



# **Ericsson Composition Engine (ECE) 17 Training Programs**

## **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.

**The delivery of the Learning Products is realized by various Services:**

Icon	Service
	Instructor Led Training (ILT)
	Virtual Classroom Training (VCT)
	eLearning (WBL)
	Workshop (WS)
	Short Article (SA)
	Structured Knowledge Transfer (SKT)
	mLearning
	Job duty analysis (JDA)
	Competence GAP Analysis (CGA)

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## Ericsson Composition Engine (ECE) 17.1 CSS Operation & Maintenance



LZU 108 2516 R1A

### Description

Do you need to operate and maintain ECE (Ericsson Composition Engine) 17.1?

There are many aspects to Ericsson Composition Engine and its components. There are also multiple interfaces and management tools available. ECE has two main deployments: Converged Services Studio (CSS) and Unified Service Exposure (USE).

CSS provides a service enablement platform for services based on SS7 and SIP. USE provides a platform for exposing network capabilities using Service Exposure and Advanced Composition.

This course covers the various capabilities of ECE CSS. It includes placing ECE in the overall network, using SS7 and SIP, service selection and troubleshooting procedures.

With the help of the ECE 17.1 Operation and Maintenance manual provided in this course and the guidance of the instructor, the attendees will be able to learn the most efficient ways of performing essential system administration tasks, such as maintaining services, handling alarms and statistics and performing backup and restore procedures.

### Learning objectives

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

- 1 Provide an introduction to ECE
  - 1.1 Give an introduction to ECE and its features
  - 1.2 Explain what ECE is and the principles surrounding its development
  - 1.3 Place ECE in the context of the overall network
  - 1.4 Mention some of the components which comprise ECE
- 2 Explain the Reference Setup and networking principles
  - 2.1 Investigate the Reference Deployment setup
  - 2.2 Describe Deployment Profiles
  - 2.3 Compare virtualized setup with cloud-based setup
  - 2.4 Analyze the network setup of ECE 17.1
  - 2.5 Describe load-balancer use in ECE 17.1
  - 2.6 Determine the software architecture for ECE





- 3 Explore JBoss and MySQL cluster setup for ECE
  - 3.1 Determine the JBoss Server configuration in ECE 17.1
  - 3.2 Identify basic procedures in JBoss
  - 3.3 Describe the setup of MySQL Cluster on ECE 17.1
  - 3.4 Explain Geographic Redundancy
- 4 Implement Operation & Maintenance procedures
  - 4.1 Describe the Configuration Manager component
  - 4.2 Evaluate the Ericsson SNMP Agent (ESA) component
  - 4.3 Investigate ESA fault management
  - 4.4 Investigate ESA performance management
- 5 Define SS7 in ECE
  - 5.1 Explain the SS7 configuration
  - 5.2 Determine the Service Selection configuration
  - 5.3 Practice SS7 configuration
- 6 Define SIP in ECE
  - 6.1 Explain the SIP configuration
  - 6.2 Determine the Application Router configuration
  - 6.3 Practice SIP configuration
- 7 Execute ECE 17.1 backup and restore procedures
  - 7.1 Evaluate the backup and restore procedures for ECE 17.1
  - 7.2 Perform partial backup and restore procedures
  - 7.3 Describe node backup and node restore procedures
- 8 Define health checks and troubleshooting procedures
  - 8.1 Describe the basic health checks that can be performed on ECE
  - 8.2 Implement these checks to ensure the ECE system is healthy
  - 8.3 Locate and interpret relevant log files
  - 8.4 Explain some basic troubleshooting tasks
  - 8.5 Collect information for CSR reporting



## 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, System Administrators, Application Developers

## Prerequisites

Successful completion of the following courses:

The participants should be familiar with IP and Linux CLI. Knowledge of Intelligent Networks, SS7 and SIP would also be beneficial.

## Duration and class size

The length of the course is 3 days and the maximum number of participants is 8.

## Learning situation

This course is based on instructor-led training and task-oriented learning, involving exercises and accessing equipment remotely.

