

Telecommunications Made Easy

COURSE AIM:

This course will allow attendees to gain a solid understanding of the IT & Telecommunications market and associated technologies, providing delegates with an understanding of what the technologies are and what they do, making the converged communications world that much easier to understand.

COURSE OBJECTIVES:

- To clarify the Acronyms surrounding the IT & Telecommunications world.
- To explain network access technologies such as PSTN, ISDN, ADSL & 3G.
- To explain the role of TCP/IP in the converged world of data / voice traffic.
- To clarify the traditional fixed voice world and its integration with mobile telephony.

COURSE DESCRIPTION:

This course will help attendees to understand the main concepts and acronyms behind the technologies used in the growing IT and Telecommunications world. This is not an in-depth analysis. Instead, the focus is on the functional connectivity of devices and the applications they enable. This fundamental knowledge can then be applied to your organisation, its services and solutions, in order that individuals can confidently conduct informed technology based discussions with colleagues as well as current and potential customers.

FORMAT:

2-days, interactive classroom based
Maximum attendees: 15 per course

CONTENT:

- Terminology Exercise
- Analogue vs. Digital

Data

- The OSI Reference Model
- Circuits and Packets
- Transmission Mediums (Copper, Fiber, Wireless)
- Local Area Network (LAN) Basics and Protocols (Ethernet, W-LAN)
- Internetworking Devices (Hubs, Switches, Routers, Gateways)
- Peripherals - Servers (Print, Proxy, Mail), Firewalls, AntiVirus, SPAM filters
- Wide Area Network (WAN) Transmission Facilities (PSTN, ISDN, A-DSL, Leased Lines)
- WAN Basics and Protocols (Frame Relay, ATM)
- Mobile Networks (GSM / GPRS / UMTS (3G) vs CDMA / 1xRTT / EV-DO Rev.A)
- Wi-Fi – 802.11 Wireless Networking
- Wi-MAX
- The Internet & The WWW
- Transmission Control Protocol/Internet Protocol (Function, Addressing)
- IP QoS (TCP/UDP)
- VPN's (including IPsec)

Voice

- The Fixed Voice Market
- Geographical Numbering
- Centrex / Gateway
- IP Centrex / Private Voice
- 0800 & other Voice Services
- PBX's
- PSTN
- ISDN (BRI & PRI)
- Stepping
- DDI
- Queuing
- Other PBX Features
- Voicemail / Unified Messaging
- DECT
- VoW-LAN (VoIP over 802.11)
- Cabling & Costs
- MAC's
- Managed Services
- Voice over IP
- Mobile Integration

The Converged Network