



# Charging System 3.0

## 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.

**Service delivery is supported using various delivery methods including:**

Icon	Delivery Method
	<b>Instructor Led Training (ILT)</b>
	<b>Seminar (SEM)</b>
	<b>Workshop (WS)</b>
	<b>Virtual Classroom Training (VCT)</b>
	<b>Web Based Learning (WBL)</b>
	<b>Short Article (SA)</b>
	<b>Streaming Video (SV)</b>
	<b>CD-ROM (CD)</b>
	<b>Delivery Enablers</b>
	<b>Remote Training Lab (RTL)</b>
	<b>Web Portal (WP)</b>
	<b>Ericsson Education E-Learning</b>
	EEOnline @ <a href="http://learning.ericsson.net/eonline/">http://learning.ericsson.net/eonline/</a>

## Charging System 3.0 Overview



LZU 108 6254 R2A

### Description

This course provides the participants with a general technical knowledge of the Ericsson Charging System 3.0. The course focuses on describing the features of Charging System 3.0, its architecture and how traffic cases are handled.

It also focuses on the structure and function of this network with particular emphasis on all nodes involved and new capabilities. The node platforms and interfaces are examined along with the service features, both basic and optional. The course prepares students for further study on specific nodes and applications.

### Learning objectives

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

- 1 Explain the nodes that comprise the Charging System 3.0 network with particular emphasis on the ADM, AIR, MINSAT, CCN, VS, IVR and SDP functionality.
- 2 Analyze the function of each network node. Explain the hardware and software architecture of the Charging System 3.0 nodes.
- 3 Define the purpose of the various interfaces and protocols. Describe the machine-machine interfaces.
- 4 Highlight and explore the new functionality and new and improved features introduced with Charging System 3.0.
- 5 Identify the interaction of network nodes by examining a selected group of Traffic Cases.

### Target audience

The primary target audience for this course are any personnel who require an understanding of the Charging System 3.0 network. They may be new to Charging System 3.0 or have already worked with previous charging system versions.

### Prerequisites

There are no pre-requisites for this course.

**Duration and class size**

The length of the course is 1 day and the maximum number of participants is 16.

**Learning situation**

There are two versions of this course:

- **ILT version:** This course is based on theoretical instructor-led lessons given in a classroom environment.
- **VCT version:** This is a theoretical course given in a virtual classroom over the net by an instructor. The course contains modules like slide presentations, exercises, self-paced studies and tests.

**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	Short description of the topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• Charging System 3.0 Network Architecture</li></ul>	2hrs
	<ul style="list-style-type: none"><li>• Charging System 3.0 Features with particular emphasis on Subscriber Segmentation, Community Charging, Lifecycle notification to external system and FBC</li></ul>	1hr 30mins
	<ul style="list-style-type: none"><li>• Node Functions and Interfaces</li></ul>	1hr 30mins
	<ul style="list-style-type: none"><li>• Charging System 3.0 Traffic Cases with particular emphasis on the interaction of SDP, AIR and Voucher Servers</li></ul>	2hrs

# Data Warehouse System (DWS) 4.0 System Administration



LZU 108 6557 R1A

## Description

This course will target the practical needs of system administrators in their use of the Data Warehouse System (DWS). It will help them to understand GUI-based terminology for DWS, understand the purpose and usage of the various reports available to them from DWS.

## Learning objectives

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

- 6 Manage the day-to-day maintenance of DWS.
  - Effectively use the System Administrator's Guide for the DWS system to perform daily, weekly and monthly maintenance tasks.
  - Effectively use the Web GUI for the DWS system to perform daily, weekly and monthly maintenance tasks as well as system monitoring.
  - Monitor logs and error reports.
  - Keep logs and file directories clean.
  - Monitor Cron and other frequently executed routine tasks.
  - Manage system processes.
  - Use the DWS configuration tools.
- 7 Manage DWS backup processes.
  - Perform database backups.
  - Backup the Flash Recover Area.
- 8 Monitor data extraction from external nodes and manage data loading into DWS.
  - Effectively use the System Administrator's Guide for the DWS system to verify data extraction from external nodes and schedule loading into DWS.
  - Manage the data loading process in DWS.
  - Schedule, and where necessary reload, Multi-Mediation data records.
  - Have an overview of Number Analysis.
- 9 Implement routine troubleshooting tasks on DWS.
  - Effectively using the System Administrator's Guide for the DWS system to identify problems in the system and diagnose the corrective action.
  - Monitor system logs and alarms..
  - Implement routine network specific changes.
  - Monitor and implement routine database maintenance.
- 10 Follow procedure for documenting a DWS problem and requesting Ericsson support.
  - Identify source and related performance problems.



