

LANs vs. WANs: Serving Different Purposes **LANs (Local Area Networks)** and **WANs (Wide Area Networks)** are fundamental building blocks of computer networks, each designed to fulfill specific needs and serve different purposes. In summary, LANs are ideal for connecting devices within a limited area, while WANs are necessary for connecting networks and devices across larger distances.###

WANs: Connecting Networks Across a Wide Area * **Purpose:** Connect multiple LANs or individual computers across a wide geographical area, such as countries, states, or continents.###

LANs: Connecting Devices within a Limited Area * **Purpose:** Connect devices within a confined geographical area, such as a home, office, or school.* Uses cables (Ethernet) or wireless technology (Wi-Fi) for connectivity.* Offers slower data transmission speeds compared to LANs due to the longer distances involved. Understanding these differences helps in designing and managing effective network infrastructures for various purposes. Cables, Wi-Fi |||||