

Network topology design

[Technology](#), [Information Technology](#)



Network Topology Design The company has grown from ten to a hundred employees in one year. This is a tremendous growth rate which is a pointer to effective management, security, and integrity of the network that the technology oriented company has employed so far. Additionally, the company projects a hundred percent expansion in the next one year. This requires a network topology that is stable, secure, and integral.

For the first ten employees of the company, a ring topology proves to be very effective; this topology holds all the employees equal thereby allowing them equal access to the databases. In this topology, single stations use their own internal drives as the basic storage destination but each of these accesses the drives of the other computers without unnecessary restrictions. This type of topology is easier to mechanize and promises convenience of use. Furthermore, the additional computer drives offer back up to the data incase of a crash of any computer. This topology is cheaper in relation to any other (Shelly & Rosenblatt, 2012).

The growth recorded in the first year needs an equally stable topology but one that caters for the increased number of employees. This is a mechanism promised only by the star topology which is strong and stable enough to sustain the multiple access expected from the growing number of employees. In this mechanism, a central database is accessed equally by other individual computers. To increase efficiency, the database can be placed on the cyber space. This is achieved through cloud computing. Cloud computing offers speed, security, and integrity three factors that may be hampered in the event of the increase of employees in the firm (International Conference on Soft Methods in Probability and Statistics, & López-Díaz,

2004).

Illustration

Ring topology

Star topology

References

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