

## Prerequisites

- User level experience of computers and the Internet is desired.
- Basic knowledge about electronics, computer hardware and binary math are helpful but not essential.
- Interest in finding out how things work.

Note: No networking knowledge is necessary.

Our trainers are capable of adapting to different skill levels and will explain technical terms in plain English.

## What is included in the course?

- Course hand out in a ring folder
- Pen and text marker
- Scribble block
- Air conditioned course room
- Modern presentation technologies
- Morning and afternoon tea
- Lunch
- Course certificate



## Times and dates

Start: 8.30am Tuesday 14 February 2012

End: 4pm Thursday 16 February 2012

Start: 8.30am Tuesday 1 May 2012

End: 4pm Thursday 3 May 2012

Start: 8.30am Tuesday 26 June 2012

End: 4pm Thursday 28 June 2012

## Where and how much?

Course Duration: 3 days

Course Venue:

Pentech Communications Ltd.

Level 1, 190 Taranaki Street

Wellington

Price: \$1,850 excl. GST

Discounts are available for multiple attendees from the same company.

Pentech is able to customise this course to meet your specific requirements. We can also run it at your premises.

For further information and bookings please contact us:

Email: [sales@pentech.co.nz](mailto:sales@pentech.co.nz)

Telephone: (04) 470 7640.

For questions regarding course content and schedules please contact:

Email: [training@pentech.co.nz](mailto:training@pentech.co.nz)

Telephone: (021) 320689.



Smart Thinking. Precise Delivery.

## Networking Basics



A foundational network  
course

## Course overview

This introductory course will provide you with an overview of communication networks – how they are built, how they operate and the important role they play in transporting business communications.

As a student you will learn about the components of today's computer networks and technologies that make them work.

You will also become familiar with commonly used network terminology and the role of the products, such as Routers and Switches, which glue your network together.

## Target audience

Anyone who needs a basic understanding of computer networks including:

- Helpdesk staff
- System administrators
- Service delivery managers
- Project managers
- Project co-ordinators
- People who are working with or managing network personnel
- Anyone embarking upon a networking career
- Current network administrators and network engineers looking to solidify or augment their current networking skill set.

## Course description

This course will cover the following topics:

- Computer network related terminology
- Network types: LAN, WAN, MAN etc
- Network topologies: Star, Ring, Bus etc
- Cable types and structured cabling systems
- Open Systems Interconnect (OSI) Reference model
- Network technologies: Ethernet, Frame Relay, DSL, ATM etc
- Switching technology and products
- Routing technology and products
- Higher layer protocols: IP, TCP, UDP etc
- Addressing in different layers: MAC, IP, SAP, ports etc
- Data structures: frame, packet, cell, segment etc
- Communication concepts in TCP/IP networks: Client-server etc
- Services and Protocols in an IP network: DHCP, DNS, SMTP, FTP etc
- Network design principles and network hierarchy
- Options for managing computer networks: SNMP, Monitoring, Management etc
- An overview of Network Security: Firewall, VPN, IDS/IPS etc
- An overview of IPv6
- The five most common problems found in Enterprise networks.

## Who is the trainer?



Jan Schoenfelder is Pentech's most experienced trainer with 25 years in the IT industry and more than 10 years of teaching experience in the IBM Technology Training Centre in Germany.

He taught networking courses of all levels from beginners right up to network troubleshooting courses and covered major network

technologies used in the past 20 years such as Ethernet, Token Ring, ATM, Frame Relay, X25, ISDN, TCP/IP, SNA and a lot more.

Jan has also worked for more than 8 years as a Network Architect and Consultant for large government organisations and multinational companies.

He will make sure that you take the most out of this course and get the basics right regardless of your entry level skills.