

Chapter 11: Data Protection

- **Threat** - Is a potential violation of security. When a threat is actually executed, it becomes **attack**.
Those who execute or cause threats to be executed are called attackers.
- **Malware**- Is a a general term used to refer to viruses, worms, spyware, adware etc. In other words, it is unwanted software that someone else wants to run on some one else computer. It infects computer, making it behave in a way, which no one approve of.
- **Viruses**- Malicious codes/programs that cause damage to data and files on a system.
 - ✓ Viruses can attack on operating system, boot block, system areas, files and application –program macros.
 - ✓ **Worms**- Is a self –replicating program which eats up the entire disk space or memory.
 - ✓ **Trojan Horses**- A trojan horse is a program that appears useful first but actually performs malicious functions such as deleting or damaging files.
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- **Spyware**- Is a software which is installed on any computer to spy on the activities and report this data to people willing to pay for it.
- **Adware** – Are the programs that deliver unwanted ads to the computer(generally in Pop-Ups form).
 - Adware consume our network bandwidth.
 - It is similar to spyware—however, it may be installed with user consent.
- **Spamming** -Refers to the sending of bulk-mail by an identified or unidentified source.
 - ✓ In non-malicious form, bulk-advertising mail is sent to many accounts.
 - ✓ In malicious form(eg, e-mail bombing), the attacker keeps on sending bulk mail until the mail-server runs out of disk space.
 - ✓ **SPIM** It is a SPAM sent via instant messaging systems such as Yahoo Messenger, MSN Messenger and ICQ.
- **PC Intrusion** – PC Intrusion **can occur in any of the following form**
 - ✓ **Sweeper Attack**
 - ✓ **Denial services**
 - ✓ **Password Guessing**
- **Phishing**-In phishing, creator sends fake email in the hope of gaining personal/financial information.
- **Pharming**- It is actually a code installed on the hard drive of a user's computer or on actual web server , code redirects user to a fake website without user knowing.

- **Firewall-** Is a network security system, either hardware-or software-based, that controls incoming and outgoing net-work traffic based on a set of rules.
 - ✓ A firewall forms a barrier through which the traffic going in each direction must pass. A firewall security policy dictates which traffic is authorized to pass in each direction.