

# Example of local area networks research paper

[Business](#), [Marketing](#)



Networking is an important task that needs to be undertaken with utmost care so that future challenges can be easily solved. The organization will make use of several servers to manage the various applications and computer communication systems. The ground floor will have 28 workstations. The workstation will be used by the support staff. There will be support applications that will be used for various support tasks. Some of the common tasks which will be seen to be taking place on the ground floor include debugging the applications which are in use. The common applications which are in use in the sales and marketing departments are the sales and marketing applications respectively. The communication between the departments will be done through the servers and by way of routers. The switches will act as interdepartmental communication devices. It requires that the departments manage its own network. The security of each department will also be undertaken by each department. In order to organize the structure of the devices in the network, structure, and to provide connectivity, routers have been introduced at all three departments. Furthermore, in order to protect the computers from external attacks, such as viruses, worms or crackers, Firewalls have been put in front of all connections leading to the external network. In all the departments, there will be use of switches. The use of switches will enable computers or other devices of the network use the same channel to communicate which has a fixed bandwidth (i. e. the bandwidth is divided between the equipments). As a result of this, frequent collision can occur on the network when two or more devices try to communicate at the same time, severely affecting the network performance. A switch breaks up collision domain on each of its

port, which means that, any device connected to the switch has full bandwidth available to it, which can be utilized for transmission. There will be a server room where all the servers will be operated on. The server room will be located on the general support room. The diagrammatic representation is shown in the diagram below: