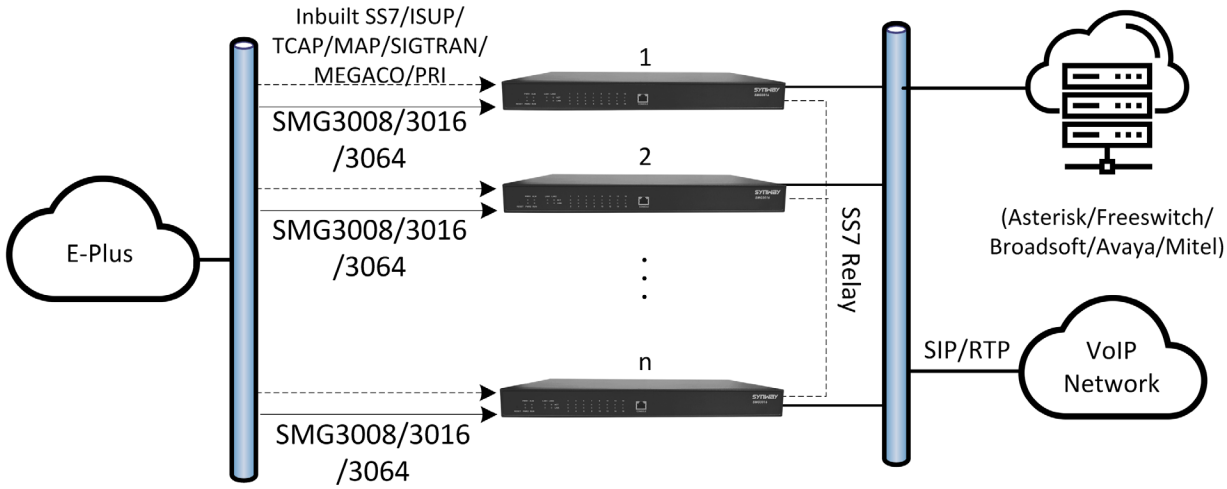
To make connectivity even easier, E-Plus wanted any-to-any network connectivity and interwork multiple protocols to deliver services to their retail, business and wholesale customers. That would save time and money both for the customers and E-Plus themselves. For improving the performance of customers' telecommunication , E-Plus also wanted to find a device can widely compatible with its own softswitch platform and a third party Broadsoft. Moreover, the device was expected to support high densities call with high stability.

Solution:

After evaluating several devices from different vendors of VoIP hardware, E-Plus choice was Synway SMG3064/3016/3008 .The SMG3064/3016/3008 connects IP and hybrid networks via telephony and Fiber Optical/ Ethernet links in a compact 1U form factor appliance. It also transforms media and signaling to support efficient and reliable voice, fax and multimedia sessions for mobile, fixed and cloud-based applications.The convergence of IP multimedia and TDM gateway functionality in a single chassis in the SMG offers significant reductions in investment and operational cost when compared to less integrated alternatives.

SMG3064/3016/3008 adopts telecommunication architecture and use more DSP hardware than similar products, the processing ability is more powerful than most rivals. SMG3064/3016/3008 adopts open platform architecture, which is compatible with a variety of soft switching and a third-party software. It also can upgrade product functionalities promptly, according to user needs, being seamlessly compatible with diverse networks and applications.

SMG3064/3016/3008 could help integrators and enterprises to enjoy cost-effective & reliable telecom applications. According to the user`s experience and comparison analysis, SMG3064/3016/3008 features faster system response speed, and connects with the IP/TDM network faster and more reliably, with very low latency, and increases numbers of trunking frequency. SMG3064/3016/3008 can implement full load communication effectively in the case of low bandwidth, and convert TDM to high definition VoIP reliably. SMG adopts a variety of brands components, optimizes embedded system continually during using, assuring the products can maintain a better stability under the circumstance of long time and high-density usage.



Results：

By adopting SMG3064/3016/3008 VoIP Gateway, E-Plus can receive the following benefits:

- *Minimize SS7/SIGTRAN VoIP Gateway Cost:*

High voice quality and instant call connection, improving system efficiency and profitability; Synway SS7 VoIP Gateway could reduce hardware cost by 70%;

- *Build-in SS7, SIGTRAN, SIP in A Single Platform*

Complimentary standardized SS7 Packets(Up to 64 SS7 links, ISUP, MTP1~3, TCAP), SIGTRAN and SIP for any carrier networks worldwide; Field-proven by over 50 largest operators from European, China, USA, India, Brazil, South America;

- *Dedicated DSP-Empowered Capability*

Telecom-style DSP algorithm has been optimized for over decades, assuring seamless compliance with any network environment. Plentiful DSP resources are allocated for signaling, media processing, bandwidth optimization, Telco redundancy;

- *Robust Telco-Grade Architecture*

Dual power supply, 1U compact structure, industrial heating sink system, dual 1,000M Ethernet interfaces, and Telco' grade hardware architecture ensure 200,000Hr MTBF and 0-defective rate in long lifecycle ;

- *Highly Adjustable For Diverse SoftSwitch*

Homegrown core technologies to assure seamless compliance with diverse softswitch platform, including Mitel, Avaya, Broadsoft, Yate, OpenSIP, Asterisk, VECTRA, VSC, SIPPULSE, Tropico, FreeSwitch and more other softswitch;

- *99.9999% Availability in Full Load*

Support 4/8/16/64E1 (120/240/480/1,920Chs) per unit, with higher system responsiveness capability in extreme network for better operational results; High performance and stability in cases of unstable (low) bandwidth and high capacity;

- *User-friendly WEB Management*

With complete understanding about SPs and operator's headaches, SMG3000 adopts the simplest and straight-forward configuration to achieve SPs and Operators' most sophisticated objectives. Over 1,000 units of SMG3000 can run together;

About Synway

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Vodafone Installed Synway's UMCT Platforms to Launch Its OBD/IBD Applications for Its 50M Indian Subscribers

Synway
Case Study

Executive Summary:

With high efficiency and reliability in full load, The Synway convergence platform UMCT has been selected to perform highly demanding OBD/IBD application for better expanding Vodafone's Indian marketplaces since 2005. Synway successfully upgraded Vodafone's communications system for better efficiency, and helped Vodafone penetrated into competitive India markets faster than ever before.

