

# Computer security

[Engineering](#), [Computer Security](#)



The other method is Transposition (rearrangement characters) which is the encryption process in which units of the original plain text (usually individual characteristics) are simply moved around; they appear unchanged in the cipher text for their relative location. Study Case (Bank of Shenandoah Valley) While both encryption and authentication method are providing some measures of security, the Implementation of security itself has totally a different approach.

Before any methods chosen, the two most important factors in security implementations are avian to be determined. The level of security needed and the cost involved, so the appropriate steps can be taken to ensure a safe and secure environment. In this case Bank of Shenandoah Valley is In type of business which a high level of security Is required, therefore, I would suggest the use of encryption method with a complex algorithm involved.

Although an authentication method is a secure method as well, is not as complex as encryption method of complex algorithm since it has been used in military during the war where a high levels of security are a must. During the war, he use of encryption becomes paramount so those messages are not intercepted by the opposing forces. This is a perfect example of how reliable an encrypted message can be while used within its appropriates guidelines. Chapter # 6 4- Describe the three deferent database models - hierarchical, relational and network.

For data to be effectively transformed into useful information, it must be organized in 1 OFF the smallest unit (or piece of data) used by the computer and then progresses into the database, which holds all the information about

the topic. The data is organized in a top - down or inverted tree like structure. At the top of every tree or hierarchy is the root segment or element of the tree that corresponds to the main record type. The hierarchical model is best suited to situations in which the logical relationship between data can be properly presented with the one parent many children (one to many) approach.

In a hierarchical database, all relationships are one - to -one or one- to-many, but no group of data can be on the 'many' side of more than one relationship. Network Database is a database in which all types of relationships are allowed. The network database is an extension of the hierarchical model, where the various levels of one-to-many relationships are replaced with owner-member relationships in which a member may have many owners. In a network database structure, more than one path can often be used to access data. Databases structured according to either the hierarchical model or the network model suffers from the same deficiency: once the relationships are established between the data elements, it is difficult to modify them or to create new relationships. Relational Database describes data using a standard tabular format in which all data elements are placed in two-dimensional tables that are the logical equivalent of files. In relational databases, data are accessed by content rather than by address (in contrast with hierarchical and network databases).