

# [Chapter 4 lab essay](https://assignbuster.com/chapter-4-lab-essay/)

Chapter 4 Lab4.

1. 1Standards are put in place to make everything work together error free. Because Stability, Consistency, Minimization of packet errors. 4. 1. 2Because the voltage used to transmit data needs only be high enough for the receiver to detect it. Making the voltage higher would make the receiver electronics more difficult. 4.

1. 3Hospitals, security systems, PA & recording studios. The drawback of STP cables is that they will increase the total cost of an installation. STP cables are more expensive due to the shielding, which is an additional material that goes into every meter of the cable.

The shielding also makes the cable heavier and stiffer. Thus, it is more difficult to handle. 4. 1. 4Cat 310MbpsToken/10 base TCat 416MbpsTokenCat 5100MbpsEthernet/TokenCat 61000MbpsGigabit EthernetCat 6a1GbpsGigabit EthernetNT1210Chapter 4 Lab4. 1. 6Coaxial cable consists of a core of copper wire surrounded by insulation, a braided metal shielding, and an outer cover. 4.

1. 7100 meters & a signal repeater4. 1. 8They both need straight UTP4. 1.

10Multimeter- an electronic measuring instrument that combines several measurement functions in one unit. Tone generator-electronic audio acoustics and equipment testing and setup, or informational signals, commonly associated with a telephone system Pair scanner- used to locate problems ina LAN systemTime domain reflectometer – is an electronic instrument used to characterize and locate faults in metallic cablesNT1210Chapter 4 Lab4. 1 review1. Automatically chooses the MDI or MDIX configuration to properly match the other end of the link. 2.

When deciding where to place both your router and your repeater, it’s important to put them both in a central location, and not to keep the repeater too far away from the main router—if you put the repeater on the very edge of your main network hoping to strengthen the signal to your devices, you’re going to reduce the speed of your connection to the rest of the network and to the Internet. 3. The limit on network connections a desktop can make is dependent on acceptable speed. A vast number of connections can be established, however each connection is a drain on overall speed which can reduce working ability to a crawl.

4. 2. 1Generally, singlemode cable provides less signal attenuation, higher transmissions speeds, and up to 50 times greater transmission distance than multimode cable. 4. 2.

2Immunity to Electromagnetic Interference, Data Security, Non Conductive Cables, Eliminating Spark Hazards, Ease Of Installation, High Bandwidth Over Long Distances. 4. 2. 3So companies have a chance to use already installed UTP cabling. 4. 2 review1. The cable should not have any bend radius smaller than ten (10) times the cable diameter, the cable should not be pulled over a bend radius smaller than twenty (20) times the cable diameter. 2.

Core, cladding, buffer, strengthener, outer jacketNT1210Chapter 4 Lab4. 3. 1Max LengthMax SpeedCostProsConsUTP100m1 GbpsLowEasy to install, commonly availableSusceptible to interference, limited distanceSTP100m100 MbpsMediumLow emissions, less interferenceDifficult to work with, limited distance.

Coaxial500m (Thicknet)185m (Thinnet)100 MbpsMediumLeast susceptible to interference of all copper media. Single cable problem fails entire networkFiber10km+ (SM)2 km+ (MM)100 Gbps (SM)10 Gbps (MM)HighMore secure, long distances, highest speedsDifficult to terminate, expensi4. 3. 21. fiber 2.

Coaxial 3. Stp