Background:

Vodafone comes a long way since making the first ever mobile call in the UK on 1 January 1985. Today, more than 400 million customers around the world choose us to look after their communications needs. In 30 years, a small mobile operator in Newbury has grown into a global business and one of the most valuable brands in the world, and now operate in around 30 countries and partner with networks in over 50 more.

True to its origins, Vodafone has always committed to deliver useful and inspiring innovation. In 1991 it enabled the world's first international mobile roaming call. In 2002, with Vodafone Live!, it sets a new standard for mobile communications with internet access on the move.

Challenges:

Firstly, Vodafone (www.vodafone.com) has over 300 enterprise partners across India, including bank, telecom, and power plants. Most of them need highly frequent communication activities, such as announcement, marketing, promotion and so on. How to communicate and associate with each other more efficiently and effective becomes the top issue. A coordinated, robust and future-oriented communications system became more and more important.

Secondly, Vodafone needed to make full usage of its existing facility to maximize its value for its business partners. In past 10 years, Vodafone has developed and set up highly efficient TDM and Fiber voice network, with SS7 and IP protocols embedded. It has been in huge investment and still works perfectly and stably. Vodafone needs to find a technical partner with high interoperability and reliability over its existing networks.

Thirdly, with a complex traditional communication system and independent branches, some important new communication methods were required, email, SMS, presence alert, call center and IVR in different terminal devices, including intelligent mobile, tablelet, IPAD and so on. So the new communication had to make all these features and functionality available for all of Vodafone's subscribers.

Vodafone Installed Synway's UMCT Platforms to Launch Its OBD/IBD Applications for Its 50M Indian Subscribers

Synway
Case Study

Solution:

Early in the year 2004, Synway had partnered with the Indian well-known solution partner VoiceGate to build some voice systems for different carriers, including Idea, and it could be tailored to Vodafone's needs and seamlessly interconnected with Vodafone's platform.

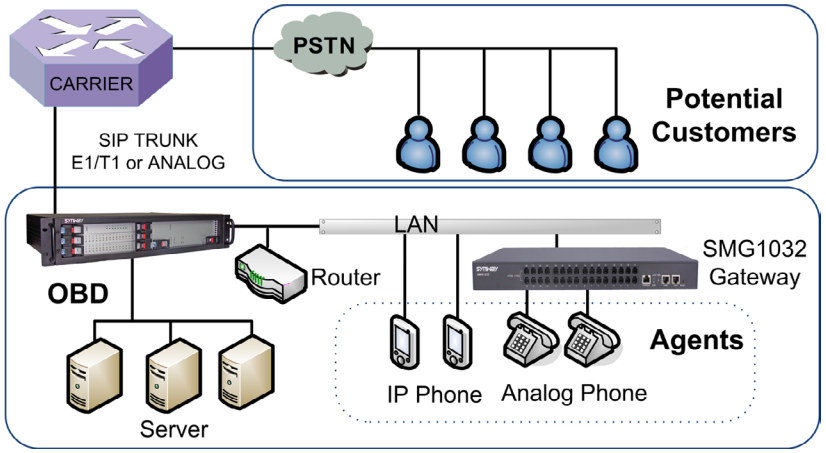
Supporting up to 2000 ports in a single system, the UMCT could fulfill Vodafone's high capacity requirement. It also platforms feature high flexibility, programmability and high scalability. Incorporating a full suite of protocols, including SIP, SS7, ISDN, CAS, and Telco solution providers can depend on Synway's portfolios to easily deliver gateway functionality and a host of next generation features. Sustainability and interoperability of Synway's products protect initial investment of service providers and application developers.

The UMCT possesses rich media processing capabilities, and provide service providers and application developers with matchless cost, high performance ALL-IN-ONE hardware platform easily used for all of CTI applications. Its enhanced built-in resources include conferencing, fax, compression protocols, echo cancellation and call control, which are powered by innovative technologies and expertise accumulated in serving leading service providers, application developers, telecom equipment providers and OEMs worldwide.

"Synway's engineers offer us responsive and efficient development, deployment, and design support to help developers rapidly deliver sophisticated revenue-generating applications", Like VoiceGate's managing director Mohammad Syed said: "Synway's new generation UMCT not only cut our information system cost. Unlike its rival products, it has compatible and optimized SS7 protocols compliance, it also provider better service and support, make all Vodafone's needs possible and available".

In the hypercompetitive environment, The UMCT helped Vodafone continually lower subscription cost for standard service, such as voicemail, and simultaneously offer subscribers more value-added functionalities, such as faxmail, CRBT, etc.

Typical Application:



Synway®

Value:

The UMCT platform has the following values, which ensure Vodafone's further penetration into Indian market:

- ALL-IN-ONE architecture of integrated signaling and multimedia processing

Integrate media processing and signaling built on in-house DSP architectures, and support all of multimedia applications, such as IVR, call center, fax and conferencing, and other highly available solution architectures.

- Rich media processing: conferencing, compression, fax, echo cancellation, call control, etc.

Support for enhanced multimedia processing resources, including conferencing, IVR, fax, compression, echo canceller, call control, help developers develop flexible feature-rich applications.

- Selectable signaling protocols: CAS, ISDN PRI, SS7(ISUP/TUP/MTP/TCAP), SCCP(MAP)

Offer robust signaling technologies, including SS7 (MTP1-3, ISUP, TCAP, TUP), SCCP(MAP), ISDN PRI and CAS for service providers and application developers to develop and deploy high capability, high performance and highly available enhanced services in PSTN and PLMN networks.

- Universal user-friendly SHCTI API supports for a range of calling features

Unified API architecture minimizes efforts on application development and deployment, and PSTN-based or SIP-based applications can be migrated among all of Synway's hardware platforms.

