

The background is a dark blue gradient with a subtle grid of white lines. Several large, white, 3D-style arrows are scattered across the image, pointing in various directions. A horizontal light blue band is positioned behind the text.

# **HOME AREA NETWORK**

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# *Description*

A home network or home area network (HAN) is a type of local area network. This network can be used devices such as printers, smartphones and tablets. These additional capabilities can then be used to increase the quality of life inside the home.



# Causes

One of the primary drivers behind the establishment of this kind of network is the need to distribute residential Internet access to all internet capable devices in the home.



# Infrastructure

A home network usually relies on one of the following equipment to establish physical layer, data link layer, and network layer connectivity both internally amongst devices and externally with outside networks:

A modem is usually provided by an ISP to expose an Ethernet interface to the WAN via their telecommunications infrastructure. In homes these usually come in the form of a DSL modem or cable modem.





# Transmission Media



Home networks can use either wired or wireless technologies to achieve full connectivity. Home networking may use

- Ethernet Category 5 cable, Category 6 cable - for speeds of 10 Mbit/s, 100 Mbit/s, 1 Gbit/s, or 10Gbit/s.
- Wi-Fi Wireless LAN connections - for speeds up to 450 Mbit/s, dependent on signal strength and wireless standard.
- Phone wiring - for speeds of 160 Mbit/s (see HomePNA)