

---

## Firewall: One day introductory course

---

- Introduction
- TCP/IP Recap
- Firewall Basics
- ipchains, iptables (Netfilter)
- Implementation for home use
- Implementation for business use
- Firewall Management

1. Introduction (morning session)
  - what is a firewall
  - why do we need a firewall
2. TCP/IP concept recaps (morning session)
  - TCP/IP model
  - Layered concept
  - Common protocols and ports , TCP, UDP, IP, ICMP
  - TCP 3 way handshake and how it works
3. Firewall basics (evening session)
  - different types of firewalls
  - how each of it works; at what level /layer does it do checking
  - software/hardware based firewall
  - iptables and ipchains
  - basic configurations and usage, chains
4. Practical implementations (evening session)
  - implementation for a home
  - implementation for the office/business
  - firewall management (using firewall script/ruleset software/application)
  - - GUI based/web based
5. Further reading/discussion
  - Firewall, why is it not enough
  - other threats that cannot be detected
  - as one of a method, not a means to solve security problems
  - sample of combination with firewall usage
  - IDS ? IPS ? what next ?