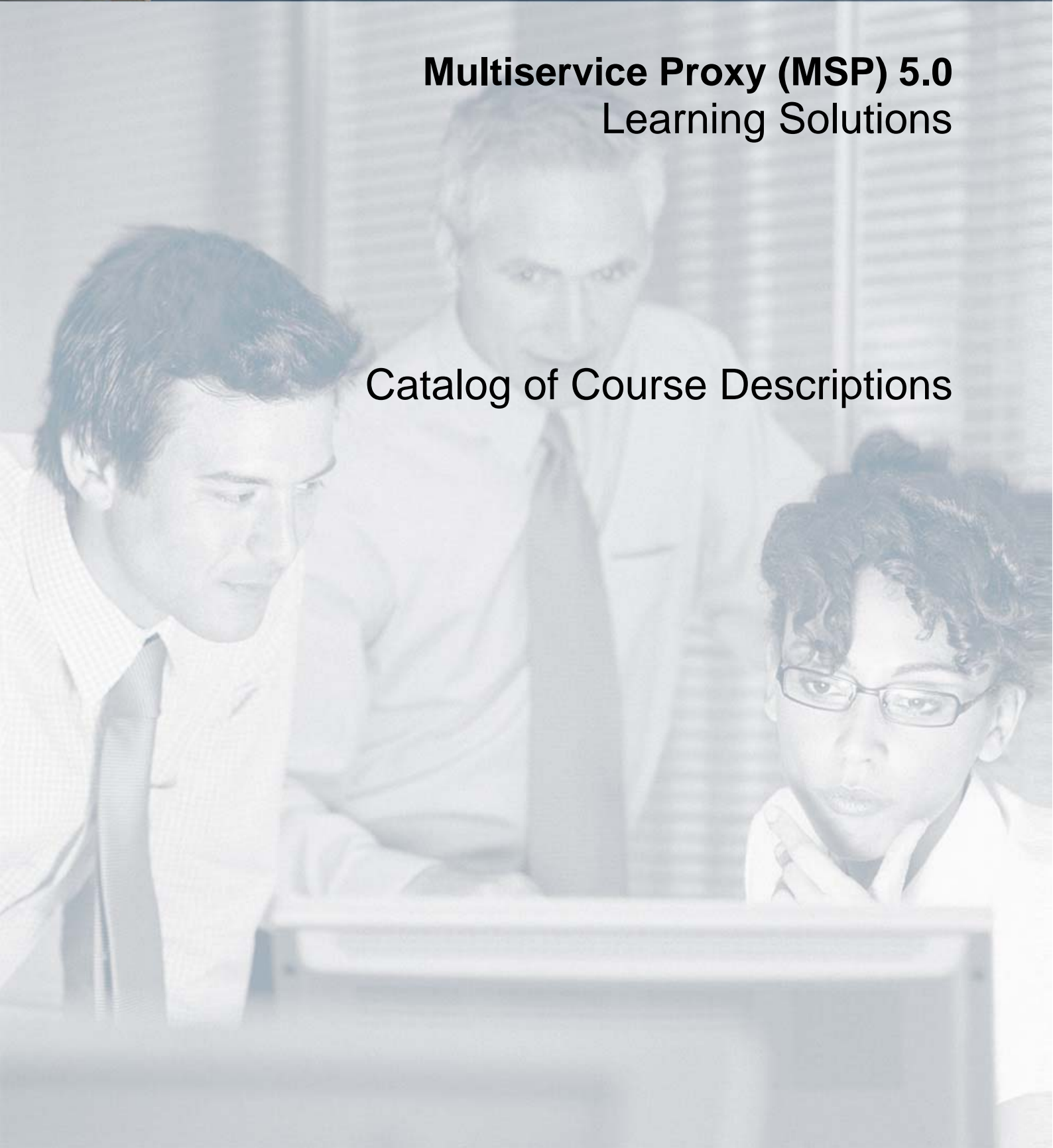




Multiservice Proxy (MSP) 5.0 Learning Solutions

Catalog of Course Descriptions





Catalog of Course Descriptions








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Introduction

Ericsson has developed a comprehensive Training Programs service to satisfy the competence needs of our customers, from exploring new business opportunities to expertise required for operating a network. The Training Programs service is delineated into packages that have been developed to offer clearly defined, yet flexible training to target system and technology areas. Each package is divided into flows, to target specific functional areas within your organization for optimal benefits.