The benefits offered by Synway UMCT based solutions include:

1. Interoperability: Interconnect the distributed branches to maximize efficiency while driving costs down;
2. Scalability: the UMCT allows for unlimited expandability and can work steadily in high density usage of over 2,000 chs in a single system;
3. Tele-grade reliability: High cost performance and Telco dual-power redundancy and can efficiently balance the calling overload.

www.synway.net

Connect Synway

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Synway Carrier-Grade VoIP Gateway Helps Etisalat in Middle East Deliver Unified Communication and IBD Services

CASE STUDY

Etisalat Group is one of the world's leading telecom groups in emerging markets. Headquartered in Abu Dhabi, Etisalat was established four decades ago in the UAE as the country's first telecommunications service provider. An international blue-chip organisation, Etisalat Group provides innovative solutions and services to 163 million subscribers in 17 countries across the Middle East, Asia and Africa.

Etisalat offering a full range of information, communications services for both consumer and corporate markets. Etisalat operates UAE's fastest mobile network that delivers up to 21Mbps for downlink to complement its nation-wide GSM network, and peering/voice and data transit, call center, as well as cable TV services (including High Definition Television and on-demand services).Etisalat also operates an extensive fixed business network that provides a wide range of data, voice and wholesale services.

Challenges:

Etisalat's call center is offering voice services to both residential and business users. Since its introduction in 2014 Etisalat network was built around two different core solutions: one serving its business subscribers and the other, provided by Synway, serving the enterprise subscribers. Having two different solutions inside the same network presented some real challenges:

- *System cannot remain high performance with the high density incoming calls occur;*
- *New services had to be integrated and tested in multiple environments, before going live*
- *Network design was not flexible enough to allow quick, efficient and cost-effective adaptation to traffic growth*
- *The dialing logic have to been optimized for better backup;*

Solutions:

In 2016 Etisalat decided to develop its call center service and use a single vendor to provide VoIP infrastructure for both the residential and business users. This project was awarded to Synway because of its field-proven, stable and reliable products, excellent post-sales support, and the ability to react fast. This was coupled with Synway' ability to comply with Etisalat's new feature requirements, as the networks evolved.

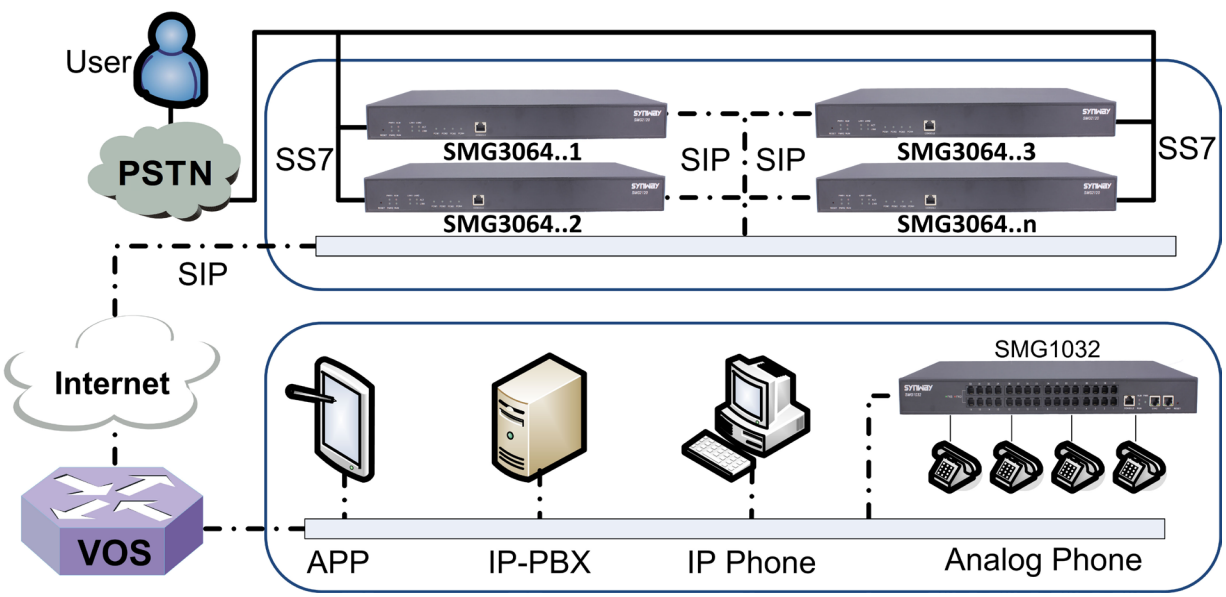
Synway offered a stable and efficient solution based on Synway SMG 3064. With a more efficient manner to interconnect and deliver large-scalability services, The Synway SMG3064, with 63E1-SIP Ports and STM-1 interface in 1U compact size, enables service providers and carriers to maximize value of their networks and services. The SMG3064 converts digital PSTN message into IP formats and connects and secures sessions across IP and mixed network boundaries to support the seamless delivery of services.

The SMG3064 connects IP and hybrid networks via telephony and Fiber Optical/Ethernet links in a compact 1U form factor appliance. It also transforms media and signaling to support efficient and reliable voice, fax and multimedia sessions for mobile, fixed and cloud-based applications. Synway SMG3064 offered the high voice quality and reliability that Etisalat expected. The convergence of IP multimedia and TDM gateway functionality in a single chassis in the SMG offers significant reductions in investment and operational cost when compared to less integrated alternatives.

It can significantly improve the operation efficiency while applying SMG3064 in the data processing and SMS transmission, because of the lower cost of SMS-based data in carrier networks. With SMG3064, carrier networks could assure higher successful transmission rate of data, and less bandwidth is consumed. For its specific security algorithm of built-in SIM slots, SMG3064 would incur lower probability of being disabled or suspended. Therefore, many enterprises and carriers are starting to adopt SMG3064 for business expansion and efficiency improvement.

Results:

- *High-speed response and connectivity in the extreme network environments, with better run efficiency;*
- *Telecom grade reliability and continuous high performance in fully loaded capacity and in the long run;*
- *Homegrown hardware and software technologies to guarantee relevant upgrading and customization;*
- *More compact hardware design to save space and ensure advantages of power consumption and cost ;*



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The Financial software and network service pioneer, HUNDSUN is facilitated to build advanced OBD system by SYNWAY

CASE STUDY

Hundsun Technologies is a world-leading provider of financial software and network service. Founded in 1995 and headquartered in Hangzhou, Hundsun has been committed to the development and deployment in the fields of assets management industry, provides the whole IT solutions and service to financial institutions. Until now, over 5000 employees work for Hundsun and more than 20 million financial institutions have entrusted Hundsun with their assets management.