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### 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 (hours)
1	Provide an introduction to ECE	1
	Explain the Reference Setup and Networking principles	2
	Explore JBoss and MySQL cluster setup for ECE	3
2	Implement Operation & Maintenance procedures	3
	Define SS7 in ECE	3
3	Define SIP in ECE	3
	Execute ECE 17.1 backup and restore procedures	2
	Define health checks and troubleshooting procedures	1

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## Ericsson Composition Engine (ECE) 17.1 USE Operation & Maintenance



LZU 108 2517 R1A

### Description

Do you need to operate and maintain ECE (Ericsson Composition Engine) 17.1?

There are many aspects to Ericsson Composition Engine and its components. There are also multiple interfaces and management tools available. ECE has two main deployments: Converged Services Studio (CSS) and Unified Service Exposure (USE).

CSS provides a service enablement platform for services based on SS7 and SIP. USE provides a platform for exposing network capabilities using Service Exposure and Advanced Composition.

This course covers the various capabilities of ECE USE. It includes placing ECE in the overall network, exposing network capabilities using Service Exposure, creating flexible skeletons with Advanced Composition and troubleshooting procedures.

With the help of the ECE 17.1 Operation and Maintenance manual provided in this course and the guidance of the instructor, the attendees will be able to learn the most efficient ways of performing essential system administration tasks, such as maintaining services, configuration management, handling alarms and statistics and performing backup and restore procedures.

### Learning objectives

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

- 1 Provide an introduction to ECE
  - 1.1 Give an introduction to ECE and its features
  - 1.2 Explain what ECE is and the principles surrounding its development
  - 1.3 Place ECE in the context of the overall network
  - 1.4 Mention some of the components which comprise ECE
- 2 Explain the Reference Setup and networking principles
  - 2.1 Investigate the Reference Deployment setup
  - 2.2 Describe Deployment Profiles
  - 2.3 Compare virtualized setup with cloud-based setup
  - 2.4 Analyze the network setup of ECE 17.1







- 2.5 Describe load-balancer use in ECE 17.1
- 2.6 Determine the software architecture for ECE
- 3 Explore JBoss and MySQL cluster setup for ECE
  - 3.1 Determine the JBoss Server configuration in ECE 17.1
  - 3.2 Identify basic procedures in JBoss
  - 3.3 Describe the setup of MySQL Cluster on ECE 17.1
  - 3.4 Explain Geographic Redundancy
- 4 Implement Operation & Maintenance procedures
  - 4.1 Describe the Configuration Manager component
  - 4.2 Evaluate the Ericsson SNMP Agent (ESA) component
  - 4.3 Investigate ESA fault management
  - 4.4 Investigate ESA performance management
- 5 Explain Service Exposure
  - 5.1 Describe Service Exposure and what it is used for
  - 5.2 Describe the integration with MSDP
  - 5.3 Define the Service Exposure data model
  - 5.4 Demonstrate Service Exposure in ECE 17.1
- 6 Explain Advanced Composition
  - 6.1 Describe Advanced Composition and what it is used for
  - 6.2 Determine the triggering principle of Advanced Composition
  - 6.3 Explain the architecture of the Advanced Composition Editor (ACE)
  - 6.4 Create and test application skeletons
- 7 Execute ECE 17.1 backup and restore procedures
  - 7.1 Evaluate the backup and restore procedures for ECE 17.1
  - 7.2 Perform partial backup and restore procedures
  - 7.3 Describe node backup and node restore procedures
- 8 Define health checks and troubleshooting procedures
  - 8.1 Describe the basic health checks that can be performed on ECE
  - 8.2 Implement these checks to ensure the ECE system is healthy
  - 8.3 Locate and interpret relevant log files
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## Prerequisites

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The participants should be familiar with IP and Linux CLI. Knowledge of Intelligent Networks and Webservices would also be beneficial.

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	Explain the Reference Setup and Networking principles	2
	Explore JBoss and MySQL cluster setup for ECE	3
2	Implement Operation & Maintenance procedures	3
	Explain Service Exposure	3
3	Explain Advanced Composition	3
	Execute ECE 17.1 backup and restore procedures	2
	Define health checks and troubleshooting procedures	1

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