Service delivery is supported using various delivery methods including:

Icon	Delivery Method
	Instructor Led Training (ILT)
	Seminar (SEM)
	Workshop (WS)
	Virtual Classroom Training (VCT)
	Web Based Learning/eLearning (WBL)
	Structured Knowledge Transfer (SKT)
Delivery Enablers	
	Remote Training Lab (RTL)

Multiservice Proxy 5.0 Technical Overview



LZU 108 7668 R1A

Description

Will you use the Multiservice Proxy to offer a wide variety services to your customers? If so you need a clear understanding of Multiservice Proxy 5.0, its features, benefits and associated concepts. This course will show you how the Multiservice Proxy is a future-proof product that provides fast, secure and feature rich browsing in order to ensure end-user satisfaction.

This course helps you to take advantage of the Multiservice Proxy's many features and functions by describing its: role and position in Ericsson's Service Layer; hardware, key benefits, features and functions; optimisation features, its role in various traffic scenarios; and key operation and maintenance functions.

Learning objectives

On completion of this course the participants will be able to:

- 1 Explain the mobile internet services and introduce the Multiservice Proxy 5.0
 - 1.1 Outline the evolution of the mobile internet
 - 1.2 Explain the evolution from a WAP Gateway to a Multiservice Proxy
 - 1.3 Describe where Multiservice Proxy fits into the service layer
 - 1.4 Provide a generic view of the solution
 - 1.5 Identify benefits of offered by Multiservice Proxy
- 2 Describe the Multiservice Proxy architecture
 - 2.1 List the nodes that comprise the Multiservice Proxy and their functions
 - 2.2 List the possible Multiservice Proxy configurations and explain differences between High Availability (HA) and Single Node (SN)
 - 2.3 Describe the hardware and software requirements for each configuration
 - 2.4 Explain Multiservice Proxy seamless scalability
 - 2.5 List the external traffic and operation and maintenance interfaces
 - 2.6 List the 3PP's used to achieve high availability
 - 2.7 Explain virtual gateways within Multiple Virtual Network Operator (MVNO) solutions
 - 2.8 Explain how Multiservice Proxy can be an addressable and transparent Proxy
- 3 Describe the Multiservice Proxy's features and functions
 - 3.1 Describe the difference between push and pull traffic
 - 3.2 Show streaming traffic
 - 3.3 Show traffic cases for both push and pull and MMS traffic through Multiservice Proxy
 - 3.4 Describe the user identification, user authentication, the LDAP database and describe the role of the radius cache
 - 3.5 Outline how subscriber access can be controlled with URL rules, zones and APN groups
 - 3.6 Describe default homepages, URL modification with URL redirect and replacement and Free Access URL

- 3.7 Explain why you might use a dedicated proxy per URL
- 3.8 Describe how the scripting engine can be used to customize solutions and give examples
- 3.9 Identify how push initiators interact with Multiservice Proxy and outline the role of information forwarding

- 4 Illustrate Multiservice Proxy's optimized browsing
 - 4.1 Explain how Multiservice Proxy can use JPEG compression
 - 4.2 Explain multipart creation
 - 4.3 Describe the role of the content cache
- 5 List the separately licensed features for Multiservice Proxy
 - 5.1 List the benefits of subscriber activity tracing
 - 5.2 List the benefits of the Symantec scan engine
 - 5.3 Explain the use of the ICAP interface
 - 5.4 Describe the feature offered by the categorization engine and Content filtering groups
 - 5.5 Describe the content adaptation feature

Target audience

The target audience for this course is: Service Planning Engineers, Service Design Engineers, Network Design Engineers, Network Deployment Engineers, Service Deployment Engineers, System Technicians, Service Technicians, System Engineers, Service Engineers, Field Technicians, System Administrators, Application Developers, Business Developers, Customer Care Administrators.