Challenge:

For HUNDSUN, there is no doubt that telecommunication is significant, since 98% of its business are completed by telephone call. However, when telephone silence and hang-up usually occur in actual operational process, there is not only a waste of resources for each telephone communication, which negatively impacts efficiency of OBD system.

Solution:

Technically, most outbound dialing systems adopt the predictive dialing mechanism, in which system automatically dial a number beforehand. When a called number is reached, the agent must communicate with the called individual as soon as possible. In the predictive dialing mechanism, the calling system first dials a customer's number and then dials an agent's number after the customer pick the phone, and thus a delay exists in connecting. If the delay is too long, the customer will hang up, as there is no answering agent heard, which results to a void dialing. It not only wastes the communication resources, but also brings down the system efficiency.

SMS1000 completely analyzes and adjusts the dialing functionality to better match the predictive dialing mechanism of the outbound system. FSK mode is adopted to send out the dialing number before the first ringing via the setting of VoIP gateway parameters (similar to the number sending mode of DTMF). This subtle adjustment increases the efficiency of session establishment by around 30%, and the silent interval between sending calling number and the signal of ringing can be adjusted by setting SMG1000 parameters. For SMG1000 gateway, the interval can be set to 200ms; for rival products, it is 900 ms; thus, Synway SMG gateway can save 700ms, and outperform most rival products.

Result:

With comparison analysis, the outbound calling OBD dialing system has increased the dialing success rate and reduced the rate of defective calling; with shorter call duration and order-closing success rate, efficiency of the communication system increased at least by 18%.

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Adopting SMG4000 Wireless Gateway, UPS (China Branch) Provides Voice & Data Notification System to Improve Customers Satisfaction

CASE STUDY

United Parcel Service (NYSE: UPS) is a global leader in logistics, offering a broad range of solutions including the transportation of packages and freight, the facilitation of international trade, and the deployment of advanced technology to manage the world of business more efficiently. One of largest cargo carriers in the world, UPS has run its services in China over decades.

Challenges:

Its business expands exponentially in past 2 decades. However, UPS still has some challenges, technologically, when commercials have been growing:

1. *UPS legacy phone notification systems could not catch up with its business growth;*
2. *A mere way of dialing(audio) notice system could not assure 100% reach rate for package pick-up;*
3. *Highly frequent dialing consumes much bandwidth and is not cost effective;*
4. *Limited speech processing, and low scalability and flexibility of existing systems;*
5. *Failure to handle a large number of unanticipated incoming calls from package receptionists;*
6. *System cannot remain high performance while the high density incoming calls occur;*
7. *Could not perfectly combine voice & date (SMS based) notice applications on existing system.*

Solutions:

For these challenges, UPS China decided to change its legacy system, using Synway SMG4000 wireless gateway. SMG4000 wireless mobile gateway could not only be used to optimize both voice and signaling in highly intensive dialing, but also efficiently and reliably transition data, including SMS, Email, Text and so on. Specifically, to meet customers` needs for both access channels(voice or SMS), it can separately process voice or data transmission, as well as can handle simultaneous transmissions on both voice and data in a single system, which helps enterprises and carriers achieve perfect integration between voice and data.

SMG4000 has been used for a wide range of applications in the market in the world, and its reliability and agility have been field-approved in diverse extreme environments, including low bandwidth and unstable wireless signals. Its DSP-based architecture ensures the data is transmitted and retrieved accurately, reliably, efficiently and rapidly. With high reliability in operation, SMG4000 delivers matchless values, and possesses unparalleled transmission efficiency for real-time transmission in all kinds of data SMS services.

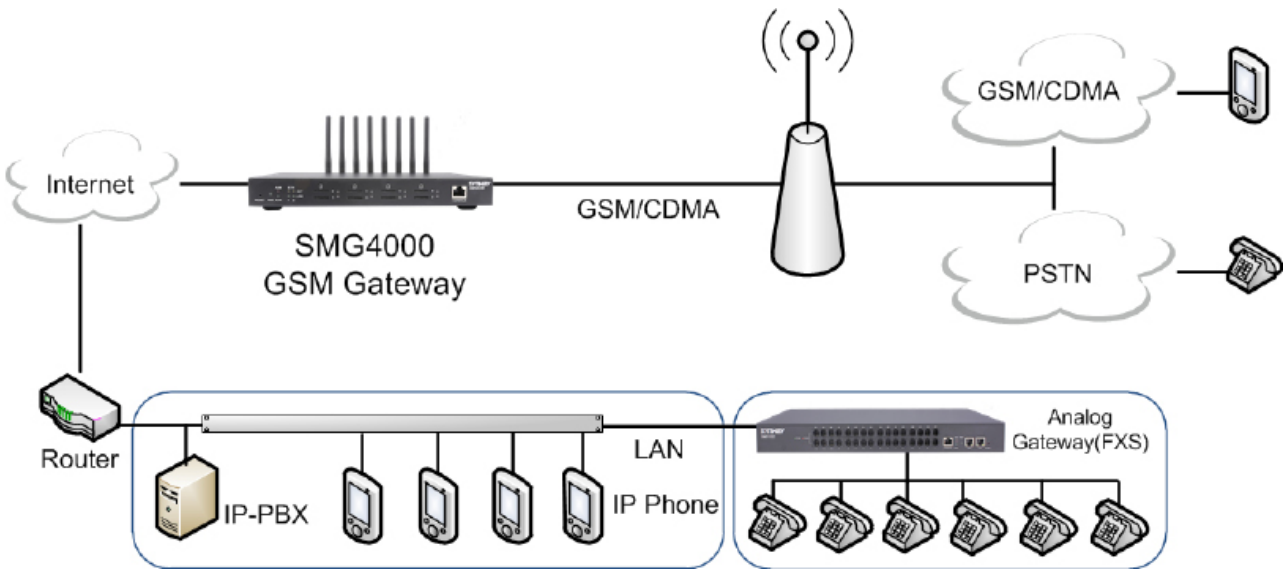
Synway®

It can significantly improve the operation efficiency while applying SMG4000 in the data processing and SMS transmission, because of the lower cost of SMS-based data in carrier networks. With SMG4000, carrier networks could assure higher successful transmission rate of data, and less bandwidth is consumed. For its specific security algorithm of built-in SIM slots, SMG4000 would incur lower probability of being disabled or suspended. Therefore, many enterprises and carriers are starting to adopt SMG4000 for business expansion and efficiency improvement.

