Name: Tri Huynh Chau

CST226 \_ Chapter 9

Professor: John

1.Describe the primary functions of a network.

a network is a collection of loosely coupled processors interconnected by communication links using cables, wireless technology, or a combination of both.

3.If you are setting up a simple network at home to connect your newest devices, which of the network topologies discussed in this chapter would you choose? Explain why.

I use star because it is simple , cheap

5.Explain why network operating systems were phased out as distributed operat-ing systems gained popularity.

.7.In your own words, describe the functional differences between a bridge and a gateway. Give an example of each.

A bridge is a device that is software operated that connects two or more local area networks that use the same protocols. For example, a simple bridge could be used to connect two local area networks using Ethernet networking technology.

A gateway, on the other hand, is a more complex device and software that connects two or more local area networks or systems using different protocols. A gateway translates one network’s protocol into another, resolving hardware and software incompatibilities. For example, the systems network architecture (commonly called SNA) gateway can connect a microcomputer network to a mainframe host.

9.Explain the major advantages and disadvantages of a bus topology.

Advantages: all sites are connected to a single communication line running the length of the network

Disadvantages: Because all sites share a common communication line, only one of them can successfully send messages at any one time. Therefore, a control mechanism is needed to prevent col-lisions.

11.Referring to Figure 9.7, describe the flow of data from host-to-host as it moves from host 1 to host 8, including each controller or bridge.

Host 1,,2, bridge ,5,6,7 , bridge, 8

.13.Referring to Figure 9.10, describe the flow of data from host-to-host as it moves from host 3 to host 7, including each controller or bridge.

3 , central controller, bridge, 8 ,7

15.Describe a hybrid topology and draw a graphic illustration of an example.

A hybrid topology is a combination of any of the topologies discussed here. For exam-ple, a hybrid can be made by replacing a single host in a star configuration with a ring,

17.Give two real-life examples where packet switching would be preferred over circuit switching, and explain why.

In marathon, one racer run then give the stick for another racer to finish the race

Delivery pizza