

TSS 4.0 Integration & Verification



LZU 108 6638 R2A

Description

This course provides Ericsson customers with the competence needed to perform Integration and Verification of the Telephony Soft-switch (TSS 4.0) solution.

The course consists of theory and case based exercises on how to integrate and verify TSS 4.0 on the AXE, Integrated Site platforms and AXD 301. All traffic and signaling interfaces in TSS will be covered and also the alarms related to the interfaces. The course will only describe TSS connected towards an IP core network.

Learning objectives

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

1 Introduce the TSS 4.0 concepts and network elements

- 1.1 Outline the main components used in the TSS 4.0 network.
- 1.2 Become familiar with the new functionality incorporated into the TSS 4.0 solution.
- 1.3 Outline the signaling interfaces of TSS 4.0
- 1.4 Understand the different concepts and terms used in TSS 4.0

2 Understand the TSS 4.0 HW & SW Implementation

- 2.1 Understand the HW and SW required for the TeS and the MGW when implementing TSS 4.0.

3 Describe the Traffic Handling

- 3.1 Explain how the server addresses physical resources in MGWs.
- 3.2 Explain the protocol stacks involved in TSS 4.0.
- 3.3 Describe the basic traffic cases in TSS 4.0.
- 3.4 Describe signaling sequences at basic call setup and release.
- 3.5 Explain how different codec's affect the bandwidth utilization in the core network.

4 Perform the TCC – TGC Communication configurations

- 4.1 Explain the function of the TCC – TGC control interface.
- 4.2 Become familiar with the application protocols and protocol stack used over this interface.
- 4.3 Configure the control interface using the IPN and GESB
- 4.4 Verify the interface.

5 Perform the TGC and MGW Configuration

- 5.1 Define ML and MGWs.
- 5.2 Configure and verify H.248 signaling links.

6 Configure the Virtual MGW

- 6.1 Configure and verify VMGW in a MGW Blade system.
- 6.2 Configure and verify the different dev types in the VMGW.

7 Define the Inter-Connect Interface

- 7.1 Configure and verify the IC interface.

8 Perform the BICC Configuration

- 8.1 Configure and verify a BICC interface between two Telephony servers.
- 8.2 Monitor the BICC messages using TCC commands.

9 Understand and configure the ISUP Access

- 9.1 Configure and verify an ISUP access towards a MGW.

10 Make a Call Path Tracing in TSS

- 10.1 Perform call path tracing in the TCC, TGC, and MGW.

11 Perform EAR and RSS Access Configuration

- 11.1 Configure EAR and RSS access in MGW.
- 11.2 Configure EAR and RSS access in TCC.
- 11.3 Verify the EAR and RSS access in TSS.

12 Understand and configure PRA Access

- 12.1 Configure PRA access in MGW.
- 12.2 Configure PRA access in TCC.
- 12.3 Verify the PRA access in TSS.

13 Understand and configure V5.2 access

- 13.1 Configure V5.2 access in MGW.
- 13.2 Configure V5.2 access in TCC.
- 13.3 Verify the V5.2 access in TSS.

14 Configure SIP and SIP-T signaling interfaces

- 14.1 Configure and verify a SIP interface.
- 14.2 Configure and verify a SIP-T interface.

15 Configure H.323 signaling interfaces

- 15.1 Configure and verify a H.323 interface in the TeS towards a VoIP network.

16 Understand the Access gateway configuration

- 16.1 Introduction to the AGC (Access Gateway Controller).
- 16.2 Understand how to configure a MSAN in the TSS 4.0 network.



17 Introduce the IMS, DNS and ENUM concepts in TSS 4.0 Network

- 17.1 Explain how the TSS 4.0 is used as PSTN GW in the IMT Network.
- 17.2 Outline the main components and signaling interfaces used in the IMT TSS PSTN Gateway Network.
- 17.3 Understand the different concepts and terms used in IMT PSTN Gateway.
- 17.4 Understand DNS/ENUM (IP Works) and show how it is connected to TSS.

18 Describe the Geographic Redundancy TSS 4.0

- 18.1 Explain the Geographic Redundancy for TSS 4.0 concept
- 18.2 Detail the TSS 4.0 n+1 solution

Target audience

The target audience for this course is: System Engineer, Network Deployment Engineer. This audience is working with implementation, installation, testing, integration, operation and support tasks on TSS.

Prerequisites

The participants should have successfully completed of the following flows:

TSS Fundamentals

AXD 301/305 Operation & Configuration or

Integrated Site Fundamentals and

IS Network Configuration

Duration and class size

The length of the course is 5 days and the maximum number of participants is 8.

Learning situation

This course is based on theoretical and practical instructor-led lessons given in both classroom and in a technical environment using equipment and tools, which could be accessed remotely.