The course is relevant for anyone requiring an overview of the Multiservice Proxy product and wider Service Layer with Multimedia and Messaging domain. This includes: executive personnel (customer project leaders, marketing managers, site managers), company management and administrative personnel, as well as technical staff who require further specialized training in the system.

Prerequisites

An understanding of Internet technologies, mobile networks, Mobile Internet Enabling Proxy (MIEP) and Multimedia Messaging Service (MMS) is advantageous. This, and much more, is provided by the following:

- Telecom Operator 2.0 - Technical Realization of Multimedia Services (LZU 108 6936)

and, optionally,

Telecom Operator 2.0 – Multimedia Business Challenges & Opportunities Business (LZU 108 6935).

Duration and class size

The length of the course is 6 hours and the maximum number of participants is 16.



Learning situation

This course is based on theoretical instructor-led lessons given in a classroom environment.

Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	Course Introduction	15 mins
1	Mobile Internet Services Overview	45 mins
1	Multiservice Proxy 5.0 Architecture	1 hour
1	Features and Functions	2 hours
1	Optimization Features	1 hour
1	Separately Licensed Features	1 hour

Multiservice Proxy 5.0 System Administrator



LZU 108 7669 R1A

Description

Do you need to be able to operate and administer your Multiservice Proxy 5.0 system? If so, the Multiservice Proxy 5.0 System Administrator learning program is the service that you and your staff need. This program leads the participants through the job tasks associated with support of Multiservice Proxy 5.0, ensuring that they have the skills required to administer Multiservice Proxy 5.0 nodes. You will gain experience with provisioning, configuration, troubleshooting, backup, monitoring and restarting of the Multiservice Proxy 5.0.


This training is delivered in the form of Task Oriented Learning (TOL) in order to provide a structured, practical training for Multiservice Proxy on an Ericsson site, using Ericsson equipment. This training covers the generic tasks which are not customer specific.

This training is also available as a Structured Knowledge Transfer (SKT), which performs the job tasks adapted to the customer's unique environment and job roles, and facilitated by a mentor (LZP 101 130).

Learning objectives

On completion of this course the participants will be able to:

- 1 Access the Multiservice Proxy system
 - 1.1 Logon to the Multiservice Proxy system
 - 1.2 Run the Multiservice Proxy Administrator Tool (MSA)
 - 1.3 Navigate through the MSA
 - 1.4 Check the Multiservice Proxy version Information
 - 1.5 Create a MSA user account
- 2 Manage administrative accounts
 - 2.1 Adding a UNIX administrative user
 - 2.2 Manage UNIX administrative User Initialization files
 - 2.3 Change a Multiservice Proxy administrators UNIX password
 - 2.4 Delete a Multiservice Proxy administrators user account
 - 2.5 Maintain LINUX administrative users
 - 2.6 Assign or change a password
 - 2.7 Delete a user account
- 3 Perform Multiservice Proxy system health checks
 - 3.1 Check the file system disk space
 - 3.2 Inspect the Multiservice Proxy processes
 - 3.3 View the Multiservice Proxy interfaces
 - 3.4 Check the IP network

