

zehnder

A Case Study

“This Case Study describes how a leading European company solved its communications problems by migrating from traditional PBX to 3CX Windows based PBX software and beroNet VoIP access technologies (beroFix) giving them soft migration to best of Class 4 Carrier Grade VoIP communications with redundancies, multi-site and fax integration “



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About Zehnder

Based in Baden-Wurttemberg, Germany, Zehnder GmbH is a 100% subsidiary of Swiss Zehnder Group AG, a public company and market leader in decorative bathroom and electric radiator production.

The Problem

When the support contract on their Avaya phone system expired, the company needed a new open standard solution with which they could be vendor independent, thereby lowering their costs substantially and achieving maximum flexibility. With over 500 employees making more than 2.000 outgoing calls a day across, the PBX is the lifeline of their business and going back to traditional PBX vendors such as Avaya, Siemens or Alcatel was not an option considering the CAPEX (initial costs + renewals) and OPEX (running costs) of such a system.

The challenge was to find a robust solution to cope with such a high demand.

The Decision

Following extensive research, Zehnder chose the 3CX Phone System in concert with beroNet's VoIP gateways (beroFix). This PBX and Gateway combined cost was very convincing as the overall combined system was extremely effective, easy to learn and quick to implement.

3CX could reduce the OPEX drastically – through reduced administration and the flexibility to choose SIP standard IP phones. By building on a Windows-based IP PBX they could integrate it with their existing IT infrastructure and achieve the flexibility that was required.

The beroNet Gateways (beroFix) were chosen due to their modular design, high 3CX compatibility and driver free technology with built in echo cancellers and Fax support.

The added beroNet failover switch (berofos), the beroFix devices became a complete in-house redundancy solution, unbeatable in both price and quality.

"By placing the beroFix in front of our proprietary PBX we were able to initiate a soft migration to our new 3CX PBX for Windows. beroFix proved itself as a robust, carrier grade system from day one, handling up to 5000 calls per day (internal, incoming and outgoing) while the unbeatable price of the the berofos Failover solution was the closing argument. I was particular pleased we were able to continue using our familiar Windows FAX system simply by implementing the beroNet CAPI solution. "
– Mr. Ercan Yapalak, Zehnder IT Department

1. Soft Migration

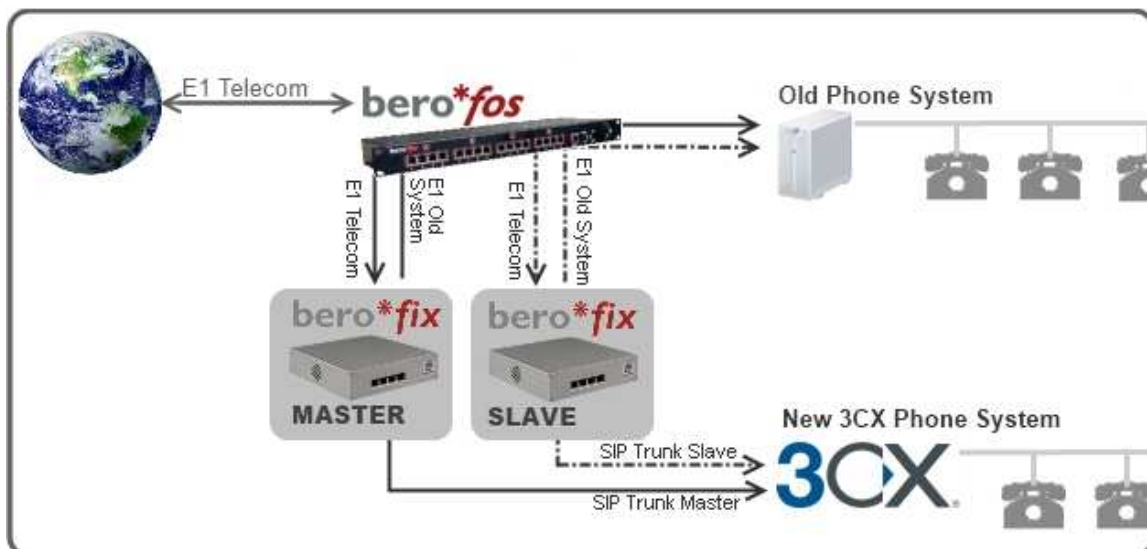
In January 2010 Zehnder started to setup a test infrastructure. Zehnder decided to run both the new 3CX Phone System and their proprietary Avaya phone system in parallel. This way they assured that the proprietary system could act as a backup while allowing a soft migration to the new system.

