

Brico International

IP telephony through the wireless Aironet network



“NOW WE CAN MANAGE AND MAINTAIN OUR TELEPHONE EXCHANGE OURSELVES; THAT IS THE BIGGEST ADVANTAGE. SO WE SAVE ON COSTS AND TIME.”

Georges Swan, European coordinator IT security at Brico International

TECHNOLOGY WITH ITS SIGHTS SET ON EXPANSION

Brussels is the head office of the well-known international do-it-yourself chain Brico International. The stores are not just found in Belgium. They are also well represented in France, Spain and Portugal. In February 2001 Brico International expanded to a new location, where it was to occupy four floors. All the offices needed to be equipped from scratch, so the company decided that this was an opportunity to replace its nine-year-old telephone system.

The company was considering a telephone system based on IP (Internet Protocol), where not only data but also telephone traffic is run through a computer network. According to Georges Swan, European coordinator IT security at Brico, this had to do with the structure of the company: “Since the move, people are spread over two buildings only 300 metres apart. The best way to connect them was by installing a wireless network. Despite the short distance, a cable connection would have been considerably more expensive because we would have had to dig up the road. By comparison, the cost of installing a wireless network was only a fraction of the price. Moreover, with IP telephony we could also use the same wireless computer network for transmitting speech.”

EXECUTIVE SUMMARY

Background

Brico International in Brussels is the head office of the well-known do-it-yourself chain. When the company expanded to a new location, occupying four floors, all the office equipment had to be installed from scratch. A network connection between the new offices and the departments in a second building, 300 metres down the road, also had to be installed.

Challenge

Because of the move, Brico International also decided to replace its nine-year-old telephone system. The company has several offices at various locations, including some abroad. From the start, IP (Internet Protocol) telephony was considered. This new telephone technology is, after all, easy to extend to new locations.

Solution

Brico International installed a Cisco IP telephone system with 80 telephone sets in the two buildings. Communications between the two offices run through a wireless Cisco Aironet network. The decision to use Cisco was based on practical considerations. For example, Cisco is the only supplier of IP telephony that offers telephone sets with an internal switch. This may appear to be a small detail, but it makes a big difference.

Results

During the installation, there were cost savings on wiring and sockets. Now the maintenance of the telephone system is run internally. IP telephony is a flexible and user-friendly system for both system managers and end-users. Moreover, it can be easily integrated into other applications, which simplifies many tasks. Brico International is currently considering additional applications and possibilities.

After comparing the offers from a number of big players in the telephone market, Brico International eventually chose IP telephony from Cisco. The old network equipment needed to be modified somewhat. The original hubs were

replaced by Cisco Catalyst 3524 switches, which also supply power to the IP telephones. The switches are in turn connected to the gigabit ethernet Catalyst 4908 switch, which takes care of the connection to the Internet.



An IP telephone exchange with Cisco CallManager 3.0 software was installed in the new building. This serves around 60 Cisco IP Phones 7910 and 20 IP Phones 7960 at both locations. Cisco Unity, a “unified messaging” system that allows management of e-mail, voice mail and faxing through a single inbox from any set (IP phone, mobile phone, PC) or location, was also installed. Moreover, a complete fax installation was provided. Each member of staff has their own fax number and reads the incoming documents through the inbox. For the IP telephone sets at the reception and at the director’s secretariat, Brico International installed the Cisco WebAttendant, a software application that replaces the traditional, manual telephone exchange. The receptionists now have a clear overview of incoming calls on a computer screen and can easily transfer them.

Brico International is now also testing Cisco Softphone, software that adds telephone functions to your computer. Not only does Softphone offer extra mobility to laptop users, it can also use address and telephone directories on the computer, allowing you to make a call or transfer one with a simple click of the mouse.

Internal management of user-friendly telephone exchange

“Now we can manage our own telephone exchange; that is the biggest advantage. After all, speech and data run on the same network, which is being managed by our own IT people. So we no longer depend on a fixed supplier. Also, we needed to install only one network,” says Georges Swan.

He is especially pleased with the user-friendliness and flexibility of IP telephony. The installation and configuration of new applications and sets is very simple. “In ten minutes you can connect a new set to the network. Also, staff members can move offices quickly and without problems. We even have a few sets free for meeting rooms and communal areas. You just take the set and plug it into the socket wherever it is needed. Soon even that will no longer be necessary. We plan to assign a code number to each staff member. By entering this code they can then use each set with their own personal settings. With the old exchange, whenever we wanted to move a phone we had to call the supplier and we even needed special pairs of pliers for the connection. Now it is quick and as good as free.”

Integration with existing and in-house applications

For the staff members of Brico International, the new system offers even more convenience. Because the telephony is based on IP and runs through a computer network, the telephone functions are easily integrated with other software applications. Georges Swan: “Take for example the new fax system. We often have to fax legal documents to our suppliers. Many of them are based abroad. Suppose that we have to send the same document to 300 suppliers. Thanks to IP telephony, we have developed a mailing system that allows us to send that document in one step to all 300 companies. Previously, all fax numbers had to be entered one by one. Moreover, you no longer have to print a document to fax it. Now it can be sent directly from the PC. So we are looking at integrating the fax system into even more applications.”

Georges Swan is especially enthusiastic about the possibilities of IP telephony for integration with other applications and the development of new applications. “It is an advantage we only discovered once we started to use the system. We now have a much better picture of our telephone traffic. We can check who calls where and when, what the peak times are for telephoning, what the pattern is of a given department. We can obtain reports on this through an application that we have written ourselves. It isn’t difficult at all. It is a joy to work with such a system,” he says.

Reducing telephone expenses

Since the installation of the IP telephony system, internal calls between the two Brico International buildings are free. This telephone traffic runs through the computer network and does not use the public telephone network. For the moment, the savings on telephone expenses are not significant, but in future this should change.

“We have, after all, more offices not only around Brussels but also abroad. Now that we are successfully running both data and telephone traffic over a single network, there is a possibility that in the long term we will do the same for the other offices. The inter-office telephone traffic could then run over a leased line and that would have an impact on the telephone bill. Right now we are already connected to one another by a leased line for data transport,” explains Georges Swan.

“What we are doing to reduce telephone costs is to redirect calls to mobile phones through Proximus. For this we have installed two SIM boxes (an extra gateway). If someone with a fixed phone calls a mobile phone, the system detects this and the call is routed through a card in the gateway to Proximus so that we call at a cheaper rate,” he adds.

The decision to use Cisco was based on very practical considerations. Cisco is the only supplier of IP telephony to offer telephone sets with an internal switch. “This may appear a small detail, but this meant that we could reduce the cabling by half. In an office where you have to start from scratch, that is definitely worth considering,” says Georges Swan. “Each office needs only one network connection. The computer can be connected through the telephone thanks to the internal switch.”

Another practical advantage of Cisco IP telephones is that they work with in-line power. The Catalyst switches of the network supply the telephone sets with power. So the network manager has a better idea of energy usage and the sets are not susceptible to

power failures. "It is also simpler because you do not need an additional socket at each desk for your phone to work, which was the case with other suppliers," adds Georges Swan. "And finally, the fact that just about all our other material, from routers right through to the wireless network, was all from Cisco also influenced the decision. We were satisfied with all this, so that was a good reason not to change supplier."



For the wireless network, Cisco supplied material from the 350 series. Both buildings communicate with one another through antennas. These are both connected to bridges which in turn are connected to the Catalyst switches. "The wireless network was not only an affordable solution at the time of sale. It was also a system that does not saddle you with recurring costs, as is the case if you use a leased line," concludes Georges Swan.



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