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- 3.5 Access Multiservice Proxy vitals and use the dashboard to check on real-time statistics
 - 3.6 View the Multiservice Proxy alarms
 - 3.7 Verify the status of the Veritas software
 - 3.8 Examine the load balancers
 - 3.9 Check for hardware messages or errors
 - 3.10 Check Oracle backup log
 - 4 Perform preventative maintenance
 - 4.1 Manage file systems and disk space
 - 4.2 Inspect CPU usage
 - 4.3 Inspect the memory usage
 - 4.4 Perform license checks
 - 4.5 Verify the system ports are up
 - 4.6 Check the time synchronization between servers
 - 5 Examine Multiservice Proxy alarms and logs
 - 5.1 Manage the Capacity Log
 - 5.2 Check the Veritas SNMP service group is running
 - 5.3 Monitor the status of the SNMP agents
 - 5.4 View the Multiservice Proxy troubleshooter log using the pallogviewer
 - 5.5 View the access log
 - 5.6 View the engine_A.log
 - 5.7 View the access and error logs
 - 6 Perform Multiservice Proxy provisioning
 - 6.1 Provision a Push initiator with normal authentication
 - 6.2 Provision an Origin Server within Multiservice Proxy
 - 6.3 Provision a URL rule
 - 6.4 Provision a Multiservice Proxy zone
 - 6.5 Add a subscriber using the Customer Administrator Interface (CAI)
 - 6.6 Modify a subscriber using CAI
 - 6.7 Delete a subscriber using CAI
 - 7 Configure changes on the Multiservice Proxy
 - 7.1 Interpret Multiservice Proxy configuration parameters
 - 7.2 Modify Multiservice Proxy configuration parameters
 - 7.3 Modify another parameter of your choice
 - 8 Execute a Multiservice Proxy backup procedure
 - 8.1 Configure SN configuration backup
 - 8.2 Configure HA configuration backup
 - 8.3 Perform database backup procedure
 - 8.4 Manage Multiservice Proxy SN back process
 - 8.5 Manage Multiservice Proxy HA backup process
 - 9 Execute a Start/Stop procedures
 - 9.1 Execute a complete system stop

- 9.2 Perform a complete system start-up
- 10 Perform license management
 - 10.1 Perform a standard license check
 - 10.2 Retrieve the host id and locking codes
 - 10.3 Install a license
 - 10.4 Delete a license
 - 10.5 For HAsc examine the license server pool
- 11 View Multiservice Proxy performance management
 - 11.1 Configure Multiservice Proxy performance data
 - 11.2 View the Multiservice Proxy performance data locally
 - 11.3 Run the SNMP performance data poller
 - 11.4 Use the traffic event logs for statistics
- 12 Multiservice Proxy charging management
 - 12.1 View the Multiservice Proxy Call Data Records/Traffic Event Records (CDR's/TER's)
 - 12.2 View the Traffic Event Logger parameters
 - 12.3 Activate Traffic event group2
- 13 Manage the distributed data cache
 - 13.1 Add a traffic server
 - 13.2 Remove a traffic server
- 14 Monitor a Multiservice Proxy high availability system
 - 14.1 Access the load balancer GUI
 - 14.2 View the load balancer configuration via the GUI
 - 14.3 View the load balancer current stats
 - 14.4 Monitor the load balancer time/date
 - 14.5 Check the load balancer system file capacity
 - 14.6 Use the load balancer 'B' command
 - 14.7 View the load balancer log files
 - 14.8 Access the Veritas GUI
 - 14.9 View the status of the service groups
 - 14.10 Check the Veritas processes are running
 - 14.11 Check Veritas cluster communication is up
 - 14.12 Clear a faulted resource
 - 14.13 Start and stop the Veritas cluster
 - 14.14 Remove a node from a stale state
 - 14.15 Check the Veritas licenses
 - 14.16 View the Veritas engine_A log
 - 14.17 Verify the Veritas configuration files
 - 14.18 View the configurations for LLT and GAB
 - 14.19 Use the commands hagrp, hastatus and hares
- 15 Investigate various Case studies and examples
 - 15.1 Examine user Identification and Information Forwarding
 - 15.2 Provision a push initiator with Information Forwarding
 - 15.3 Configure for Service Access Control for Premium access to mp3 download service
 - 15.4 Examine the configuration for content filtering

- 16 Troubleshoot the Multiservice Proxy
- 16.1 Investigate possible Multiservice Proxy problems
- 16.2 Learn how to isolate the cause of a Multiservice Proxy problem
- 16.3 Learn how to use the tools in /opt/miep/tools
- 16.4 Run a dumpreport and examine how to attach to a CSR
- 16.5 Check the Oracle database

Target audience

The target audience for this course is: System Administrators.