Results：

With SMG4000 adoption, UPS has resolved its headache well and obtained some tangible values, by offering hybrid dialing/SMS notification system, which ensure to 100% reach pick-up recipients.

- *In case, pick-up recipients do not reply on due, the SMG4000-based system will switch to dialing notification model day by day until pick up is processed;*
- *In addition, SMS-based data transition would be accessible for recipients anytime, consume less bandwidth, and characterize high reliability and availability;*
- *SMG4000 adopts dedicated DSP chipsets to process data, assuring high-efficient and real-time transition. In 2016, UPS sent over 50M pieces of notification SMS, with 100% reach rate;*
- *SMG4000's homegrown hardware and software technologies guarantee relevant upgrading and customization, and its DSP-enabled voice optimization assures crystal voice quality and maximize bandwidth efficiency.*



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Siemens Joined hands With Synway to Provide Compatible Call Recording Solutions for Its PBX Systems

Synway
Case Study

Headquartered in Germany, Siemens is a world-leading PBX communication solution provider. As a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years, Siemens has been dedicated to provide a complete range of services and solutions for worldwide users. Ever since 2003, it decided to build a long-term strategic partnership with Synway, to offer more versatile, cost effective and robust call recording systems for call centers, banks, enterprises and many others.

Background:

With 343,000 employees in more than 200 countries, Siemens reported worldwide revenue of approximately $ 98 billion in fiscal 2014. Siemens in the USA reported revenue of $ 22.2 billion, including $ 5.2 billion in exports, and employs approximately 46,000 people throughout all 50 states and Puerto Rico.

Challenges:

Facing a large customer base worldwide with diverse needs for various applications, such as public security, banking institutes and call centers, Siemens was expected to provide all value-added services for existing and prospective customers, including call recording, sessions, fax etc. Differentiation became vital and urgent. Siemens had to be creative and forward-thinking in choosing an ideal hardware solution partner for its call recording solution.

Audiocodes and Synway, two of the world-leading hardware manufacturers have been renowned for their concentration on recording hardware design and manufacturing. The hardware Siemens had been looking for should possessed high reliability, standardization and cost advantages, including:
1. As a global powerhouse, Siemens had to match the needs of clients and distributors worldwide. To minimize the post-sales expenses, Siemens needed to ensure its solution was stable during warranty period and keep the defective rate under 0.1%.

2. To meet market demands at all levels, Siemens attached great importance to capital expenditure. With more emerging small-to-medium sized call recording companies, Siemens realized that only by offering better products and services at much reasonable price would it cater to various user needs better around the globe and keep the sales growing.

3. The recording solution for Siemens needs to posses good adaptability and be fully compatible with global marketplaces.

Siemens Joined hands With Synway to Provide Compatible Call Recording Solutions for Its PBX Systems

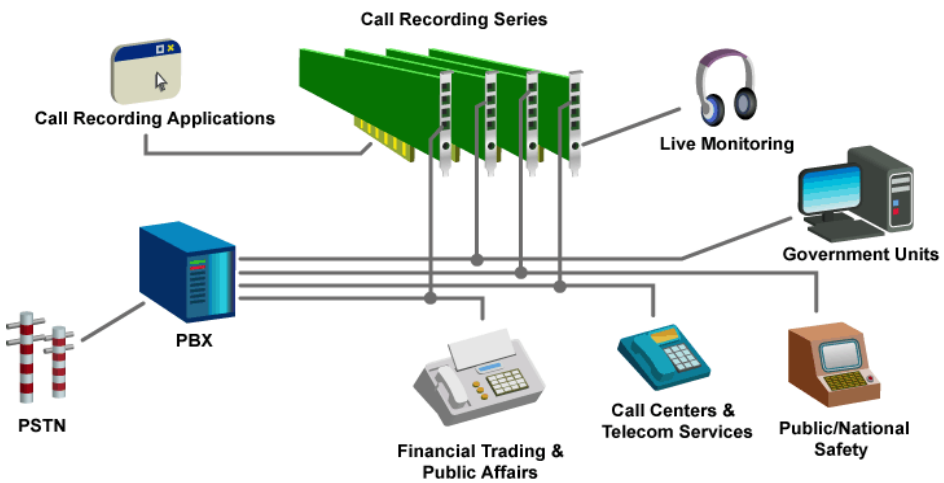
Synway
Case Study

Solution:

To reach results, Siemens decided to partner with Synway at the end. They had started to understand Synway's product and services since 2002. It took them one year to finish the integration process, and from year 2003 they began to apply Synway solutions into field. Some of value and benefits which Synway offered for Siemens include:

- High MTBF---Normally, the lifecycle of Synway products is 6-10 years under full loading situations. Whenever technical issues came out (design, deployment, development), Synway's 24*7 online or onsite support could address most of them timely and efficiently. Also, the defective rate within lifecycle could be lower than 0.1%.
- Unparalleled cost advantage--- Synway's solutions successfully helped Siemens address worldwide customers' needs, maintaining its momentum among global market and acquire more customers.
- Better globalization---With a complete range of passively or actively tapping categories, Synway products are compatible with all interfaces, such as IP, T1, E1, Analog, PCM, Radar wireless etc. Also, the half-length compact size makes it easily installed into compact server for space saving.

Typical Application:



Results:

Since 2003, Siemens had successfully reached its goals, finished design, integration and deployment and completely adopted Synway's hardware. The benefits through collaboration with Synway are as follows:

- Minimize product development cost, one-stop solution to address all market needs in call recording industry;
- Improve market share in fierce international competition, building a highly value-added product lines efficiently;
- Significant savings on operational cost and after sales costs, improved efficiency and effectiveness.

www.synway.net

Connect Synway

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A Call recording Pioneer, VPI made breakthrough and boosted sales by partnering with Synway

Synway
Case Study

Voice Printed International(VPI) is a world-leading recording solution provider. VPI has started to deploy Synway's hardware since 2006, and widely applied to all its portfolios and accumulated 60k plus channels in field. Relying on Synway's services and unrivaled cost advantages, VPI gained high recognition from customers and industry peers.

