N720 - DECT Base in different subnets (VPN)

Question?

Can I operate the N720 DECT IP multicell system in different subnets?

Subnets are often used to separate different (logical or spatial) segments within networks. The N720 DECT IP uses protocols and technologies, which are **not supported** in different subnets. This may be due to the switches being used or the protocol itself.

Satellite Control Protocol (SCP)

The SCP is used for communication between the N720 DM (DECT Manager) and the N720 IP (base station). Numerous mechanisms of the DHCP protocol are reused in this. In this case, the N720 DM acts as an SCP server and the base stations as SCP clients.
Due to the fact that a "common broadcast domain" is needed, SCP cannot be used between different subnets or sites, which are interconnected by means of a VPN. This is due to the protocol being used and the layers:
e.g. VPN (OSI) is layer 3, the broadcast domain, however, is layer 2. Lower layers are not just able to use higher layers. In this instance, each subnet requires its own separate, independent DECT manager.

Overview about the DECT discovery protocol/procedure.

DECT base is connected to Power.

Broadcast message send by DECT Base station:

Source	Destination	Protocol	Info
0.0.0.0	255.255.255.255	UDP	Source port: 4712 Destination port: 4711

The moment you accepted the DECT Base station in the web-interface of the DECT Manager, the DECT Manager will respond with:

Source (IP DECT Manager)	Destination	Protocol	Info
192.168.178.17	255.255.255.255	UDP	Source port: 4711 Destination port: 4712

DECT Manager will start DHCP procedure.

Source	Destination	Protocol	Info
0.0.0.0	255.255.255.255	DHCP	DHCP Discover - Transaction ID 0x43ab9d52

DECT Base connected via VPN

Because of the limitations of VPN connections, the DECT base stations can not be connected to the DECT manager via a VPN connection. You need to install a separate DECT manager or N510 single cell on the other location. This means that it will act as an separate DECT system.

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