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## Avaya® IP Fundamentals

**Duration: 1 Days**    **Course Code: 0229W**

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### Overview:

Internet Protocol (IP) Fundamentals provides you with an introduction to the basic concepts of IP networking, the IP Suite, and the basics of routing. Regardless of your current level of knowledge, you will gain from this course a solid understanding of how a packet moves from the source destination workstation to the destination workstation and the major steps along the way, including how data is segmented, how headers are added or stripped off, and how a file travels through the IP stack.

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### Target Audience:

No information available

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### Objectives:

- **After you complete this course you will be able to:**
  - Describe the Internet as an IP network
  - Describe the two major networking software stack models:
    - The OSI 7 Layer model
    - The TCP/IP 4 Layer model
  - Describe the major networking protocols.
  - Explain the role of IP addressing in message delivery.
  - Describe the principle of routing.
  - Explain how RIP concepts are embodied in routing tables.
  - Describe the journey of a packet
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### Prerequisites:

**Attendees should meet the following prerequisites:**

- There are no prerequisites for this course

### Testing and Certification

**Recommended preparation for exam(s):**

- NCDS - BCM50 Rls. 3.0, BCM200/400 Rls. 4.0 & BCM450 Rls. 1.0 Sales Engineering
  - NCSS - BCM50 Rls. 3.0, BCM200/400 Rls. 4.0 & BCM450 Rls. 1.0 Installation, Config. & Maintenance
  - NCSS - BCM50 Rls. 3.0 Installation & Initial Configuration
  - NCTS - Converged IP Telephony Solutions
  - NCDS - Nortel Converged Campus ERS Solution
  - NCSS - Nortel Converged Campus ERS Installation & Configuration
  - NCTS - Nortel Data Networking Technology
  - NCDS - Communication Server 1000 Rls. 6.0 Network Design
  - NCSS - Communication Server 1000 Rls. 6.0 Database Administration
  - NCSS - Communication Server 1000 Rls. 6.0 Installation & Commissioning
  - NCSS - BCM50 Rls. 3.0 & BCM200/400 Rls. 4.0 Installation, Configuration & Maintenance
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### Follow-on-Courses:

**The following courses are recommended for further study:**

- There are no follow-ons for this course
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## Content:

### We discuss the following topics:

- The Internet and IP Networking
- OSI Model and IP Suite Protocol Stack
- Network addressing, including subnetting and Address Resolution Protocol (ARP) and Dynamic Host Configuration Protocol (DHCP)
- Routing services, network routing, and routing tables
- Router Information Protocol (RIP) and Open Shortest Path First (OSPF), including routing loops, split-horizon, and poison reverse
- Transport Protocols, including Transmission Control Protocol (TCP) and User Datagram Protocol (UDP), and port and socket numbers
- Application Protocols, including Telnet, File Transfer Protocol (FTP), Simple Mail Transfer Protocol (SMTP), HyperText Transfer Protocol (HTTP), and Domain Name Service (DNS)

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## Additional Information:

Avaya Self-Paced e-Learning: You have one year from the date when you order your online course or enter your activation code for your CD course to complete your training, after which your access expires. You can retake your training as often as you like during that year.

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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