We change the shape of the world

Migration solutions with the Session Boarder Controller of NovaTec SBC-SX

NovaTec Kommunikationstechnik GmbH

welcomes

you

to this Presentation

Topics

- Possible upcoming problems in a Migration process of new IT-Infrastructure and the interfaces to VoIP/SIP Trunks.
- How could these problems be avoided resp. solved?
- For each approach the right answer with products of NovaTec.

Possible upcoming Problems in a Migration process of new IT-Infrastructure and the interfaces to VoIP/SIP Trunks.

- Different physical layer and interfaces
- Different IP Address-Ranges (public and private Addresses)
- Different Address-methods (IPv4 or IPv6)
- Eavesdropping, Network security against Attacks (DoS, TLS/ SIPs and SRTP)
- Bandwidth bottleneck (Media Bandwidth Policy and Transcoding)
- Variously Interpretation of Standards and RFCs (SIP -Incompatibility)

Possible upcoming problems in a migration process of new IT-infrastructure and the interfaces to VoIP/SIP trunks.

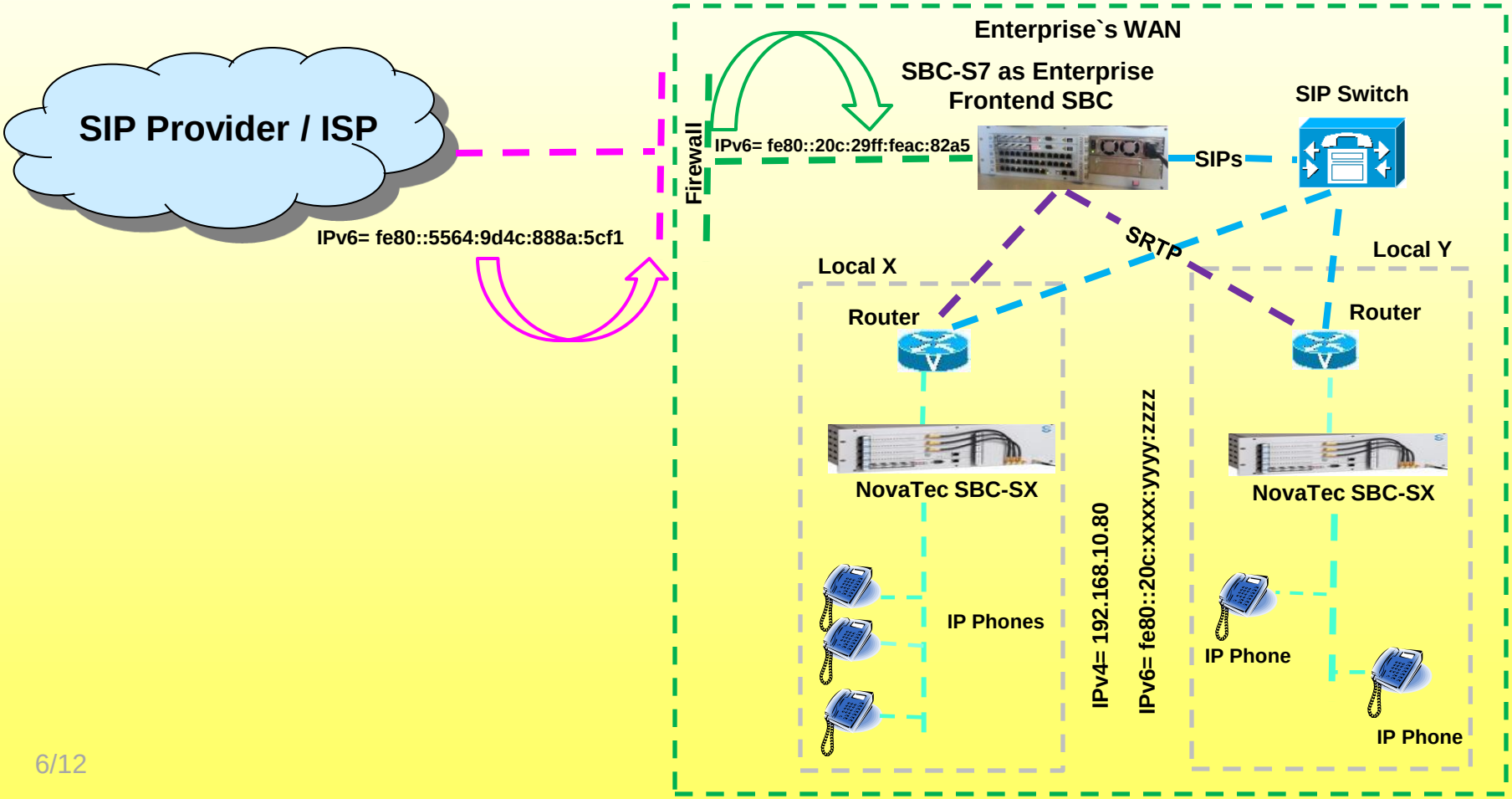
- Proper and localized emergency call in a WAN network infrastructure.
- Survival mode in case of WAN malfunction
- Setup of multiple SIP-Trunks (also as Backup).