Prerequisites

Successful completion of the following courses:

- Telecoms Operator 2.0 Technical Realization of Multimedia Services (LZU 108 6936)
- Multiservice Proxy 5.0 Technical Overview (LZU 108 7668)
- Unix knowledge
- IP networking knowledge or IP Networking (LZU 102 397)

and, optionally,

- Telecom Operator 2.0 – Multimedia Business Challenges & Opportunities Business (LZU 108 6935).

Duration and class size

The length of the course is 18 hours and the maximum number of participants is 8.

Learning situation

This training is delivered as Task Oriented Learning (TOL) where participants perform practical tasks for their job role in an Ericsson lab environment.

Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	Access the System	45 mins
1	Maintain Administrative Accounts	45 mins
1	Health Checks	45 mins
1	Preventative Maintenance	45 mins
1	Alarms and Logs	1 hour
1	Provisioning	1 hour
1	Configuration	1hours
2	Backup and Restore	1 hour
2	Start/Stop Procedure	1 hour
2	License Management	45 mins
2	Performance Management	30 mins
2	Charging Management	45 mins
2	Manage the Distributed Data Cache	30 mins
2	High Availability system Administration	2 hours
3	Case Studies and Examples	4 hours
3	Multiservice Proxy Troubleshooting	2 hours

Multiservice Proxy 5.0 System Administrator SKT



LZP 101 130 R1A

Description

Do you need to be able to operate and administer your Multiservice Proxy 5.0 system? If so, the Multiservice Proxy 5.0 System Administrator learning program is the service that you and your staff need. This program leads the participants through the job tasks associated with support of Multiservice Proxy 5.0, ensuring that they have the skills required to administer Multiservice Proxy 5.0 nodes. You will gain experience with provisioning, configuration, troubleshooting, backup, monitoring and restarting of the Multiservice Proxy 5.0.

This is a flexible learning program which is aligned with your business and operational requirements. It is not a standard off-the-shelf course; the learning program should be customised, prior to delivery, to suit the specific requirements of the group or individuals to which it is directed.

This training is also available as a standard off-the-shelf course (Task Oriented Learning) which performs standard non-customized job tasks in an Ericsson lab environment (LZU 108 7669 R1A).

Learning objectives

On completion of this course the participants will be able to:

- 1 Access the Multiservice Proxy system
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 - 14.14 Remove a node from a stale state
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- 16.3 Learn how to use the tools in /opt/miep/tools
- 16.4 Run a dumpreport and examine how to attach to a CSR
- 16.5 Check the Oracle database

Target audience

The target audience for this course is: System Administrators.

Prerequisites

Successful completion of the following courses:

- Telecoms Operator 2.0 Technical Realization of Multimedia Services (LZU 108 6936)
- Multiservice Proxy 5.0 Technical Overview (LZU 108 7668)
- Unix knowledge
- IP networking knowledge or IP Networking (LZU 102 397)

and, optionally,

- Telecom Operator 2.0 – Multimedia Business Challenges & Opportunities Business (LZU 108 6935).

Duration and class size

The length of the course is 18 hours and the maximum number of participants is 4.

Learning situation

The learning program can be run as Structured Knowledge Transfer (SKT).

This is an on-the-job mentoring program based on an Ericsson mentor's presentations and demonstrations and a participant's performance of hands-on duties, tasks and skills. The SKT takes place at the customer site using the customer's network. The mentor leads each student through tasks that are defined for that employee's job function.

Time schedule

The time required always depends on the knowledge of the attending participants and the hours stated below can be used as estimate.

Day	Topics in the course	Estimated time
1	Access the System	45 mins
1	Maintain Administrative Accounts	45 mins
1	Health Checks	45 mins
1	Preventative Maintenance	45 mins
1	Alarms and Logs	1 hour
1	Provisioning	1 hour
1	Configuration	1hours
2	Backup and Restore	1 hour
2	Start/Stop Procedure	1 hour
2	License Management	45 mins
2	Performance Management	30 mins
2	Charging Management	45 mins
2	Manage the Distributed Data Cache	30 mins
2	High Availability system Administration	2 hours
3	Case Studies and Examples	4 hours
3	Multiservice Proxy Troubleshooting	2 hours