Headquartered in California, US, VPI empowers more than 1,000 customers globally, including CNN, GE, JP Mogan, US air force etc. Founded in 1994, VPI has been committed to the development and deployment in the fields of interaction recording & analytics as well as quality management for enterprises and public security, establishing a series of universal technical standards to help customers achieve more.

Background:

Founded on the principles of innovation and superior service since 1994, VPI partners with customers to ensure their success–delivering software that gets the job done, not shelf wear. At VPI, the software is changing the way the enterprises, government agencies and first responders service and engage their customers. VPI is on mission to replace the world's inefficient call recording and contact center software with apps people love.

To better help customers appreciate the values of its products and services, VPI knew for sure the importance of high adaptivity and compatibility to various SPs so as to offer more premium and fully-featured solutions. Also, VPI was dying to make more standardized and cost-efficiency products for the growing needs of global users. Back to 2005, the all-around optimization of VPI's product line began, including both hardware and software, to maintain the competitiveness among industry players. With over 100 software engineers, 6 years experience of product development and application on average, it was no problem for VPI to optimize the whole software.

A Call recording Pioneer, VPI made breakthrough and boosted sales by partnering with Synway

Synway
Case Study

Challenges

What VPI needed to overcome first and foremost, was to find a reliable hardware solution provider. For a long time, USA-based hardware partner failed to meet VPI's needs, in many aspects, including product upgrade, after-sales service or operational costs. The features and new values that VPI are looking for include:

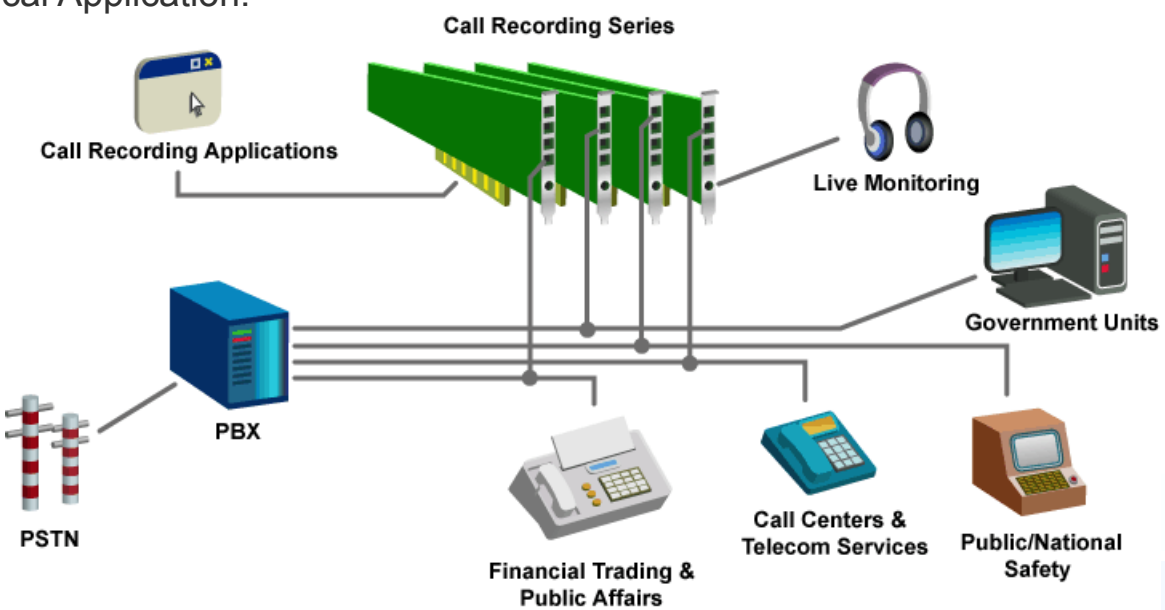
1.High adaptivity---VPI needed to ensure that its solutions fit into international market needs perfectly to obtain more global selling. Although local market was on the rise, clearly it has been shrinking over the past 10 years. When VPI realized this, it soon started to aim its business expansion at global market.

2.Consistent innovation---With their business getting mature and mature, VPI needed to deliver more innovative products to satisfy its current customers and acquire more prospective ones. But the existing provider was lack of momentum to create something new.

3.High stability and availability---End users often required highly responsive after-sales support and zero-defective solutions, thus it became VPI's priority to provide support for customers on time. Since many clients are in financial and national security areas, they demanded instant response when support was required.

4.Lower capital expenditure---Obviously, under the hyper-competitive environment, VPI needed to differ itself from other rivals for its unparalleled cost advantages. Since labor force and hardware expenditure consists of most of the total revenue, VPI had to squeeze hardware costs by 50%, which also resulted to 30% increase in sales.

Typical Application:



Synway®

Solution

To reach results, VPI decided to partner with Synway at the end. They had started to understand Synway's product and services in 2003. It took them two years to finish migration process and evaluate Synway's products and service, and from year 2005 they began to apply Synway solutions into field. Since then, there has been a breakthrough in their business: more sales income, higher operation efficiency and lower post-sales cost. Some of value and benefits which Synway offered for VPI include:

- Better globalization---with a complete range of passively or actively tapping categories, Synway products are compatible with all diverse interfaces, such as IP, T1, E1, Analog, PCM, Radar wireless etc. Also, the half-length compact size makes it easily installed into compact server.

- Customization---Specifically, Synway products have customizable API so that VPI can meet all the needs from its customers. For instance, VPI can easily distinguish itself from rivals in terms of Codecs, File storage, Start/Stop recording and so on.

- High MTBF---Normally, the lifecycle of Synway products is from six to ten years even under 365day full loading situations. Whenever there is a technical problem(design, development, deployment, development), Synway's 24*7 online or onsite support can address most issues timely and efficiently.

- Unparalleled cost advantage---One of Synway's unique selling points lies in its price. Synway's solutions helped VPI lower the overall hardware cost by up to 50%, maintain its momentum among global market and acquire more customers. What's more, VPI also saw a over 20% annual increase in sales.

