IBM - TCP/IP for z/OS: Diagnostics and Debugging

This course is designed to give you the skill required to diagnose and debug TCP/IP problems when operating on z/OS. This skill consists in developing knowledge of commands and tools together with a methodology in tackling TCP/IP problems.

The lab activity and paper projects provide an opportunity to debug real problems.

Skills Gained

- Learn what commands are useful in a z/OS environment to control TCP/IP resources, the TELNET application, and debug TCP/IP simple network problems
- Learn which trace types (packet, TELNET, FTP, and so forth) are available in a z/OS environment and know:
  - What kind of information can be found in a trace
  - When to activate a trace
  - How to activate a trace
  - How to interpret a trace (for the packet trace there is a dedicated topic)
- Use the proper diagnostic technique to approach TCP/IP problems
- Describe the Syslog function in the UNIX environment and know how to configure the /etc/syslog.conf file
- Understand how to handle and modify the translate tables used by many TCP/IP applications that connect to remote systems which use ASCII character coding
- Activate and interpret several trace types, and debug some real problems which involve the use of various application protocols.

Who Can Benefit

This intermediate course is for anyone who works on TCP/IP networks and provides support in the resolution of communication problems on z/OS.
Prerequisites

You should have:

- Completed TCP/IP for z/OS Implementation Workshop (CB695)
- Knowledge of z/OS.

Course Details

Day 1

- Welcome
- Unit 1: Introduction
- Unit 2: TCP/IP commands and utilities
- Exercise 1: TCP/IP commands and lab discovery
- Unit 3: TCP/IP traces
- Unit 4: Using IPCS with TCP/IP traces
- Exercise 2: Packet trace
- Exercise 3: OSA diagnosis lab

Day 2

- Unit 5: IP data flows
- Unit 6: Telnet
- Exercise 4: Telnet problems
- Unit 7: SyslogD and application traces
- Unit 8: FTP
- Exercise 5: FTP client
- Exercise 6: FTP server

Day 3

- Unit 8: FTP (continued)
- Unit 9: Debugging techniques
- Exercise 7: Problem Diagnosis (problem 1)
- Exercise 7: Problem Diagnosis (problem 2)
- Exercise 7: Problem Diagnosis (problem 3)
- Exercise 7: Problem Diagnosis (problem 4)
- Exercise 7: Problem Diagnosis (problem 5)

Day 4

- Unit 10: OMPRoute
Exercise 8: OMPRoute
Exercise 9: Storage usage
Unit 11: Dump verification
Exercise 10: Dump verification