30 Zehnder users from Sales, Field Sales and Production were connected to test the new 3CX Phone system while the rest of the company still used the old system. Interconnection between the 3CX, the proprietary system and the external PSTN E1 trunks was done via a **beroFix 6400 3 E1 Gateway**. This way none of the users noticed something has changed while testing the 3CX Phone System.



2. Redundancy System

Due to telephony being a mission critical part of the Zehnder business, beroNet implemented a full redundancy system constituting of 2 **beroFix6400 3E1** Gateways and a berofos Failover Switch. This system assures peace of mind with minimal downtime and allows for maintenance to be done on the running system without disturbing or disrupting the operations



3. Carrier Grade Solution

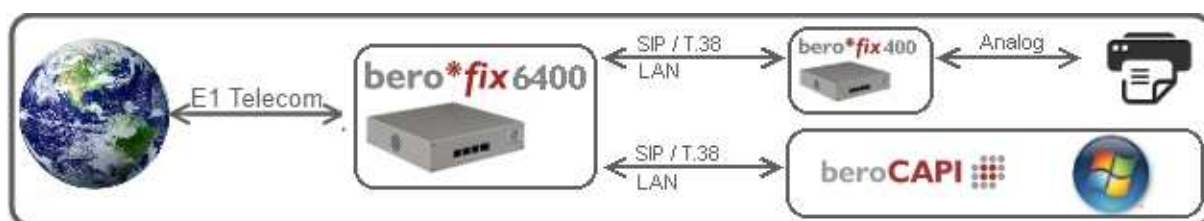
Since the first day of the test, the beroFix devices have been carrying the full load of traffic in the Zehnder organization. All calls are routed through the **beroFix 6400** before they are either distributed to the old Avaya Phone System, or the new 3CX System.

All internal calls from the proprietary system to 3CX and back are also routed through the beroFix Gateway. On any given day, as much as 5.000 calls run through the beroNet Access Gateway devices.

4. Fax Connectivity

The Fax Connectivity for analog Fax devices was assured by placing smaller **berofix 400 FXS Gateways**. 16 analog Fax machines connected to 2 **berofix 400 8FXS Gateways** secured a robust and reliable Fax Transmission over SIP via T.38 to the berofix E1 Gateways.

Zehnder's existing soft-fax solution was enhanced with a beroNet's CAPI Interface (**beroCAPI**) to connect their Fax solution to the berofix E1 Gateways. This way Zehnder employees were able to directly send faxes from their desktops PC, precisely the way they use to.



Conclusion

Despite some initial teething troubles largely caused by the old Avaya PBX, the professionalism with which 3CX and beroNet helped Zehnder implement the new PBX solution convinced Mr. Yapalak.

"Large infrastructure projects often have teething problems. At that point it is very important to see how fast a vendor can respond. 3CX and beroNet answered all our questions fast and with professional competence - I am very satisfied with their support." – Ercan Yapalak, Zehnder IT Department.

About beroNet

beroNet GmbH was founded in 2002 and is the leading European designer and manufacturer of ISDN, Analogue, Hybrid and GSM VoIP access technologies through driver-free and modular low, medium and high density PCI Cards and Gateways. beroNet is dedicated to bringing the world advancements in cutting edge VoIP telephony access solutions empowering the evolution and embrace of next generation of IP communications with technologies that combine the best of the Internet with the best of the existing fixed and mobile telephony infrastructure, breaking down the barriers to communications and making it easier and cheaper for people and businesses everywhere and anywhere to communicate. Visit www.beronet.com

About 3CX

3CX, a Microsoft Gold Certified Partner, was founded in 2005 and is headquartered in Europe with offices in the UK, Malta, Cyprus, Germany, Switzerland, Italy, Australia, USA and Hong Kong. The company has focused on the Windows IP PBX market with its innovative 3CX Phone System for Windows. 3CX Phone System for Windows is an award-winning software-based IP PBX that replaces a traditional proprietary hardware PBX /PABX. It is entirely SIP standards based and therefore interoperates with most popular SIP phones, SIPVoIP Gateways and SIP VoIP providers. It is intended to completely replace a traditional PBX, be easily manageable by system administrators and to integrate well with Windows Network infrastructure.