

## INTERNET SECURITY

Introduction Internet security refers to securing communication over the internet. It includes specific security protocols such as:

- Internet Security Protocol (IPSec)
- Secure Socket Layer (SSL)

### Internet Security Protocol (IPSec)

It consists of a set of protocols designed by Internet Engineering Task Force IETF. It provides security at network level and helps to create authenticated and confidential packets for IP layer.

### Secure Socket Layer (SSL)

It is a security protocol developed by Netscape Communications Corporation. It provides security at transport layer. It addresses the following security issues:

- Privacy
- Integrity
- Authentication

### Threats

Internet security threats impact the network, data security and other internet connected systems. Cyber criminals have evolved several techniques to threat privacy and integrity of bank accounts, businesses, and organizations.

Following are some of the internet security threats:

- Mobile worms
- Malware
- PC and Mobile ransomware
- Large scale attacks like Stuxnet that attempts to destroy infrastructure.
- Hacking as a Service
- Spam
- Phishing

**Email Phishing:-** Email phishing is an activity of sending emails to a user claiming to be a legitimate enterprise. Its main purpose is to steal sensitive information such as usernames, passwords, and credit card details. Such emails contains link to websites that are infected with malware and direct the user to enter details at a fake website whose look and feels are same to legitimate one. What a phishing email may contain?

Following are the symptoms of a phishing email:

- Spelling and bad grammar Most often such emails contain grammatically incorrect text. Ignore such emails, since it can be a spam.
- Beware of links in email Don't click on any links in suspicious emails.

- Threats Such emails contain threat like “your account will be closed if you didn’t respond to an email message”.
- Spoofing popular websites or companies These emails contain graphics that appear to be connected to legitimate website but they actually are connected to fake websites.