**Network Security Concerns**

The main concerns of network security are:

* **Addressing:** It can be used to segment networks. Network segmentation can help create logical boundaries in a network. These logical boundaries can then have different firewall rules. In addition, private addressing can be used to keep networks limited to internal use or access.
* **Topology:** It includes ring, bus, star, line, tree, full mesh, and partial mesh. A topology primarily affects the availability of a network. A topology can provide redundant paths and high availability and reduce the likelihood of unavailability of information.
* **Communication protocols:** Defining and limiting the communication protocols to those required for the business objectives reduces the overall attack surface of a network. Unnecessary services and protocols create unnecessary risk.
* **Communication pathway:** It deals with the confidentiality and possible integrity of data that is being communicated. Communication pathways may include encryption, which protects nonrepudiation of communications.
* **Redundancy:** Duplicating systems and data helps to ensure they are available after a disaster. One example is a hot site, in which computer systems are set up at an alternate location and are ready for use at any time and data is continuously updated at the hot site to mirror the data on company servers and storage. Other forms of redundancy are redundant array of independent disks (RAID) devices and an uninterruptible power supply (UPS).