Network security

Technology

There are many definitions of network security. There is no universal agreement on the definition of network security. In this writing, network security will be defined as: An attempt or an approach to protect actively or passively a communication network from threats consciously and systematically by network manager so that the goal of the communication network can be achieved. There is always a risk in implementing solutions to computer network security. The disadvantages and advantages of the solutions will be discussed in the computer network security approaches, which are discussed in this writing.

Connectivity & easy access are computer network primary goals. The problem with computer network security, these goals cannot be fulfilled satisfactory. Compromises that one can take into consideration when applying the computer network security are discussed in this writing. If there is a computer network security system that protects, what should be protected? Who should protect? When? Why? Where? How? These questions are answered in short explanations in this writing since a deeper discussion of the subject is beyond the scope of this writing.

The writing will emphasize primarily on the technical aspects of computer network security. Some procedures, hardware, and software that are used to detect, prevent, and correct threats to computer network security are discussed throughout the writing. Network security is one of many main issues in communication world. The communication technology develops so fast, that the security of communication becomes more important. Network security is not only an issue in computer networking, but also an important issue in telecommunication.

The telecommunication technology is in its converging process. In this process, security becomes an important issue not only for the users but also for the providers. As computer network proliferates, network security becomes important. The Internet helps pushing the security technology to develop fast. The need for security becomes more and more after the explosive use of Internet. The complexity of computer network makes computer network security management more difficult.

A special department that takes care of computer network security is needed in a modern organization or company. Many organizations and companies invest more in computer network security as the use of computer network in their companies and organization increase. ANCSEC evaluation criteria [7, p. 569] says that: If the cost of recovering from security breach is less than the cost of security, reduce the security level. This principle is true. Why should one spend much money to protect one's PC at home if it only contains some game applications?

On contrary, imagine a loss that a company can suffer from a stealing of its newest model by a competitor. This is one reason why a manager in an organization and company should take account security issues regarding their assets in data form. Connecting to a global network has many benefits, but this causes some threats as well. Not everyone using the new Internet behaved responsibly. There is an opportunity to access other's computers, data and resources without permission. People who do these things are known to be hackers or crackers.