TCPIP for AIX Administrators

Information

Length:	4.0 Days
__Ref:	AN21G-X
Delivery method:	ClassroomInstructor Led Online
Price:	EUR

Overview

Learn to begin implementing, using, and troubleshooting TCP/IP, generic remote commands, DSH, SSH, VLANs, Dynamic DNS, DHCP, static and dynamic routing, network availability, and NFS (V3 and V4).

This course provides essential core fundamental skills which are required as a prerequisite when taking further Power system/AIX education in advanced AIX, virtualization, high availability, and clustering. It is designed specifically for AIX version 7 but is also applicable to previous versions.

Public

This intermediate course is for Network Administrators or other personnel responsible for the configuration, use, and support of TCP/IP and common network services on AIX 6.

Prerequisits

You should be comfortable using the AIX command line, vi,**and** SMIT. These skills can be acquired by taking the following courses:

- *AIX Basics (AN10G)*
- *Power Systems for AIX II: AIX Implementation and Administration (AN12G)*

You should have:

- a general working knowledge of the AIX environment**and** commands.
- essential AIX System Administration skills such as software installation**and** the management of devices, file systems, **and** subsystems management

Objective

- Understand the fundamental concepts of TCP/IP, protocols, and addressing
- Configure TCP/IP on AIX
- Configure and use Telnet, FTP, REXEC, rlogin, rsh, RCP, and dsh

- Configure and use the open secure shell (OpenSSH)
- Connect multiple TCP/IP networks using static and dynamic routing
- Understand the theory of VLANs and how IEEE 801.1Q protocol is used in Power systems
- Configure routing, multipath routing and dead gateway detection (DGD)
- Understand and configure gigabit fast failover (GFF) and link aggregation (LA)/ether channel
- Combine both GFF and LA technologies to achieve the highest levels of availability
- Describe Domain Name System (DNS) function
- Configure DNS on AIX
- Describe Dynamic Host Configuration Protocol (DHCP) function
- Configure DHCP on AIX
- Describe Network File System (NFS) function
- Configure NFS versions 3 and 4 on AIX
- Configure the NFS automounter on AIX
- Perform basic troubleshooting of network problems

Topics

Day 1

- Welcome
- Unit 1: Network concepts
- Exercise 1: TCP/IP concepts
- Unit 2: Configuring TCP/IP
- Exercise 2: Configuring TCP/IP
- Unit 3: inetd remote command services
- Exercise 3: The inetd daemon and remote command inetd services

Day 2

- Unit 4: OpenSSH
- Exercise 4: OpenSSH
- Unit 5: VLAN theory
- Exercise 5: Configuring VLANs
- Unit 6: Routing
- Exercise 6: Routing
- Unit 7: Network availability

Day 3

- Exercise 7: Network availability (optional)
- Unit 8: DNS and BIND
- Exercise 8: Configuring a DNS domain

- Unit 9: DHCP
- Exercise 9: Configuring a DHCP and dynamic DNS

Day 4

- Unit 10: Network File System
- Exercise 10: Configuring NFS
- Unit 11: Problem determination
- Exercise 11: Problem determination
- Unit 12: Time services
- Exercise 12: Time services