How can all these problems been solved?

- With help of SBC-SX the named migration barriers can be eliminated
- On a reorganisation of an existing infrastructure, the available softswitch, applications and phones shall be noticed and integrated.

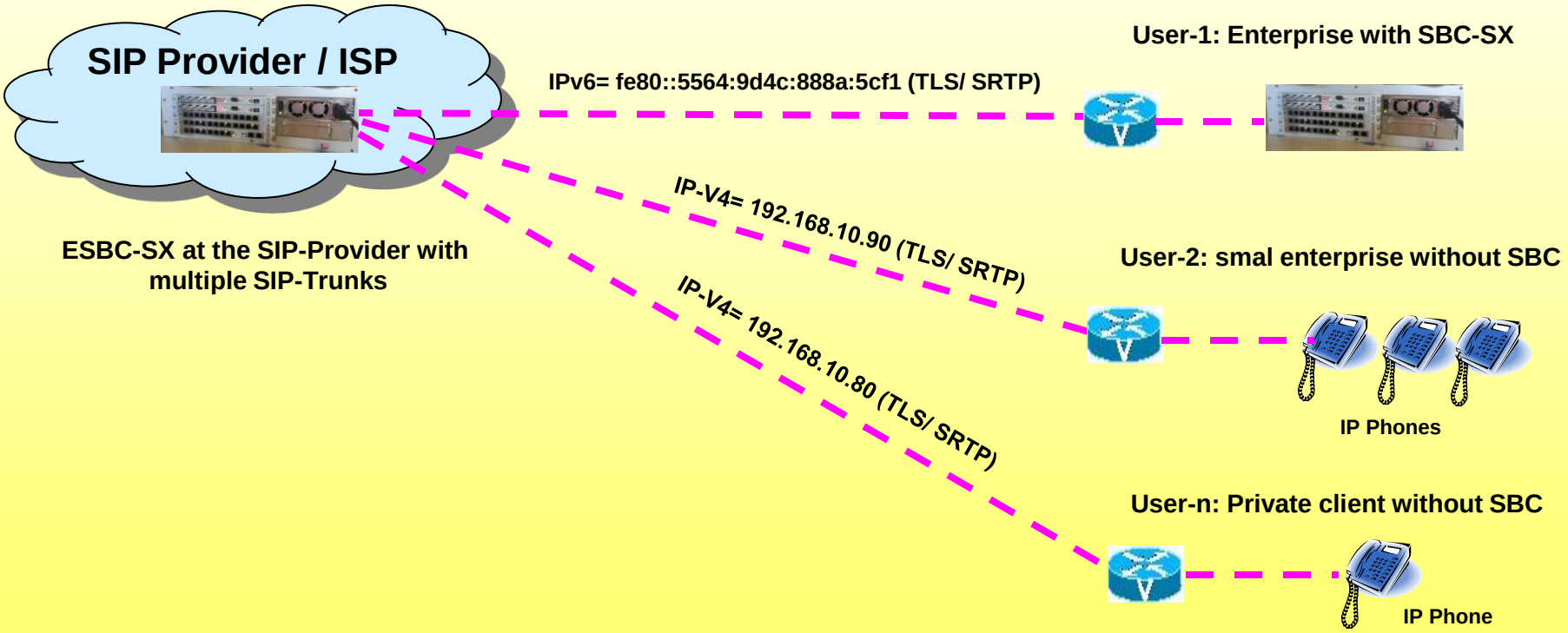
A recommendation for IP masquerading, TLS and SIPs in an existing PKI Infrastructure:

The interconnection to a SIP Provider with for example IPv6 address range can be adapted to the enterprise internal IP-address (for example IPv4 and IPv6) with help of SBC-SX. Also media conversion (like G711 to G729), Security (TLS/SRTP) in accordance to the Enterprise PKI–Infrastructure can be realized.



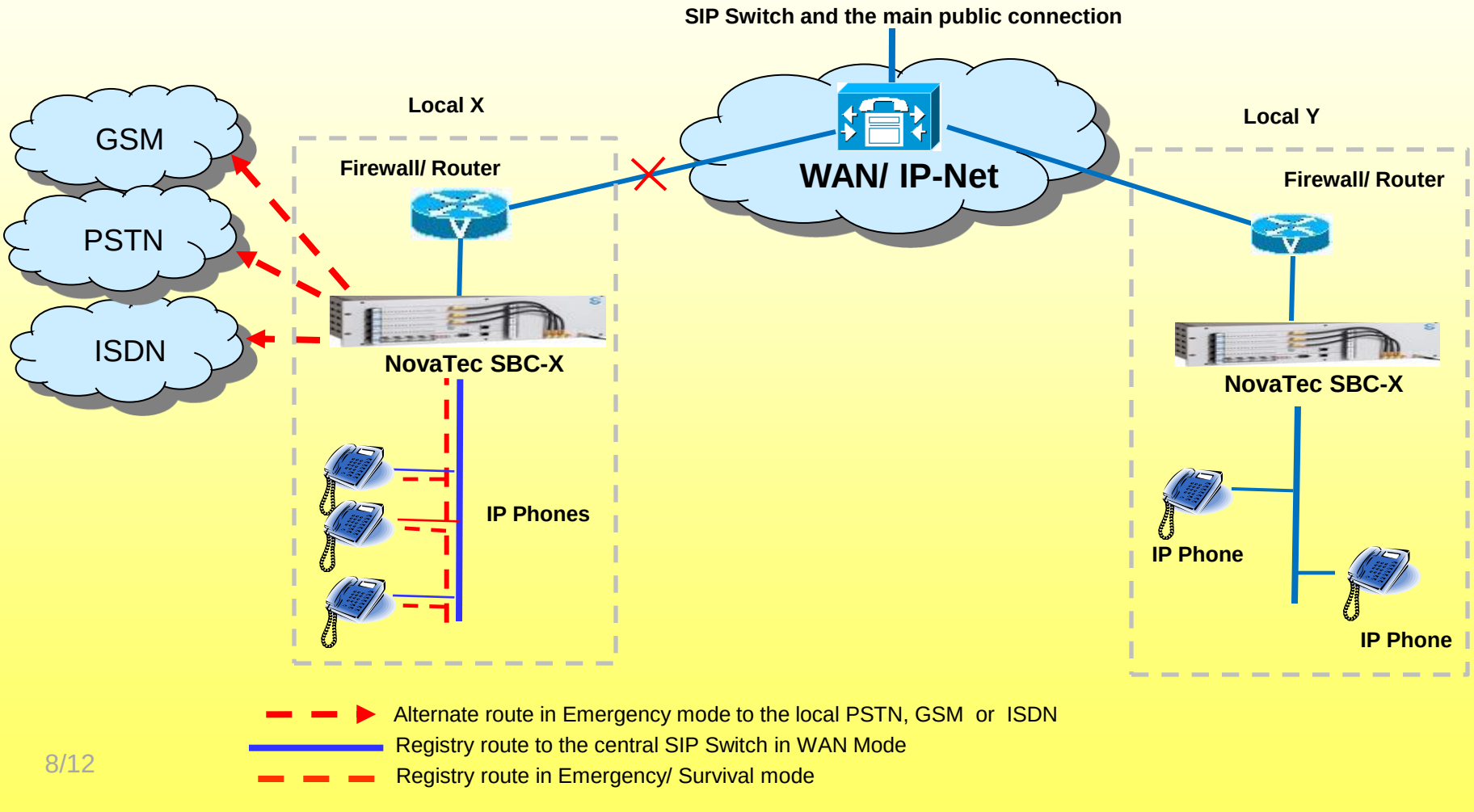
Recommendation for a setup at the ISP resp. SIP Provider:

The interconnection of a Customer of a SIP Provider can be harmonized with the help of ESBC-SX (ESBC-SX is the SBC on the SIP-Provider premises). With the possible individual setups per SIP Trunk, the SIP Provider can provide a better adaption to its customer`s needs.



Recommendation for survival mode evaluation:

The survival mode of the SBC-SX takes automatically the control of the local network as Proxy and Gateway in case of WAN malfunction. Any emergency call to the local authorities is also possible on each mode (Survival or WAN mode).



Evaluation of the survival mode:

Each NovaTec SBC-SX, which is installed at the local side and is populated with the appropriate interfaces and codecs, is enabled to support all connected terminals in the local network with telephone and data services in case of malfunctioning of the WAN or the central SIP-Switch. All named terminals on the LAN can register themselves into the SBC-SX. The SBC-SX will take over the function of Proxy and Gateway immediately and allow the local Terminals to setup connections between them and the local public network (PSTN, ISDN or GSM). In the survival mode the following features will be available for the registered* terminals:

- Call forwarding (CF)
- Calling Line Identification Presentation/ Restriction (CLIP/CLIR)
- Connected Line Identification Presentation/ Restriction (COLP/COLR)
- HOLD
- Explicit Call Transfer (ECT)
- 3 Party Conference (3PTY)

After return of the WAN to the normal function, all SIP Terminals are able to re-register into the main SIP Switch again.

***** dependent of the appropriate terminal equipment

For each Setup the right product of NovaTec

- Due to the modular design of the NovaTec SBC-SX, the SBC-SX can be expanded in accordance to the needs and capacity requirements of the customer.
- Different TDM-, GSM, optical fibre-interfaces and VoIP-Codecs of SBC-SX fulfil nearly all requirements of a modern network.
- From 16 up to 3.072 available media converters (Codecs) facilitate a strong and flexible coverage of any appropriate need.
- From one up to 12 optical fibre interfaces, one up to 12 GBit Ethernet-Interfaces and up to 48 E1- or other TDM-interfaces enable the setup of survival and emergency functions for different sized locations.
- Independent slide-in modules and full redundant power supplies perform a secure operation.
- Encryption of SIP with TLS (up to TLSv1.2, and Certificate sizes up to 2048 Bit RSA-Key) and also SRTP up to Key size of 256 Bit for simultaneous work on all Channels are guaranties for a secure transfer.

For each Setup the right Product of NovaTec

- The IP-dual-Stack enables the simultaneously use of IPv4 and IPv6.
- Loadable SIP-profile in XML-Format enables an easy SIP-Adaption to non qualified systems and switches.
- Comfortable element manager „NAMES 3.x“ allows remote maintenance, management, Control and configuration of large number of SBC-SX units in the network.
- Remote readable serial numbers of the hardware components of the SBC-SX with the element manager „NAMES 3.x“ enables a simple Asset-Management.
- Because of the available features like setup of multiple SIP-Trunks, the SBC-X can be used on both ends. On SIP-Provider- side and also on the user/ enterprise Side.
- Due to the own operating system and software structure, the system is robust against attacks which can occur because of the Spectre and Meltdown bugs in the Microcodes of the Microprocessors.

Thank you

for your Attention!

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