Local Area Networks (LANs)

When it comes to types of networks, the terms can be confusing. The nature of networking has changed quite a bit since these terms were invented.

A Local Area Network (LAN) implies a self-contained network. LANs exist in small areas, such as a single building, floor, or room. In a LAN, all nodes are directly connected with cables or short-range wireless. LANs do not need any outside technology, like an Internet Service Provider (ISP), to function. Due to their smaller size, LANs have faster speeds than other network types. Most modern LANs use a technology called Ethernet. You will learn more about Ethernet later in the course.

Instead of "LAN," professionals might refer to a LAN as the "local network."

If you're talking about a computer, "local" means "contained in the computer itself." If you're talking about a network, "local" means "connected to the same network." This might refer to the whole LAN. Or it could mean "all the nodes that can talk to each other without needing a router." Routers are devices that connect two or more different networks and can pass information between them.

Typically, LANs are supported by LAN Administrators. They manage and update the local network. The administrator's job includes servicing hardware, cabling and software. They may perform installations and deployments, upgrades, and troubleshooting. To be a LAN administrator, you need a broad range of skills and knowledge about networking, software and hardware.