Discover Leisure Connects Remote Users to its IP-PBX

Issue: Enabling remote workers at Discover Leisure's 15 offices throughout the UK to access the main office IP-PBX.
Overcoming interoperability issues between the IP-fax and SIP service provider.

Solution: Ingate SIParator® with the add-on Remote SIP Connectivity software module to allow far-end NAT traversal

Discover Leisure is one of the largest resellers of caravans and motor homes in the UK. With 15 branch offices all over the country, the company spent a great deal of money every month just on internal phone calls.
"That in combination with a large amount of faxing of customer IDs, signatures and verifications added up to such a monthly sum, we could just not let it continue," said Tim Ormrod, IT manager at Discover Leisure plc.
The starting point for the company was to find one converged solution for all offices and all forms of communications based on IP. They decided to utilize Session Initiation Protocol (SIP), which has become the de facto standard for all IP-based communications. SIP is a proven, stable Internet protocol used by all of the major communications vendors. It also allows for applications such as VoIP (Voice over Internet Protocol) to utilize the most advanced security technologies available, a considerable advantage for enterprises adopting converged communications.

The first part of the implementation was to install an IP-PBX at the main office, starting Discover Leisure's migration from a traditional telephony system to a modern VoIP system. The IP-PBX was then connected to all the other offices via a Virtual Private Network (VPN). This created one manageable network instead of 15 different systems, a tremendous benefit for the IT staff.

Additionally, now all employees throughout Discover Leisure's 15 disparate offices utilized the same voice mail system. But the most significant impact of migrating to an "all-IP" communications platform was that staff could now call each other for free – using the Internet connections that were already in place.

Connecting the road warriors

While internal staff now benefited from converging voice communications over the Internet, "road warriors" and those employees working from home still had to use their cell phones when talking to colleagues, partners and customers. These cell phone costs were a significant expense for Discover Leisure.

"We managed to cut some of our internal communications charges, but we still had very high cell phone costs. I thought there must be a way to connect the employees working from home to the IP-PBX as well."

Staff were already using dual-mode Nokia phones, which have the ability to use SIP and connect to the main

IP-PBX if there is a wireless Internet connection available and the regular cell phone network when there is no Internet connection. However, the problem was to connect to the IP-PBX through the enterprise firewall at Discover Leisure headquarters.

Discover Leisure had a traditional, SIP-unaware firewall that was not able to differentiate between unwanted traffic and SIP media. The result: SIP media, including VoIP calls, simply will not go through. This is a common problem, as many businesses have traditional firewalls already in place securing their network. Discover Leisure needed to find a way to enable the traversal of the SIP media, while keeping their traditional firewall in place to continue securing their data traffic.

Through their distributor VCOMM, Discover Leisure found the Ingate SIParator®, which handles all the SIP traffic, making sure the calls can traverse the enterprise firewall. The SIParator also controls and secures the SIP traffic and protects the enterprise network. The SIParator also has the ability to connect the remote workers, which are behind home NATs, to the enterprise PBX without any software or hardware installed in the remote workers' cell phones.

For Discover Leisure employees, it was an easy, seamless solution that required only a wireless Internet connection to work flawlessly.

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Once the Ingate SIParator was installed at the main office, within minutes all home workers were able to connect to the main PBX and to use that connection to make calls to colleagues and customers. They were also able to access their voice mail and use all functionalities in the PBX like call forwarding and speed dial.

"'This solution cut our cell phone costs. For us that is quite a significant difference. What also happened was that our remote colleagues became more present. Even though they were not physically in the office they were reached as if they were in the office. That is much harder to measure in cost savings, but it definitely increased the efficiency."

Handling interoperability

The next part of the migration for Discover Leisure plc was to include the fax system into their IP-based network. The fax system was connected through a gateway to a SIP service provider that provided unique fax numbers over IP. These SIP data calls were delivered to the local offices over the Internet. Unfortunately, the interoperability between the VoIP gateway and the SIP service provider was not working properly.

"When talking to our distributor I understood that interoperability between a SIP service provider and the enterprise server is a fairly common problem, but I also learned that the edge device – the SIParator- that we already had in place might solve the issue."

The SIParator was placed as a proxy between the VoIP gateway and service provider. Thanks to the flexibility and the advanced routing functionality in the SIParator's built-in SIP proxy, the issue was resolved easily..

"We are very pleased with our Ingate SIParator. It is a perfect edge device as it solves the traversal of the SIP traffic in a secure way. Furthermore, the flexibility it showed when they were able to solve the interoperability between the fax system and the service provider was a huge benefit," concluded Tim Ormrod.

About the Ingate SIParator®

The Ingate SIParator® is an add-on to existing firewalls that seamlessly enables the transmission of realtime communications without affecting firewall security. The SIParator handles the SIP signaling and media streams, routing them to and from the private IP addresses of authorized users on the LAN. As an organization's needs increase, the scaleable SIParator can be expanded to incorporate additional users. All Ingate SIParators and Ingate Firewalls® boast everything necessary for SIP traversal, including a SIP registrar and a SIP proxy, support for NAT and PAT and TLS support for encrypted SIP signaling, and VPN. QoS is also available.

Ingate's products also include optional software modules for VoIP survival in SIP-based hosted PBX environments and far-end NAT traversal solutions for remote VoIP.

About Ingate® Systems

A world leader in next generation firewall technology, Ingate Systems produces and sells the world's only fully SIP-capable enterprise firewalls and the Ingate SIParator, a device that connects to an existing network firewall to seamlessly enable the traversal of SIP communications and three-time winner of Internet Telephony magazine's Product of the Year Award. Ingate Firewalls solve the NAT traversal issues inherent in using SIP, and address the growing need for SIP-capable firewalls among enterprise users.

Ingate Systems has a long history of developing secure communications technology and today offers enterprises unprecedented value and ability to develop SIP-based, person-to-person realtime communications. Ingate's security products currently protect the networks of retail companies, financial institutions, industrial firms, government agencies and small-to-large enterprises throughout Europe, Asia and North America. Ingate's principal shareholders are Intertex Data AB and Bell Net Corp. Ingate Systems AB is located in Stockholm and Linköping, Sweden. Its wholly-owned subsidiary, Ingate Systems Inc., is located in Hollis, New Hampshire. For more information on Ingate Systems, visit www.ingate.com