



hp services

education

course description

Troubleshooting TCP/IP networks

u3700s

course overview

This 5 day course covers the information needed to provide a consistent, predictable and acceptable level of service provided by both operating system and network services. Because network managers are often evaluated by the availability and performance of network services, they need to know how to detect and correct network problems before users start calling to report problems or poor performance.

audience

This course is designed for network managers who are experienced in configuring and managing a TCP/IP network and are interested in learning how to troubleshoot network and network service problems.

pre-requisites

Students should be able to:

- Describe fundamental LAN concepts
- Describe how a computer system participates in a TCP/IP network
- Configure and manage:
 - A TCP/IP network
 - Local Area Transport (LAT) service
 - Network File System (NFS) server and clients
 - Dataless Management Services (DMS) server and clients
 - Berkeley Internet Name Domain (BIND) and Network Information Services (NIS) name and address services
- Describe how the Simple Network Management Protocol (SNMP) is used
 - to manage TCP/IP networks

In addition, experience in managing TCP/IP in a multivendor environment would be helpful.

course objectives

At the completion of this course, students should be able to:

- Describe fundamental network and client server concepts
- Describe how a computer system participates in a TCP/IP network
- Describe troubleshooting techniques
- Troubleshoot:
 - a TCP/IP network
 - Local Area Transport (LAT) service
 - Network File System (NFS) server and clients
 - Network Information Services (NIS) name and address services
 - Berkeley Internet Name Domain (BIND)
- Configure UNIX for network performance

to order

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detailed course outline: troubleshooting TCP/IP networks u3700s

module	key topics
networking overview	<ul style="list-style-type: none">• TCP/IP protocol architecture• addressing and routing• client/server model• troubleshooting techniques
troubleshooting TCP/IP	<ul style="list-style-type: none">• understanding the TCP/IOP operating environment• verifying TCP/IP installation• diagnosing and administrative tools• troubleshooting typical problems• troubleshooting TCP/IP interoperability problems
introducing TCP/IP protocols	<ul style="list-style-type: none">• configuring for tcpdump• using tcpdump• TCP/IP protocol headers• program example: sockets 'n stuff
troubleshooting BIND	<ul style="list-style-type: none">• understanding the BIND operating environment• verifying BIND installation• diagnostic and administrative tools• troubleshooting typical problems• troubleshooting BIND interoperability problems
troubleshooting NFS	<ul style="list-style-type: none">• understanding the NFS operating environment• verifying NFS installation• diagnostic and administrative tools• troubleshooting typical problems• troubleshooting NFS interoperability problems
troubleshooting NIS	<ul style="list-style-type: none">• understanding the NIS operating environment• verifying NIS installation• diagnostic and administrative tools• troubleshooting typical problems• troubleshooting NIS interoperability problems
improving network performance	<ul style="list-style-type: none">• kernel parameters
troubleshooting LAT	<ul style="list-style-type: none">• understanding the LAT operating environment• verifying LAT installation• diagnostic and administrative tools• troubleshooting typical problems

for more information

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