Results:

Within three years, VPI successfully reached its goals, migrated from its existing vendor to Synway, and completely adopted Synway's hardware. The benefits through collaboration with Synway are as follows:

- Multiple features and differentiation;
- Beneficial to both domestic and global market;
- Higher customer satisfaction to boost more sales revenue;
- Significant reduction in operational costs.

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SYNWAY HELPS THE BIGGEST TELECOM OPERATOR IN INDIA TO TAKE HARDWARE AWAY FROM LEGACY SYSTEM

Synway
Case Study

Customer background analysis and challenges:

Bharti Airtel is India's biggest telecom operator and also a very important multinational telecommunication operator in the fast developing world. Its telecommunication networks are distributed in more than 20 countries with more than 300 million subscribers.

Airtel is always famous for its high quality service, but, with rapid development of global VoIP communication business of Airtel, telecom operation and hyper-competition have created huge pressure on its IVR system. Airtel faced big challenges in recent years to provide the best service, reduce operational cost and simplify operation. But legacy customer service system supported by IVR cannot fully meet the needs of its business development in scalability, stability and response efficiency. Their difficulties lie primarily in:

- cost disadvantage for hardware adoption and high power consumption
- limited speech processing ability and scalability, low flexibility of existing systems
- long development cycle as well as higher human cost and time cost for upgrading legacy existing system
- lack of flexibility which cannot be promptly improved according to market demands
- low flexibility and limited scalability to handle a large number of incoming calls from users

Solution:

For these reasons, Airtel decided to change its legacy system, using SynHMP.

SynHMP can be authorized through USB KEY according to the number of channels. Each USB KEY has a unique serial number. It supports a variety of IP voice codec formats: G.711 A-Law, G.711 μ-Law and G.729. SynHMP can be used together with various series communication products of Synway in the same IP environment, with the unified API, configuration items and event interface, to get more powerful ability of building high-processing systems. HMP Client adopts distributed structure design so it can be deployed on the any server (different from HMP Server). There are two modes of active and passive connection for HMP Client. Multiple clients can be connected to a HMP Server; Expandability can be achieved for module software design.

SYNWAY HELPS THE BIGGEST TELECOM OPERATOR IN INDIA TO TAKE HARDWARE AWAY FROM LEGACY SYSTEM

Synway
Case Study

SynHMP is an ideal product to develop media server in structured network. In pure IP environment, neither physical inventory nor on-site installation is required for SynHMP. SynHMP can run in TDM environment too (as long as TDM access can be achieved through any Synway or a third-party equipment)

SynHMP, as software engine of a core voice module, runs in real time with higher-priority. During initialization, SynHMP will initialize all resources to be configured and will be periodically activated by an external high priority interrupt. With this technology, SynHMP can use CPU cycles with higher-priority and will not be interfered or interrupted by user mode application even if CPU utilization is 100%.

It is important that, with SynHMP software, developers can concentrate on the development of new communication application systems after this software is installed. The cost and deployment hurdles of media processing server, therefore, are greatly reduced. After initial investment in system development, software developers just focus on development/test and increases the flexibility for media processing. The cost is reduced along with Internet and system integration.

SynHMP can support 2400 channels of IVR or UC applications. But in practical applications, users may need various applications besides IVR, including fax and conferencing etc., it can basically achieve up to 1920 channels. At the same time, SynHMP can leave 50% of CPU resources to handle a wide variety of applications. SynHMP is undoubtedly the technology to change the whole environment of VoIP communication system. It will bring a great innovation to media processing mode in the field of telecommunications as well as become the preferred choice of system integrators and developers.

Results:

1. higher-priority to use CPU cycles for ensuring that the system has telecommunication-grade stability
2. very simple and effortless deployment to shorten development cycle and save investment cost
3. Quick and easy establishment for large capacity call center based on VoIP
4. Homegrown inherited intelligent SynCTI driver development platform to realize stronger multimedia processing ability
5. software distributed architecture for more convenient expansion and expandability

www.synway.net

Connect Synway

As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. Since 1995, over 3,000 service providers, software developers and system integrators have deployed Synway's offerings to deliver a broad range of TDM and VoIP-based applications worldwide, including Unified Communications, SIP Trunking, Call Center, Mobile VAS, Faxing, Conferencing, Call Recording as well as Asterisk-based Open Source Applications. With dedicated teammates and well-known premium services, Synway makes consistent efforts to deliver partners with a variety of customizable, high-performance and cost effective voice communications products.

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Synway HMP Helped BlackNGreen and Airtel/ Vodafone Implement a High-Capacity Versatile IVR System

Synway
Case Study

Customer background analysis and challenges:

BlackNGreen is one of the leading innovators and providers of VAS products and telecom solutions to the top telecom operators, including Airtel and Vodafone, across the world. BNG's VAS products are enabling over 800 million users globally, to experience state-of-the-art VAS offerings.

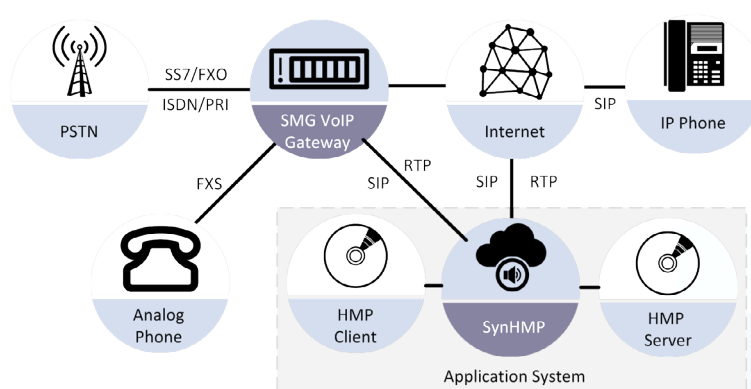
To serve the subscribers well, BNG developed and maintained hardware-based IVR system for its carrier partners. But with its business growing, BNG realized that its existing IVR system was not flexible to fulfill the needs of its partners. What is needed is to build a high capacity, scalable IVR system to face ever changeable needs of subscribers.

