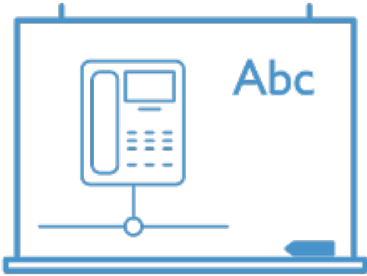


VoIP Essentials



IP telephony (short for **Internet Protocol telephony** and Internet telephony) or **Voice over IP** (short **VoIP**; from "**voice over internet protocol**"), is telephony over computer networks which are set up according to Internet standards. Typical information for telephony, i.e. voice and control information for establishing a connection, is transmitted via a data network. For call participants, computers, telephone terminals specialised in IP telephony or classic telephones connected via special adapters can establish the connection.

IP telephony is a technology that makes it possible to implement the telephone service on IP infrastructure so that it can replace the conventional telephone technology including ISDN and all components.

To gain a general understanding of how Voice over IP works, we will give you some basic knowledge about components, architectures, codecs and protocols.

Since this is an IP network based technology, but there is also a completely independent level of its own that originates from the SIP protocol, we have subdivided this collection of knowledge into:

- [Network Essentials](#)
- [SIP Essentials](#)

Related Links:

- [802.1Q](#) (Snom Service Hub)
- [Basics of networks](#) (Snom Service Hub)
- [Bus topology](#) (Snom Service Hub)
- [Determining local hosts and remote hosts](#) (Snom Service Hub)
- [Hybrid topologies](#) (Snom Service Hub)
- [IP address classes](#) (Snom Service Hub)
- [IP-Addresses - IPv4](#) (Snom Service Hub)
- [IP-Addresses - IPv6](#) (Snom Service Hub)
- [IPv4 private networks](#) (Snom Service Hub)
- [IPv6 - Transition Technologies](#) (Snom Service Hub)
- [LAN - Local Area Network](#) (Snom Service Hub)
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- [Protocols and Data Transmission](#) (Snom Service Hub)
- [Ring topology](#) (Snom Service Hub)
- [Shortcuts, optimizations in IPv6 addresses](#) (Snom Service Hub)
- [Star topology](#) (Snom Service Hub)
- [Structure of Unicast Addresses](#) (Snom Service Hub)
- [Subnet Masks](#) (Snom Service Hub)
- [Subnets](#) (Snom Service Hub)
- [TCP-IP Architecture](#) (Snom Service Hub)
- [The most important TCP-IP protocols at a glance](#) (Snom Service Hub)
- [VLAN - Virtual Local Area Network](#) (Snom Service Hub)
- [VLAN and QoS features](#) (Snom Service Hub)
- [WAN - Wide Area Network](#) (Snom Service Hub)