Computer Network

A **computer network** is a group of [computers](https://en.wikipedia.org/wiki/Computer) that use a set of common [communication protocols](https://en.wikipedia.org/wiki/Communication_protocol) over [digital](https://en.wikipedia.org/wiki/Digital_signal) interconnections for the purpose of sharing resources located on or provided by the [network nodes](https://en.wikipedia.org/wiki/Node_(networking)). The interconnections between nodes are formed from a broad spectrum of [telecommunication network](https://en.wikipedia.org/wiki/Telecommunication_network) technologies, based on physically wired, optical, and wireless radio-frequency methods that may be arranged in a variety of [network topologies](https://en.wikipedia.org/wiki/Network_topology).

The nodes of a computer network may include [personal computers](https://en.wikipedia.org/wiki/Personal_computer), [servers](https://en.wikipedia.org/wiki/Server_(computing)), [networking hardware](https://en.wikipedia.org/wiki/Networking_hardware), or other specialised or general-purpose [hosts](https://en.wikipedia.org/wiki/Host_(network)). They are identified by [hostnames](https://en.wikipedia.org/wiki/Hostname) and [network addresses](https://en.wikipedia.org/wiki/Network_address). Hostnames serve as memorable labels for the nodes, rarely changed after initial assignment. Network addresses serve for locating and identifying the nodes by communication protocols such as the [Internet Protocol](https://en.wikipedia.org/wiki/Internet_Protocol).