The following challenges were in front of BNG:

- Cost disadvantage for hardware adoption and high power consumption;
- Uneasy scalability, low flexibility of existing legacy hardware-based systems;
- High maintenance cost and time consumption for upgrading legacy existing system;
- Lack of flexibility which cannot be promptly adjusted according to market demands;

Solution:

To address this issue, BNG decided to implement SynHMP, Synway's Host Media Processing platform, to deploy a high capacity IVR system.



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SynHMP can be authorized through USB KEY according to the number of channels. Each USB KEY has a unique serial number. It supports a variety of IP voice codec formats: G.711 A-Law, G.711 μ-Law and G.729. SynHMP can be used together with various series communication products of Synway in the same IP environment, with the unified API, configuration items and event interface, to get more powerful ability of building high-processing systems. HMP Client adopts distributed structure design so it can be deployed on the any server (different from HMP Server). There are two modes of active and passive connection for HMP Client. Multiple clients can be connected to a HMP Server; Expandability can be achieved for module software design.

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Synway's Call Recording Product Family Has been Used in Emergency Services in France and Other European Countries

CASE STUDY

Caen is a commune in northwestern France. It is the prefecture of the Calvados department. Caen fire brigade(also known as a fire and rescue service or simply fire service) is a public organization that provides predominantly emergency firefighting and rescue services for a Caen area.

Challenges:

In the sensitive world of fire safety, the ability to record calls made to Caen Fire Brigade Call Center was a necessity for emergency fire call. In the past few decades, the Caen Fire Brigade used its recording solution provided by local operator. However, the Caen Fire Brigade's decided to implement a migration of its telephony infrastructure to expand its system.

*One issue was the need to find a solution that could assure the quality of voice in high-density call traffic and maintain 24*7*365 recording monitoring ability in extreme environment. Moreover, implementing and expanding a recording system have to feature better cost effectiveness and high interoperability. It seemed very hard to find a call recording system with high balance between interoperability, quality and economy.*

Solutions:

Via France-based system integrator, Caen Fire Brigade decided to adopt Synway's call recording family products.

As one of world's leading manufacturers for recording hardware and software, Synway offers a wide range of product portfolios for use in all kinds of recording applications in legislature, call centers, financial dealing, and control/command operations. Synway's analog/digital hardware and software component are equipped with multiple voice-processing capabilities like G.729, GSM, G.711 A-law, μ-law, Linear PCM, IMA-ADPCM, MP3, VOX format etc.

Complete Product Range

Synway offers the broadest range of call recording hardware platforms. For two decades Synway has consolidated its position as a leading international call recording hardware solution vendor. Having worked with our products over time, our clients have helped Synway achieve: the most diverse product ranges, greatest scalability, greatest compliance with multi-protocols and multi-networks, and the most installations in Asia and Europe.

Synway®

Compact Size for Smaller Server

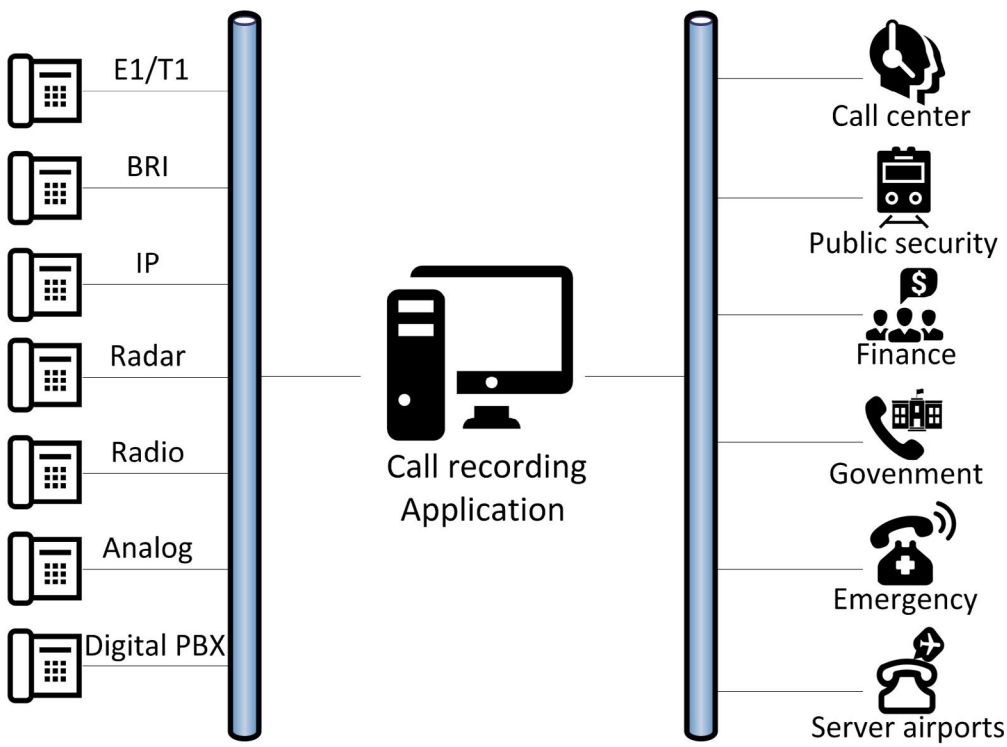
Since call recording plays such a critical role in rescue of Caen Fire Brigade, the Caen Fire Brigade required that the solution could offer high levels of reliability and availability. According to exhaustively test, Synway's call recording hardware/software was able to meet those requirements through its deployment in virtualized mode in Caen Fire Brigade's fully redundant central datacenter. Half-length size also save much space and server cost for Caen Fire Brigade.

Results:

With competitive Call Recording components, Synway delivered a comprehensive and high-quality solution, enabling Caen Fire Brigade to roll out their further services quickly and efficiently.

The following points are able to be satisfied:

- *Interface with most passive tapping categories: analog, digital PBX, BRI, E1/T1/J1, IP, radar, radio;*
- *Complete range of DSP-empowered Codecs, signal analysis, debug-tools for best performance;*
- *7-day application development cycle, effortless migration across all interfaces via a unified API;*
- *Half-length compact design, PCI/PCIe form factor, could be installed into most mini-sized servers;*
- *All development toolkits available, customizable application demos specifically for any developers;*
- *One-stop customer service: help developers evaluate, design, deploy, install, debug and upgrade;*



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