

FAQ - Customer network set-up

Network requirements for Synchronization via DECT

To connect the N870 devices:

- 100 Mbit/s switch port with corresponding cabling to the device is required.
- The switchport must allow multicast / broadcast messages.
- PoE IEEE 802.3af < 3.8 W (Class 1)
- VLAN disconnection from other network devices: recommendation
- Supports VLAN tagging
- Activation of Quality of Service mechanisms: recommendation
- DECT Manager and all base stations in the same layer 2 segment

Network requirements for Synchronization via LAN

To connect the N870 devices:

- 100 Mbit/s switch port with corresponding cabling to the device is required.
- The switchport must allow multicast / broadcast messages.
- PoE IEEE 802.3af < 3.8 W (Class 1)
- VLAN disconnection from other network devices is mandatory.
- Supports VLAN tagging
- Activation of Quality of Service mechanisms is mandatory.
- DECT Manager and all base stations in the same layer 2 segment.
- The whole Layer 2 network in which the BS/DMs are operating have to IP/Ethernet Multicast enabled in case of Synchronisation via LAN

Extra requirements when LAN Synchronisation is used:

- The less switch hops, the lower the transmission delay and its jitter will be.
- The higher the bandwidth or quality of used switches is regarding packet delay and its jitter, the lower the packet delay and the lower the packet delay jitter will be.
- Enhanced packet processing logics (like L3 switching or packet inspection) could have significant negative impact on the resulting packet delay jitter. If possible, they should be deactivated for the N870 base stations connected switch ports.
- Significantly increased traffic load on a switch, in the range of the maximum throughput, could have significant negative impact on the packet delay jitter.
- VLAN based prioritization of LAN packets could be a fruitful measure to minimize packet delay and its jitter for N870 base stations.



For more information about LAN synchronization see this wiki article. [FAQ - LAN synchronisation](#)

You can also find information how to measure if the network is suitable for LAN synchronization.