

Building a Secure Network

(One day Workshop)

About the Course

Information security is no more a luxury; it has become the core of the online business. Without information security business cannot continue and more over customers will loose their valuable private and business information. Presently it is not a question of loosing data but usage of lost data for malicious purpose has taken the driver's seat.

Time and again news about information security breaches at different parts of the globe has reserved the headlines. Looking at these facts it has now become a regular and important topic during high level management meetings.

This workshop is targeted for those who are into information security practices or would like to start a career on this domain. This workshop is delivered through interactive classroom sessions.

Workshop objectives

At the end of this course, participants will be able to:

- Understand and relate basic networking components
- Learn about various threats and vulnerabilities which can impact the network
- Get an idea about mitigation strategies against the risks using various security control technologies
- Learn about information handling techniques
- Understand how to deploy technologies to get better protection
- Get a glimpse of network security best practices
- Learn how to maintain confidentiality, integrity and availability of data

Workshop Contents

The one day workshop would cover the topics as noted below. There would be relevant discussion / exercises at appropriate junction points to elaborate and understand model concepts.

Networking Basics

- OSI Layers
- Types of Network (LAN, MAN, WAN)
- Protocols (TCP/IP, Frame Relay, ISDN etc.)
- Transmission Media (Bounded, Unbounded)
- Network Operating System Overview

Threats and Vulnerabilities

- Physical threats
- Logical threats
- Passive and active threats
- Common vulnerabilities

- Network Attacks
- Mitigation strategies

Network Security Controls

- Firewall types and deployment methods
- IPS functionalities
- Routing and Switching security controls
- Antivirus, Anti-SPAM, Anti-Phishing
- Layered Security approach
- Remote access technologies (VPN, IPSec, SSL, SSH)
- Wireless Network Security

Data handling techniques

- Classification of Data and Data Cycle
- Cryptography (Symmetric, Asymmetric)
- Digital Signature
- SSO
- PKI
- Email Security
- Handling stored data securely