

Types of Network

- LAN - Local Area Network
- WAN - Wide Area Network
- MAN - Metropolitan Area Network

LAN - Local Area Network

- A [LAN](#) connects network devices over a relatively short distance. A networked office building, school, or home usually contains a single LAN, though sometimes one building will contain a few small LANs (perhaps one per room), and occasionally a LAN will span a group of nearby buildings. In [TCP/IP](#) networking, a LAN is often but not always implemented as a single IP [subnet](#). In addition to operating in a limited space, LANs are also typically owned, controlled, and managed by a single person or organization. They also tend to use certain connectivity technologies, primarily [Ethernet](#) and [Token Ring](#).

WAN - Wide Area Network

- As the term implies, a [WAN](#) spans a large physical distance. The Internet is the largest WAN, spanning the Earth. A WAN is a geographically-dispersed collection of LANs. A network device called a [router](#) connects LANs to a WAN. In IP networking, the router maintains both a LAN address and a WAN address.
- A WAN differs from a LAN in several important ways. Most WANs (like the Internet) are not owned by any one organization but rather exist under collective or distributed ownership and management. WANs tend to use technology like [ATM](#), [Frame Relay](#) and [X.25](#) for connectivity over the longer distances.

- **Metropolitan Area Network** - a network spanning a physical area larger than a LAN but smaller than a WAN, such as a city. A MAN is typically owned and operated by a single entity such as a government body or large corporation.

What is the difference between a LAN, a MAN, and a WAN?

- A **LAN** (local area network) is a group of computers and network devices connected together, usually within the same building. By definition, the connections must be high speed and relatively inexpensive (e.g., token ring or Ethernet). Most Indiana University Bloomington departments are on LANs. For more, see [What is a LAN \(local area network\)?](#)
- A LAN connection is a high-speed connection to a LAN. On the IUB campus, most connections are either Ethernet (10Mbps) or Fast Ethernet (100Mbps), and a few locations have Gigabit Ethernet (1000Mbps) connections.
- A **MAN** (metropolitan area network) is a larger network that usually spans several buildings in the same city or town. The IUB network is an example of a MAN.
- A **WAN** (wide area network), in comparison to a MAN, is not restricted to a geographical location, although it might be confined within the bounds of a state or country. A WAN connects several LANs, and may be limited to an enterprise (a corporation or an organization) or accessible to the public. The technology is high speed and relatively expensive. The Internet is an example of a worldwide public WAN.