

Announcements

- Submit system will be available next week.

Definitions

- **Spam** – unsolicited e-mail or junk mail
 - Affects network bandwidth problem
- **Spyware** – software that gathers information without a user's consent
 - Typically bundled with other software
- **Adware** – Form of spyware where collected information is used to determine advertisements to display.
- **Rootkit** – Software tools designed to hide running processes, system data or files helping to maintain access to system without detection.
- **Cookie** – Information stored in a text file which keeps track of user's activities on a specific Web site
 - Information identifies users
 - Could help generate customized Web pages
 - Generated by a web server and provided to web client
 - Web client could send a cookie when connecting to the server
 - They are not programs or plugins

Definitions

- **DoS** – Denial-of-service attack – Attack on a computer system or compute network by overloading the system resources (computational or networking)
- **Smurfing** – Form a of DoS
- **Registry** – Database that stores configuration information Windows systems
- **Web Syndication** – Portion of a web site is made available to users or other web sites (sometimes refer to as RSS)
- **Web feed** – Document with information items.
- **RSS** (Rich Siste Summary, RDF Site Summary, Really Simple Syndication) – File format for web syndication
- **Podcasting** – Similar to RSS but rather than reading you listen to the content

Definitions

- **Virus** – Malicious program that attaches itself to a program or file
 - File most of the time is executable
 - Damage to hardware or software
 - Infection of the computer occurs when the virus is run or the file open
 - Viruses depend on humans for propagation
- **Worm** – Malicious program and defined as a subtype of a virus.
 - Difference with typical virus – It can replicate and propagate by itself
- **Trojan Horse** – Malicious program that appears to be useful software
 - Do not reproduce by attaching to files
 - Do not self-replicate
 - Known for creating backdoor to your system.
- **Phishing**
 - Sending e-mail pretending to be a legitimate business in order to acquire private information

Certificates

- The following certificates and public key material is based on material from www.webopedia.com
- **Certificate** – Attachment to electronic message used for security purposes (From www.webopedia.com)
 - Common use – verify identity of a user sending a message
- **Certificate Authority (CA)** – third-party organization that issues certificates. Its role is to guarantee someones identity.

Public-Key Encryption

- **public-key encryption** – cryptographic system that uses two keys:
 - Public key – known to everyone
 - Private (secret) key known only to message recipient
- Keys are related in such a way that only the public key can be used to encrypt messages and only the corresponding secret key can be used to decrypt them
- Example of public-key system
 - PGP (Pretty Good Privacy)

Security Setting for Web Browsers

- The browsing experience can be enhanced by enabling some browser functionality. However this additional functionality can compromise your computer security.
- Rule of thumb – Disable unnecessary functionality and set your security levels to the highest level possible.
- Enable functionality only when you can trust the site you visit
- Zones
 - Your browser may allow you to group web sites in different security zones
 - For each zone you can define the necessary functionality level
- Be careful with sites that use scripts (e.g., JavaScript scripts)
- Active X controls and plugins – may be used in a security attack.
- Cookies – It is recommended you disable them and enable them if you trust the site you visit
- Block pop-ups – Some could compromise your system's security

Some Network Terminology

- **LAN** – Local Area Network - Computers that are relatively close to each other. Close mean in a room, building, campus.
- **Segment** – Part of a network separated by network device.
- **Node** – Anything connected to the network (e.g. a computer, a printer, etc.)
- **Backbone** – main data carrier in a network. You can can have a backbone
- **Mbps** – Mega bits per second
- **Switch** – Device that connects network segments
- **Router** - Specialized computer that makes possible the flow of packets