- Document the source problem and symptoms.
- Log the problem with Ericsson.
- Log the problem and solution in the system administrator's site logbook.

### **Target audience**

The target audience for this course is: System Administrators.

### **Prerequisites**

The participants should be familiar with Charging System 3.0. Participants need an overview understanding of the role of the nodes in the Charging System 3.0 network and also the different call types supported in their PrePaid Service. Participants also need to be operating at the level of database administrator and need to be working at the level of system administrator for UNIX servers and have system administrator level knowledge of networking. Ideally system administrators should also know about the support and maintenance of Business Objects.

### **Duration and class size**

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

### **Learning situation**

The methods used in training will involve a instructor led overview of the system administration aspects of the DWS system. The training material will be the DWS system administrator and troubleshooting documentation as well as the user guide. The practical exercises will involve task-based learning. Students will be given realistic scenarios to solve and document. Students will use system documentation to support these scenarios.

This training will ideally take place on the customer site, with a remote connection to DWS.

Additional requirements will be a classroom with a multi-media projector, large whiteboard and whiteboard markers:

1 PC (configured as an admin PC) per student and for the instructor, with remote logins to the DWS server.

## Data Warehouse System (DWS) 4.0 for Customer Care



LZU 108 6555 R1A

### Description

This course will target the needs of customer care in their daily use of the Data Warehouse System (DWS 4.0) CSHR and AHR reports. It will help them to understand terminology for DWS, understand the purpose and usage of the reports available to them from DWS.

### Learning objectives

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

- 11 Use the Call & Service History Reporter (CSHR) GUI.
  - Effectively use the CSHR User Guide for the DWS system to perform daily tasks.
  - Locate the appropriate subscriber report for call history and be able to use these reports to solve subscriber queries and resolve conflict
  - Customize CSHR output and use the template at a later time
- 12 Effectively use the Account History Reporter (AHR) GUI.
  - Effectively use the AHR User Guide for the DWS system to perform daily tasks.
  - Customize AHR output and use the template at a later time
- 13 Troubleshoot Customer's queries about call history usage credit or replenish activities.
  - Effectively use the Call and Service History Reporter (CSHR) GUI and the Account History Reporter (AHR) GUI to aid in troubleshooting routine customer queries.

### Target audience

The target audience for this course is Customer Care Administrators. Other participants who might benefit from this training are IT staff and prepaid network support staff. Also business development staff may like to increase their knowledge of what information is now available within the system to support subscriber queries.



### **Prerequisites**

The participants should be familiar with Charging System 3.0. They need to have a clear overview of each node's role in the Charging System 3.0 network as well as the different call types supported in their Charging System 3.0.

Participants also need to know how to use Netscape and Internet Explorer Web browsers.

### **Duration and class size**

The length of the course is 1 day and the maximum number of participants is 8.

### **Learning situation**

The methods used in training will involve a short instructor led overview of the customer care aspects of the DWS system. The training material will be the DWS user documentation. The practical exercises will involve task-based learning. Students will be given realistic scenarios to solve and document. Students will use user documentation to support these scenarios.

This training will ideally take place on the customer site, as connection to DWS and PPS nodes is a requirement, the optimum timing of the training would be during user acceptance testing before DWS is put to commercial use.

Additional requirements will be:

A classroom with a multi-media projector, large whiteboard and whiteboard markers.

Per student and for the instructor:

1 personal computer configured customer care client and connections to the DWS

Access and logins for Call Service History Reports and Account History Reports

1 prepaid test subscription and phone per student

1 prepaid test vouchers per student - each with different face values

This training could also take place on a test server at the MU Ericsson site provided there is full access to operational DWS and PPS customer GUIs. Classroom requirements as above.



### 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	Short description of the topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• Overview of Charging System 3.0 as well as the DWS 4.0 system architecture and purpose</li><li>• DWS CSHR theory</li><li>• Practical Exercises Part 1: Call History Practical exercises with instructor support</li><li>• DWS AHR theory</li><li>• Practical Exercises Part 2 Account History Practical exercises with instructor support</li><li>• Additional Report customizations</li><li>• Practical Exercises Part 3: Report Configuration</li></ul>	<p>90 minutes</p> <p>60 minutes</p> <p>30 minutes</p> <p>60 minutes</p> <p>30 minutes</p> <p>60 minutes</p> <p>30 minutes</p>

## Data Warehouse System (DWS) 4.0 Charging Intelligence and Reports



LZU 108 6556 R1A

### Description

This course will target the practical needs of Audit, Financial, Marketing and Business Analysts in their daily use of the Data Warehouse System (DWS). It will help them to understand GUI-based terminology for DWS, understand the purpose and usage of the various reports available to them from DWS.

### Learning objectives

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

- 14 Effectively use the Financial Reports User Guide for the DWS system to perform daily tasks.
  - Effectively use the Financial Reports Graphical User Interface in DWS system to perform daily tasks.
  - Understand the information content in the Financial reports.
- 15 Effectively use the Audit Reports User Guide for the DWS system to perform daily tasks.
  - Effectively use the Audit Reports Graphical User Interface in DWS system to perform daily tasks.
  - Understand the information content in the Audit reports.
- 16 Effectively use the Financial Reports User Guide and Audit Reports User Guide for the DWS system.
  - Perform daily tasks and troubleshoot data inconsistencies using the Audit Reports and Financial Reports GUIs.

### Target audience

The target audience for this course is: Business Developers, Customer Care Administrators.

Also, staff involved in processing prepaid charging intelligence: marketing staff, business analysts, financial department, auditors, fraud investigators. Other participants who might benefit from this training are IT staff and prepaid network support staff.



### **Prerequisites**

The participants should be familiar with PrePaid System (PPS). Participants need an overview understanding of the role of the nodes in the PPS network and also the different call types supported in their PrePaid Service. Participants also need to know how to use Netscape and Internet Explorer Web browsers.

### **Duration and class size**

The length of the course is 1 day and the maximum number of participants is 8.

### **Learning situation**

The methods used in training will involve a short instructor led overview of the charging intelligence aspects of the DWS system. The training material will be the DWS user documentation. The practical exercises will involve task-based learning. Students will be given realistic scenarios to solve and document. Students will use user documentation to support these scenarios.

This training will take place on the customer site, with remote connection to DWS.

Additional requirements will be:

A classroom with a multi-media projector, large whiteboard and whiteboard markers.

Per student and for the instructor:

1 personal computer configured customer care client and connections to the DWS

Access and logins for Call Service History Reports and Account History Reports, Audit Reports and Financial Reports



## Time schedule

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

Day	Short description of the topics in the course	Estimated time
1	<ul style="list-style-type: none"><li>• Overview of the purpose of the DWS system and how the reports used by charging intelligence staff can collect network and prepaid business data</li><li>• Brief Introduction to Business Objects</li><li>• Financial Reports definition and contents</li><li>• Audit Reports definition and contents</li><li>• Practical Exercises Part 1: Financial Reports Practical exercises with instructor support</li><li>• Review of solutions to exercises in part 1</li><li>• Practical Exercises Part 2 Audit Reports Practical exercises with instructor support</li><li>• Review of solutions to exercises in part 2</li><li>• Practical Exercises Part 3 Optional exercises involving interpreting realistic case based scenarios.</li></ul>	<p>45 minutes</p> <p>15 minutes</p> <p>1 hour</p> <p>1 hour</p> <p>1 hour</p> <p>20 minutes</p> <p>1 hour</p> <p>20 minutes</p> <p>1 hour</p>