



KULTURFABRIK

KULTURFABRIK SAVES TIME AND MONEY THANKS TO CISCO IP TELEPHONY

«WE NOT ONLY SAVE A LOT ON EXPENSIVE GSM COSTS. WE DON'T HAVE TO DO SO MUCH RUNNING AROUND EITHER. CISCO'S WIRELESS NETWORK HAS SIGNIFICANTLY IMPROVED WORKER COMFORT. THE NEW INFRASTRUCTURE OFFERS US SEVERAL ADVANTAGES AND CLEARS THE WAY FOR TECHNOLOGIES OF THE FUTURE. IN TIME WE WILL BE EXPANDING OUR NETWORK IN ORDER TO OFFER VISITORS ALL THE ADVANTAGES OF THE NETWORK TECHNOLOGY.»

René Penning, IT Manager at Kulturfabrik

Every day, employees of the Kulturfabrik cultural centre are in constant contact with their technical co-workers in the theatre and concert hall, arranging the final details relating to lighting, mobile seating and much more. The hall, however, is located in a separate building to the administrative offices and until recently no telephones were installed. In order to communicate with each other, employees either had to constantly walk to and from the hall or make calls with a GSM device. Not surprisingly, this situation led to a great deal of frustration and wasted time and money.

The existing telephones at Kulturfabrik were already seven years old and the telephone exchange was also due to be replaced. It was the ideal opportunity to equip the concert and theatre hall with internet and telephone connections as well. It soon became apparent that underground cabling to connect the two buildings with each other was to be too great a hassle. Seeing as there was no room in the piping already present, the connecting road between the buildings would have had to be dug up to install new pipes and cables. That solution was quickly rejected as being too expensive. Kulturfabrik's IT and telecom provider, CEL, therefore suggested creating a wireless IP network at the site that could support both telephony and internet traffic. This solution not only fit perfectly within the non-profit organisation's available budget, it has also made it ready for the future.

EXECUTIVE SUMMARY

PROFILE

Kulturfabrik is an alternative regional and cross-border cultural centre based in the Luxembourg town of Esch-sur-Alzette. The centre covers a surface area of 4,500 m² and comprises various rooms and halls, including two performance halls, a foyer, rehearsal rooms for music groups and theatrical societies and administrative offices.

BACKGROUND

The concert and events complex Kulturfabrik is spread out over a number of buildings. The administrative building is just under 100m from the concert and theatre hall. However, the administration is in contact up to 30 times a day with technicians from the hall. In the past, such contact took place via expensive GSM communication or simply on foot, which took a lot of time. There was an obvious need for a telephone network that could bridge the distance between the various buildings. The goal was to simplify communication between the employees of the two buildings and to save on expensive GSM costs. At the same time, the organisation was looking to ready itself for the future.

SOLUTION

A preliminary study showed that new underground cabling was not possible. In order to install the necessary telephone cables for the network, the driveway connecting the two main buildings would have had to be dug up. The underground cable pipes were already full. That not only presented a risk for the existing cables and piping, there was also an expensive price tag attached. Kulturfabrik's telephone and data communication partner, CEL (Comptoir Electrotechnique Luxembourgeois) therefore recommended the installation of a Cisco wireless network enabling the use of IP telephony. CEL has since installed a dozen model 7912 and 7905 fixed IP telephones. Alongside these fixed telephones, Kulturfabrik also has three mobile 7920 IP telephones at its disposal. In order to regulate communications, CEL installed a CallManager Express, four Cisco Aironet 1120 access points and two Catalyst 2950 switches.

RESULTS

Thanks to Cisco's 100% IP solution, it is now possible to make calls to and from Kulturfabrik's various buildings. Communication between employees is therefore a great deal simpler and above all free. The new solution allows the cultural centre to eliminate its expensive GSM costs. Maintenance costs are also a thing of the past with IP telephony, seeing as Kulturfabrik takes care of its own maintenance, urgent configurations or adjustments to the system. The artists themselves are also now able to surf the internet from their rooms. The network offers them free access to the internet.





The growing success of the cultural centre is evidenced by the rising number of employees over recent years. "We had a growing number of computers and employees and the need for a global IT policy was becoming more and more apparent," says René Penning, IT Manager at Kulturfabrik. "The installation of IP telephony and hence the replacement of the telephone exchange was the opportunity for us to simplify and restructure our IT infrastructure. CEL provided us with 10/100 Mbit switches and new patch panels. On our side we installed a new server which enabled us to share common files in a structured network, which includes a few Apple Macintosh computers. It is now very clearly structured and we are able to make small adjustments and maintain the system ourselves. Moreover, it is extremely easy to centralise IT and telephony in a small organisation such as Kulturfabrik. Because our network is converged, CEL now takes care of both our telephony and our IT. It is very convenient for us to have just one contact for everything to do with IP communications."

Mid-2006, CEL replaced the telephone exchange in the administrative building with a Cisco CallManager Express, itself installed on a Cisco router. CEL subsequently installed a dozen IP telephones over the entire site and the concert hall and administrative offices were also equipped with wireless access points. Kulturfabrik now has the use of three wireless IP telephones. That way, employees are able to communicate with each other between the two main buildings. René Penning: «There was a small problem with the network frequency in the beginning but thanks to the experienced technicians at CEL, we were quickly able to resolve that. The network is now stable and completely satisfies our expectations. On the one hand we have managed to eliminate expensive GSM costs and, on the other, our technicians no longer have to do so much running around to remain in contact and this at no extra cost. The Cisco wireless network has significantly improved worker comfort."

"When actors or musicians arrive, we no longer have to look for the hall manager. He always has a wireless IP telephone with him and can immediately join the artists to take care of any practical arrangements. We are therefore able to assist the artists with greater speed and efficiency," says Penning.

Thanks to the wireless network, facilities for those artists have also been improved. "An increasing number of artists have a laptop with a wireless network connection. They are often on tour and like to remain in contact with family and friends from home or with their agency or recording company. We used to have a single computer set aside for them in the administrative building. That was a lot less pleasant for them and less convenient for our employees. Now we can offer them wireless internet access in the artist rooms. We have created a separate guest network specifically for this purpose. The artists are now able to make a connection via a simplified procedure compared with the secure access that applies to our own employees. Naturally, the guest network only provides access to the internet and not to our internal network. Our network is, furthermore, very secure thanks to the Cisco software we added to CallManagerExpress during the implementation of this project.





The Cisco router's IOS programme has a firewall function which allows us to protect our network from intrusions. Thanks to the same router, we can also create a high speed connection on the DSL line. We have noticed that with some groups, up to five people surf the net at any one time, which isn't a problem at all. The managers are also extremely pleased about this. For them, work goes ahead as usual once they have arrived at the Kulturfabrik. It is therefore extremely handy to be able to get straight back to work with easier access to e-mail."

"The new infrastructure was a big investment for a small organisation such as Kulturfabrik. However, that investment is comparable to that of a new telephone exchange. Furthermore, the new infrastructure offers us numerous advantages and also clears the way for the technologies of the future. In time, we will extend the network in order to offer visitors all the advantages of the network technology. We are considering, for example, installing an access point in the foyer so that visitors will have access to the internet. We see no reason why we can't offer our customers free internet access. As a cultural centre, Kulturfabrik is also a meeting place. We realise our IT projects relative to the available budget. They are discussed with the city of Esch-sur-Alzette and the Luxembourg Ministry for Culture. In any case, thanks to the infrastructure we installed last year, we are very much ready for the communications future!" concludes René Penning.

