

Certified IP Professional Track: Troubleshooting IP Services

Learn how to troubleshoot end to end services

hands-on



Overview

This hands-on practical course is designed to assist you to develop the skills necessary to configure and troubleshoot a variety of IP Services from end to end. Participants will analyse and troubleshoot the message flows for Email and HTTP and learn how these protocols are used as the building blocks for advanced services such as Database Services. Throughout the course, you will be given individual trouble-shooting tasks and guided into the correct trouble-shooting methodologies necessary for working on a large IP network. Analytical skills will be enhanced through the use of several tools including use of advanced features of a Network Analyser.

You will be able to

- Describe the detailed operation of common IP services and applications
- Use advanced features of network analyzer
- Configure common network services
- Configure key IP services
- Troubleshoot and fault-find on IP services

Who can benefit

Engineers wishing to build on their existing knowledge of IP in a practical environment and enhance their fault-finding techniques.

Pre requisite knowledge

It is essential that the participants have a good knowledge of the fundamentals of IP. The participant should have successfully completed the Certified IP Engineer (CIPE) practical and theory assessment.

Outline

Introduction

- Operation of common IP Services including: Web, Email, Instant Messenger, MMS
- Review of networking tools
- Using netcat or telnet to open raw sockets
- Mobile access points & access networks

Effective Troubleshooting Techniques

- Network documentation & configuration backup
- Baseline applications & trend analysis
- Developing a troubleshooting strategy
- Analysing log files
- Identification and 'noise' removal
- Isolating & verifying faults
- Applying corrective measures
- Monitoring results
- Effective use of Protocol Analyser filters
- Analysing ICMP error codes
- Misconfigurations and Redirections
- Traffic level monitoring
- Debugging connectivity issues
- Diagnosing DHCP, DNS, VLAN & Routing issues

Web Services

- Configuration of Web servers
- Implementing Proxy and Cache services
- Verifying the correct operation of service
- Diagnosing likely causes of a fault
- Troubleshooting the service

Email Services

- Configuration of SMTP, POP & IMAP
- Authentication & email security
- Push email services
- HTML email
- Verifying the operation of the service
- Configuring MIME types

Multimedia and Messaging Services

- Configuration of messaging services
- Email and web-based gateway connectivity
- Configuring MIME types
- Database Services
- Database connectivity
- The role of SOAP
- Implementing LDAP services

Other Services

- Video and voice streaming services
- Analysis and configuration of messenger services
- Implementing VPN services
- Operation of Peer to Peer Services

Hands-on exercises, review questions & section summaries throughout

DURATION 5 days

MAXIMUM CLASS SIZE 12