

TCP/IP Fundamentals

COURSE AIM:

This course will allow attendees to gain a solid understanding of "The Internet", of data networks and the technologies underpinning them. It will explain the history of the Internet Protocol, addressing, quality of service levels, applications such as e-mail, web browsing and voice over IP, VPN's and the future such as IPv6.

COURSE OBJECTIVES:

- To understand IP
- To understand TCP & UDP
- To understand the HTTP, SMTP, FTP, VoIP & VPN

COURSE DESCRIPTION:

As the use of the Internet increases, businesses must evolve to keep up. This course looks at the phenomenal growth of the internet, tracing the evolution, looking at how the protocols work and how common applications that we use every day function across this common public backbone.

FORMAT:

1-day, interactive classroom based
Maximum attendees: 15 per course

CONTENT:

- TCP/IP Evolution
- The principles of encapsulation (OSI 7 layer model)
- Switching and routing (layers 2 & 3)
- IP supported protocols: DNS, ARP & RARP, ICMP, DHCP
- TCP – what it does and how it does it
- UDP – A lightweight transport protocol
- TCP/IP related application protocols – FTP, HTTP, SMTP
- IP Addressing (IPV4) – Public, Private, Static & Dynamic
- IP Subnetting
- IPV6 – Why we need it.
- Voice Over IP
- VPN's