

Application Sheet

Integration of Funkwerk PBXs in existing LAN Infrastructure

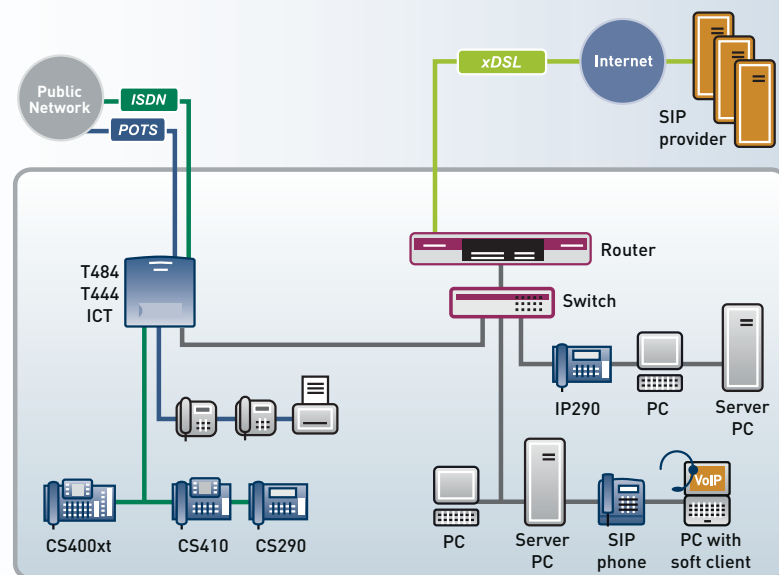
In many cases it is useful to integrate a PBX into an existing LAN. The advantages include the use of the existing LAN network for VoIP telephony (phones and soft clients) and the configuration of the PBX or polling of fee data from any PC. Here the existing router must be in a position to manage the voice traffic and also to prioritize voice data. It should also include an additional ALG (SIP proxy) for external VoIP calls. The requirement for implementation is that the router manages the LAN and WAN operation, while the PBX is restricted to operating the classical and VoIP end devices.

Advantages of PBXs with LAN connection:

- ▶ Registration with VoIP providers and support for VoIP phones in the LAN
- ▶ Configuration / management of the PBX can be carried out from any PC in the LAN
- ▶ Status messages in the control center to every PC in the LAN
- ▶ IP phones are seamlessly integrated into the existing call number structure

Advantages of routers:

- ▶ Routers are responsible for Internet access (incl. firewall) and LAN management
- ▶ Specific broadband management possible: Load balancing
- ▶ Through IPSec VPN security: No possibility of unauthorized eavesdropping or recording



Ideal for task distribution in the LAN:

T444 / T484 / ICT responsible for Voice / VoIP – existing router responsible for LAN / network

Solution:

Suitable PBXs include the elmeg systems ICT, T444 and T484. These PBXs are configured and integrated in the LAN in such a way that the router component in all PBXs is not activated. In this case, the VoIP phones and soft clients obtain their IP address from the existing router, but log on to the PBX via the phone. IP system telephony is even possible in the existing LAN with the use of an elmeg ICT. SIP providers can be logged on to the system for external VoIP calls.

In order to ensure the best possible transmission of voice and data, if in doubt, we recommend replacing the existing router with one of our R series routers.

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PROJECT REFERENCES:

- ▶ The company 'EDV-Service' [IT consultants], Mr. Wollnik, Potsdam
- ▶ The company 'Notus Energy'

MODULAR PBXs:



elmeg ICT

- ▶ Art. No. 1091433 (ICT46); 1091441 (ICT88); 1091450 (ICT880)
 - ▶ ICT with integrated voice application
 - ▶ Modular expandable
 - ▶ Alarm messages can also be processed via the Contacts module
- PBX can be extended with an additional module for VoIP, hybrid operation



VoIP-VPN gateway with DSP

- ▶ Art. No. 1091913 (M VoIP-VPN gateway); 1092189 (M 4 DSP); 1092316 (M 8 DSP); 5510000041 (M 32 DSP)
- ▶ The VoIP-VPN gateway module supplements the elmeg ICT systems. It unifies Internet telephony (VoIP) with secure data exchange over VPN. Two integrated slots for DSP expansion modules additionally provide the VoIP-VPN gateway with digital, highly compressed voice channels for transition into the PSTN.

COMPACT PBXs:



elmeg T444

- ▶ Art. No. 1091212
- ▶ Compact entry-level system
- ▶ The 4x DSP modules (Art. No. 1092189) are required for VoIP.



elmeg T484

- ▶ Art. No. 1091000
- ▶ Modular compact system
- ▶ TFE & Contacts module
- ▶ Integrated voice boxes
- ▶ The 4x DSP modules (Art. No. 1092189) are required for VoIP

ROUTERS:



bintec R1200

- ▶ Art. No. 24231
- ▶ Variably applicable with Ethernet WAN (4+1 port switch)
- ▶ SIP proxy is always available in the Bintec router

- ▶ QoS and dynamic bandwidths configurable
- ▶ Hardware acceleration and encryption
- ▶ Incl. 10 IPSec tunnels (max. 110)

SYSTEM PHONES:



elmeg IP-S400

- Extended IP system phone
- ▶ Art. No. 1091735 / 1091743
 - ▶ For use of the ISDN system telephony functions
 - ▶ Connection of DSHG headsets
 - ▶ 7-line illuminated display
 - ▶ Keyboard extensions possible
 - ▶ Power over Ethernet
 - ▶ Only in combination with the ICT



elmeg IP-S290plus

- IP system phone
- ▶ Art. No. 5510000013
 - ▶ For use of the ISDN system telephony functions
 - ▶ Connection of DSHG headsets
 - ▶ 2-line display
 - ▶ Power over Ethernet
 - ▶ Only in combination with the ICT

SUPPLEMENTARY COMPONENTS:

bintec S128p / S1224p

Power-over-Ethernet (PoE) facilitates power supply, e.g. of access points via the network cabling. The S series switches meet all the important demands for modern network infrastructures.



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