

Week 3 lab cis175

[Technology](#), [Development](#)



Week 3 lab cis175 Topologies There are several types of topologies which could be applied in such a case. Example of that includes LAN and point to point network. Therefore in this case the best is the LAN. It means Local Area Network (Spurgeon, 2009).

The reason for this is that any node in the LAN contains more than one physical link to all other devices in the Network (Hekmat, 2006).

a. When such links are mapped graphically they form into a geometrical shape. That shape can be used to describe the topography of the network. For this reason, mapping the flow of the data within the network components would determine the topology of the network logically (Spurgeon, 2009).

2. The best would be peer to peer network. The reasons;

- a. The work load is partitioned among peers (Hekmat, 2006)
- b. Everyone in this network is equally privileged and participant in this application
- c. Peers have their resources such disk storage available for every one without a central coordination by any server. (Spurgeon, 2009)

Q2. ISO model

- Paul Dig Nectar Tree seasonally to Provide Anti-dot

The easiest layer to implement is the physical layer. (Hekmat, 2006)

i. The reason for the above is that it is the layer which is concerned with the reception and transmission of any unstructured low bit over very basic physical medium.

The hardest layer to implement is the data link layer. (Spurgeon, 2009)

ii. The reason for the above is that it should be error free for the transfer of data frames that is from one node to the next over the layer which is

physical.

Q3. Ethernet

a) The best cabling when connecting Ethernet is the cat 5 cables (category cables) for carrying signals.

The reason for the above is that it can provide an outstanding performance of more than 100MHz which is very suitable for 100base-Tx and 1000 base - T. Also this cable can be used to transmit video signals and telephony.

(Spurgeon, 2009)

i. In case one would want to have an access to a machine which is very far off, the best thing would to apply the remote access. It would be very expensive to use a cable to reach a machine which is far off using cables.

(Spurgeon, 2009)

References

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Halabi, S. (2003). Metro Ethernet: [the definitive guide to enterprise and carrier Metro Ethernet applications]. Indianapolis: Cisco Press.

Hekmat, R. (2006). Ad-hoc networks: Fundamental properties and network topologies. Dordrecht: Springer.

Reynders, D., & Wright, E. (2003). Practical TCP/IP and ethernet networking for industry. Amsterdam: Newnes.

Spurgeon, C. (2009). Ethernet: The Definitive Guide. Sebastopol: O'Reilly Media, Inc.