

Zenitel

IP telephony through wireless Aironet network

“THE PRICES CHARGED BY TRADITIONAL PBX SUPPLIERS FOR MAINTENANCE AND SERVICING ARE TOO HIGH. IN OUR CASE, THIS MEANT THAT JUST OPTING FOR IP TELEPHONY WAS A SAVING IN ITSELF. MOVING OUR TRADITIONAL TELEPHONE EXCHANGE WOULD HAVE COST MORE THAN HALF OF WHAT WE PAID FOR A NEW NETWORK AND TELEPHONE SYSTEM.”

Filip Corbeel, Corporate IT Manager at Zenitel

IP telephony cheaper than moving the traditional PBX

Zenitel, a leading European system integrator and service provider in the field of wireless and cable communication for professional users, has installed IP telephony in its new offices. With this progressive technology the company is opting for a telephone system that is in the long run cheaper than a traditional telephone exchange and offers prospects for the future.

In early November 2001, Zenitel moved to new offices in Zellik. The move completed a whole series of changes and innovations that had started in 1999. As a result of the move, the entire IT and telephony infrastructure was critically reviewed and prepared for the future. The ICT department investigated, among other things, whether it would be worthwhile moving the existing PBX and it concluded that opting for integrated data and speech traffic was more advantageous than maintaining separate systems for data traffic and telephony. At the request of Zenitel, Cisco prepared a plan for an IP telephony system and listed the requirements for hardware, software and services. Armed with this information, Zenitel went to talk to four Cisco partners. The company finally chose Telindus, which installed a complete Cisco IP telephony package with Unity, fax and wireless telephones.

EXECUTIVE SUMMARY

Background

At the end of October 2001, Zenitel concluded a whole series of changes and innovations with the move of its headquarters to new offices in Zellik. As a result of the move the entire IT and telephony infrastructure was critically reviewed and prepared for the future.

Challenge

As a high-tech company, Zenitel keeps an eye out for new technologies. Right from the beginning, the company investigated what IP telephony had to offer. Zenitel's ICT department concluded that opting for integrated data and speech traffic would be more advantageous than maintaining separate systems for data traffic and telephony.

Solution

Telindus built a network for both data and telephone traffic. The integrated system connects the 150 staff members who have Cisco IP 7960 and 7910 telephone sets. Fifty users also work with Cisco Unity. For the administrative staff members who walk around the company a lot, wireless Spectralink IP telephone sets were purchased.

Results

With Cisco IP telephony Zenitel has an integrated, scalable system. A single network is now used for data and speech traffic. The company's own informatics team manages and maintains the system. So compared to a combined LAN and PBX (Private Branch exchange, a traditional telephone network), the Total Cost of Ownership (TCO or the cost of the system during its entire life cycle) is lower. In the long run, Zenitel hopes to enjoy the same benefits at an international level by expanding the system to all its other offices.

Switches provide telephones with power

“As a high-tech company, Zenitel obviously keeps an eye out for new technologies. So we wanted to investigate the possibilities of IP telephony right from the beginning and compare it to our

traditional telephone system. Moreover, it is IP and so by definition an open system,” says Filip Corbeel, Corporate IT Manager at Zenitel.

Four servers were installed in the building in Zellik: two doubly implemented IP telephone exchanges or Cisco CallManagers, one server for the Unity software and a fax server. The integrated system connects the 150 staff members who have Cisco IP 7960 en 7910 telephone sets. Fifty users also work with the Cisco Unity. With this software they can manage their e-mail, voice mail and faxes through a single inbox and from any appliance (IP telephone, mobile phone, PC) or location. For the administrative staff members who walk around the company a lot, wireless Spectralink IP telephone sets were purchased.

The core of the network is based on a Catalyst 6000 switch with a gigabit transfer speed and in-line power. Thanks to the latter characteristic the telephone sets are supplied with power through the network cable. So there is no need to install an additional socket to get the telephone set working. What is more, the network manager has a better idea of the energy use and the sets are not susceptible to power cuts.

The connection on the telephone net is through two PRIs (Primary Rate Interface, a set of 30+1 ISDN lines). One is used for the IP telephony installation and the other for the analogue telephone exchange. Because of its characteristic activities, Zenitel needs this for the modem traffic of the IT emergency lines for example or in case of engineering work.

Maintenance of the system happens internally

The main reason that Zenitel chose Cisco IP telephony was the lower Total Cost of Ownership (TCO or the cost of the system during its entire life cycle) of such an integrated system, compared to a combined LAN and PBX (Private Branch eXchange, a traditional telephone network). With IP telephony you use just one network that is managed and maintained by the in-house informatics team.

Filip Corbeel: "The prices charged by the PBX suppliers for maintenance and servicing are too high. With traditional telephone exchanges you are tightly bound to the supplier. In our case, opting for IP telephony meant a saving in itself. If we had chosen to keep our traditional telephone exchange, then just moving it would have cost more than half of what we paid for a new network and telephone system together. Moreover, integrating data and speech traffic in a single network offers the possibility of managing and maintaining the exchange in-house and so considerably reducing



costs. Our people obviously know all about a Windows 2000 server. After a short period of training they will now also be able to support the telephone system."

International plans with an eye on lower telephone bills

Moreover, the system is internationally scalable. One CallManager (the server used as the telephone exchange) supports up to 2,500 users at, in principle, as many locations. So the prospects for a possible expansion of the system look interesting. "Zenitel has 18 sites. We are thinking about linking them with a WAN or IP-VPN (IP Virtual Private Network, a hired private network). We would then eventually be able to provide all sites with IP telephony and save all over again. The larger the integrated entity, the lower the TCO becomes. Moreover, the sites would be able to call one another for free. If you consider that three-quarters of our telecommunications take place within the company, then that makes a big difference to the telephone bill.

By installing an additional gateway, Zenitel is already saving a lot on telephone bills. The gateway has separate connections for Belgacom, Proximus and Mobistar. Depending on the number dialled, the gateway (usually called a sim-box) automatically selects the cheapest connection.



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