



Multi Mediation (MM) 18

Training Programs

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:

Delivery Method

Instructor Led Training (ILT)

Web-based Learning (WBL)





Multi Mediation 18 Delta

LZU1082631 R1A

Description:

Multi Mediation 18 Delta course will be helpful for the operators that have prior knowledge about legacy Multi Mediation releases and are upgrading their systems to MM 18. This product will provide the participants with a high level understanding of newly introduced features and the changes from previous releases (Multi Mediation 8, Multi Mediation 15 to the latest release).

Learning objectives:

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

- 1 Define Multi Mediation 18
 - 1.1 Describe BSS Mediation
 - 1.2 Describe OSS Mediation
 - 1.3 Explain Multi Mediation Concepts
 - 1.4 Define MM Toolbox
 - 1.5 Define Applications
- 2 Describe the changes from MM15 to MM18
 - 2.1 Discuss the Multi Mediation Architecture
 - 2.2 Describe the change in naming conventions of MM releases
 - 2.3 Recognize the Toolbox changes
 - 2.4 Describe KAFKA Collector
 - 2.5 Describe HDFS Distributor
 - 2.6 Explain the support for UTF-8 Character Set
 - 2.7 Explain the support for Cassandra as external database
 - 2.8 Determine the File Duplicate Detection
 - 2.9 Determine Default Response Timeout for SMPP B-E and SMPP F-E Activities
 - 2.10 Describe Fault Management changes
 - 2.11 Explain the Enhancements in Alarm via Email
 - 2.12 Describe the Additional Text Updated in Alarms
 - 2.13 Discuss New license alarm
 - 2.14 Recognize O&M Enhancements on Web UI
 - 2.15 Explain the Change in Product Numbers
 - 2.16 Describe Runtime Scale-in of Configuration
 - 2.17 Discuss the Scheduling File Collection
 - 2.18 Discuss Accounting Management
 - 2.19 Explain License changes
 - 2.20 Describe Performance Management
 - 2.21 Discuss Nodes Dashboard Enhancements

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- 2.22 Explain Threshold Based Alarms
- 2.23 Describe the Changes in Third Party Products
- 2.24 Discuss the MM 18 Deployment
- 2.25 Describe MM Deployment on RHOSP (Cloud)
- 2.26 Describe Cloud Execution Environment (CEE) Standalone
- 2.27 Discuss Cloud Execution Environment (CEE) Cluster
- 2.28 List the Network Elements Supported

- 3 Describes the changes from MM8 to MM18.
- 3.1 Discuss the Multi Mediation Architecture
- 3.2 Describe the change in naming conventions of MM releases
- 3.3 Recognize the Toolbox changes
- 3.4 Describe KAFKA Collector
- 3.5 Describe HDFS Distributor
- 3.6 Explain the support for UTF-8 Character Set
- 3.7 Explain the support for Cassandra as external database
- 3.8 Describe the Activities Icon
- 3.9 Recognize the bnrUtility Script
- 3.10 List the BSCS Enhancements
- 3.11 Explain the Connecting Multiple Activities
- 3.12 Describe the Content Assistance
- 3.13 Explain the Data Persistence in Container
- 3.14 Describe the Database Support
- 3.15 Describe the Date Validation on increaseTime
- 3.16 Explain the dcgUtility Script
- 3.17 Describe the Discard Complete File for XML Decoder
- 3.18 Explain the Change in DNS Lookup Table
- 3.19 Describe the enhancement in Duplicate Detection feature
- 3.20 Describe the Enhancement in CDR Database Duplicate Detection
- 3.21 Describe the Enhancement in Collectors
- 3.22 Describe the Enhancement in Distributors
- 3.23 Describe the Enhancement in DRRF
- 3.24 Explain the Enhancement in DRRF and DRViewer
- 3.25 Explain Enhancement in Intercom Collector
- 3.26 Recognize the Enhancement in LogPoint
- 3.27 Recognize the Enhancement in Lookup Tables
- 3.28 Explain the Enhancement in Memory DB Lookup
- 3.29 Recognize the Enhancement in Value Router
- 3.30 Recognize the Ignore Duplicate Key Present in Memory Lookup
- 3.31 Describe the enhancement of Load Balancing in Diameter B-E
- 3.32 Describe the MANAGER Tree nomenclature changes
- 3.33 Describe the Manager Updater Continues When Conup Fails
- 3.34 Recognize the new MD5 Checksum in Filename
- 3.35 Explain the introduction of MMHealthCheck Script



- 3.36 Describe the New Collector introduction
- 3.37 Recognize the new SDK for Customized Encoder/Decode
- 3.38 Describe the Enhancement of TOKEN-SEPARATED-ASCII
- 3.39 Describe the Data Collection from Probe Controller
- 3.40 Explain the New DUP Functions
- 3.41 Explain the Protocol Support in Intercom F-E
- 3.42 Explain the introduction of Reset Functionality for Distributor Activity
- 3.43 Describe the Secured Communication
- 3.44 Explain the SFTP Connection Optimization
- 3.45 Describe SSLv3 Disabled in HTTP Back End
- 3.46 Explain the Support of JMS
- 3.47 Explain the Support of Passive Mode in FTP
- 3.48 Recognize the Support of REST Web Service
- 3.49 Describe the Syntax Highlighting
- 3.50 Describe the Viewing Data Records
- 3.51 Explain the introduction of WAP Push Support in SMPP B-E
- 3.52 Explain the introduction of XML Parsing in Java Formatter
- 3.53 Describe the File Duplicate Detection recommendations
- 3.54 Describe the Default Response Timeout for SMPP B-E and SMPP F-E Activities
- 3.55 Explain the Enhanced Graphical User Interface
- 3.56 Describe the Dashboard Enhancements
- 3.57 Describe the Enhancements in Alarm via Email
- 3.58 Explain the Suppression of FTP 42x Alarms in File mediation
- 3.59 Explain the capability of Exporting Alarm and Notification Definitions From Web User Interface
- 3.60 Describe the Active Alarms changes
- 3.61 Describe the BGwRaiseAlarm script
- 3.62 Explain the changes in Notification Log
- 3.63 Describe the Additional Problem Text Update for FTP/SFTP Alarms
- 3.64 Describe the Refine Log Records
- 3.65 Describe the change in CPI Store Folder Structure
- 3.66 Recognize the Enhancement in Notification Log
- 3.67 Describe the Additional Text Updated in Alarms
- 3.68 Describe the New license alarm
- 3.69 Explain the introduction of Multi Node Provisioning
- 3.70 Recognize the O&M Enhancements on Web UI
- 3.71 Recognize the Change in Product Numbers
- 3.72 Describe the changes in Configuration Management in Web
- 3.73 Explain the introduction of DUP Profiler
- 3.74 Describe the Enhancement in Web Interface
- 3.75 Describe the Exporting Server Resources - Web
- 3.76 Recognize GUI Enhancements
- 3.77 Explain the changes in Import/Export Functionality
- 3.78 Recognize the Limited Provisioning

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- 3.79 Describe the Optimization in Configuration Provisioning
- 3.80 Describe Persistence of GUI Layout
- 3.81 Recognize the Product Release Version is now displayed
- 3.82 Describe the Profiling DUP Code
- 3.83 Explain the Reset Activity Window
- 3.84 Describe the Scheduling File Collection
- 3.85 Recognize Accounting Management SRM replacement
- 3.86 Explain the license changes
- 3.87 Explain the introduction of Reporting in DRRF
- 3.88 Describe the Customized Report Generation
- 3.89 Recognize New Counters
- 3.90 Describe the Viewing Business Logs
- 3.91 Recognize the change in name of Reporting Hyperlink
- 3.92 Describe Log Enhancements
- 3.93 Explain Improved Performance of BGwCronScript
- 3.94 Describe Enhanced License Logging
- 3.95 Recognize Nodes Dashboard Enhancements
- 3.96 Explain Threshold Based Alarms
- 3.97 Explain the addition in Security Management Tab
- 3.98 Describe the Installing Trusted SSL Certificates
- 3.99 Recognize the Network Element Supported in MM18 release
- 3.100 Describe Performance Enhancement
- 3.101 Recognize Third Party Products
- 3.102 Explain the Ease in Software Upgrade
- 3.103 Describe MM Deployment on RHOSP (Cloud)
- 3.104 Describe the Cloud Execution Environment (CEE) Standalone
- 3.105 Describe the Cloud Execution Environment (CEE) Cluster
- 3.106 Explain the Cluster Deployment Using VMware Virtual Disk
- 3.107 Describe OVA based Deployment
- 3.108 Describe BSCS Support on Linux
- 3.109 Explain the introduction of Ericsson Blade System
- 3.110 Describe the Deprecated Features

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Multi Mediation 18.

**Prerequisites:**

Successful completion of the following courses:

The participants should be familiar with previous Multi Mediation releases.

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.





Multi Mediation 18 File Advanced Configuration

LZU1082632 R1A

Description:

Multi Mediation 18, as a versatile multi-mediation solution, has been introduced to you, and you have practiced some of the file procedures and configurations using the provided code. What about writing your own code, especially what about using the ASN.1 annotation to write your own DUP code for formatters and value routers. This course reviews the building of configurations, but focuses on the ASN.1 syntax so that you can write data structures. It also covers the effective implementation of flows, and increases your knowledge of the different tools and activities within Multi Mediation 18 File.

Learning objectives:

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

- 1 Create data structures for incoming and outgoing data
 - 1.1 Manage ASN.1 structures for incoming and outgoing data
 - 1.2 Identify the differences between the different data types
 - 1.3 Identify the different coding schemes such as BER and ISO
- 2 Manage configurations activities and coding
 - 2.1 Explain headers and trailer
 - 2.2 Configure formatters and value routers
 - 2.3 Write the DUP code for different activities
 - 2.4 Discuss the new changes in DUP functions.
- 3 Perform further processing activities
 - 3.1 Configure Memory and Database Lookup tables
 - 3.2 Discuss GUI based Lookup
 - 3.3 Consolidate data records.
 - 3.4 Configure scalable activities in MM18.
 - 3.5 Detect duplicate files or data records
 - 3.6 Integrated CDR viewer
 - 3.7 JMS in File Mediation
 - 3.8 Explain Reporting in MM18
- 4 Log data and discuss the enhancement done in Log Points.
 - 4.1 Format collected information with Log Collectors
 - 4.2 Collect the data in a database with Log Points
 - 4.3 Discuss DUP profiler and use case
 - 4.4 Discuss MM Service creation environment like content assistance, syntax highlighting.

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**Target audience:**

This course is suitable for anyone who is required be able to configure/operate/maintain Multi Mediation 18.

Prerequisites:

Successful completion of the following courses:

Ericsson Multi Mediation 18 Surveillance LZU1082635 R1A

Ericsson Multi Mediation 18 File Processing and Configuration LZU1082633 R1A

Duration and class size:

The length of the course is 4 days the maximum number of participants is 8.

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.



Multi Mediation 18 File Processing and Configuration

LZU1082633 R1A

Description:

This course will give the students the ability to use the GUI in Configuration mode and also to use some of the basic built-in scripts using telnet access. The students will create and import Collectors, Value Routers, Formatters, Consolidators and Distributors. The course is focused on how to use the GUI and the main functionalities of the system.

Learning objectives:

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

- 1 Build and create configurations
 - 1.1 Prepare the Mediation Server
 - 1.2 Set up a configuration with predefined activities
 - 1.3 Discuss the WEB UX and Dashboard in New Home Page GUI.
 - 1.4 Explore logs
 - 1.5 Explore the KYC script and System Info script
- 2 Explain coders and data structures
 - 2.1 Discuss coding rules
 - 2.2 Explain data structures and ASN1 in detail
- 3 Use processing activities
 - 3.1 Identify the main functions of value routers and formatters
 - 3.2 Use the CDR detail logs
 - 3.3 Route data based on a field value
 - 3.4 Format data to modify how it will be processed or outputted
 - 3.5 Look up data from tables (file or database)
 - 3.6 Consolidate data
 - 3.7 Explore Consolidator Configuration setup.
 - 3.8 Detect duplicated data
 - 3.9 Explore the Duplicate Detection Configuration Setup.
 - 3.10 Distribute data to trash
 - 3.11 Overview of DRRF Functionality in MM18
- 4 Maintain the system
 - 4.1 Check the daily maintenance checklist with changed directory structure in MM 18
 - 4.2 Review the tuning guidelines
 - 4.3 Optimize flows with process groups
 - 4.4 Discuss the Processing Architecture using MNP
 - 4.5 Explain DUP Debugger in MM18



- 4.6 Overview of Scalability
- 4.7 Present the Alarm Enhancements and Threshold based alarms
- 4.8 Describe Web Based Performance Counters
- 4.9 Explore BLDM capabilities on Web UI

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Multi Mediation 18.

Prerequisites:

Successful completion of the following courses:

Successful completion of the following courses:

Multi Mediation 18 Surveillance, LZU1082635 or have knowledge corresponding to this course. The participants should be familiar with UNIX and the Multi Mediation GUI. Knowledge in database administration is recommended but not required.

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8.

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.



Multi Mediation 18 Online Processing and Configuration

LZU1082634 R1A

Description:

Effectively utilising Multi Mediation Online allows operators to introduce new services and revenue streams without delay. New and exciting business opportunities can be integrated into existing network infrastructure, using the Mediation node as a single point for charging data. This course provides the participants with the skills necessary to create configurations and supervise processing operations with confidence. Knowledge and skills gained in this course will allow effective utilisation of Multi Mediation 18 Online and introduction of new services and revenue streams without delay.

Learning objectives:

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

- 1 Configure Front End and Back End activities
 - 1.1 Know the various Online Mediation interfaces available
 - 1.2 Learn about Diameter and PIPS protocols in particular
 - 1.3 Enhancement in Intercom F-E in Online Module
- 2 Configure different Processing activities
 - 2.1 Do general configuration of the various processing activities
 - 2.2 Test activities
- 3 Create Value Routers
 - 3.1 Code Value Routers in Java
- 4 Create Formatters
 - 4.1 Understand how XML Formatters work
 - 4.2 Code Formatters in Java
- 5 Store and retrieve Event and Entity data
 - 5.1 Implement Containers and Parameter Handlers
 - 5.2 Implement session based Diameter B-E
 - 5.3 Implementation of JMS and REST processing activities
- 6 Increase the performance of Multi Mediation Online
 - 6.1 Implement Optimization, Maintenance, and Congestion Flow rules

**Target audience:**

This course is suitable for anyone who is required be able to configure/operate/maintain Multi Mediation 18.

Prerequisites:

Successful completion of the following courses:

Multi Mediation 18 Surveillance, LZU1082635

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8.

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.



Multi Mediation 18 Surveillance

LZU1082635 R1A

Description:

Effectively utilizing Multi Mediation (MM) allows operators to introduce new services and revenue streams without delay. New and exciting business opportunities can be integrated into existing network infrastructure, using the Mediation node as a single point for charging data. This course introduces the fundamentals of Multi Mediation 18, its position in the Network, the Basic and Licensed features, the Toolbox, the Applications, the GUI, and the Basic Configurations.

Learning objectives:

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

- 1 Describe the Multi Mediation (MM) Concept
 - 1.1 Explain the MM18 overview
 - 1.2 Discuss the MM18 Architecture and deployment.
 - 1.3 Assess the record flow in file mediation
 - 1.4 Assess the Online Flow
 - 1.5 Analyze the MM18 Functional View
 - 1.6 Discuss the MNP overview for scalable architecture.
 - 1.7 Changes in License Handling.
- 2 Apprehend the system environment
 - 2.1 Dashboard and BLDM Tool Overview.
 - 2.2 Browse the directory structure
 - 2.3 Prepare the mediation environment
 - 2.4 Start/stop the application
 - 2.5 Manage, acknowledge and cease alarms
 - 2.6 Manage users
 - 2.7 Manage configurations in general
 - 2.8 Use the built-in scripts from the CLI
 - 2.9 Describe the KYC tool in detail
- 3 Understand and Configure the MM18 Toolbox Features
 - 3.1 Identify and Manage the Collection Interfaces of MM18
 - 3.2 Identify and Demonstrate the usage of the Processing Capabilities of MM18
 - 3.3 Access and Configure the Distribution Interfaces of MM18
- 4 Identify and Understand MM18 Applications
 - 4.1 Explain in detail MM Application like Mond,FGF.
 - 4.2 Describe the Data Collector Function



- 4.3 Understanding the Tariff Transfer Function
- 4.4 Discuss Diameter Service Agent
- 4.5 Discuss NRTRDE and its role
- 4.6 Explain Mediation of Network Data
- 5 Determine and Manage MM18 Operation & Maintenance Capabilities
 - 5.1 Explain Configuration Management and perform related tasks
 - 5.2 Explain in detail Dashboard in MM18
 - 5.3 Explore the features of Fault Management
 - 5.4 Discuss the Capabilities of Accounting Management
 - 5.5 Review the functionality of Performance Management
 - 5.6 Identify main features of Security Management
- 6 Discuss the concept of Virtualization and Cloud Deployment in MM18

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Multi Mediation and needs an overall surveillance of its capabilities.

Prerequisites:

Successful completion of the following courses:

The participants should be familiar with previous Multi Mediation releases.

Duration and class size:

The length of the course is 2 days and the maximum number of participants is 8

Learning situation:

This course is based on theoretical and practical instructor-led lessons given in a class room.