OSS-RC 14 System Administration

LZU1089800 R1A

Description
This course will give the student thorough knowledge required to administer the OSS-RC product.

This course prepares OSS-RC System Administrators to provision network elements in the OSS-RC, handle maintenance activities and backup key OSS-RC components, manage OSS-RC user accounts, monitor the status of OSS-RC services and log files, and perform troubleshooting of issues in preparation for opening Customer Service Requests with Ericsson support.

It should be noted that this course expects that participants to have the prerequisite knowledge of the OSS-RC applications from a user's perspective.

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

1  Provide a high-level description of OSS-RC
1.1 Describe the role that the OSS-RC plays in supporting the network
1.2 Describe the OSS-RC hardware platform architectures
1.3 Describe the administrative areas
1.4 Manage User accounts in OSS-RC

2  Perform User management
2.1 Describe the function of the COMInf LDAP DS
2.2 Add, Remove, Lock & Unlock OSS-RC User Accounts
2.3 Identify the role of the TSS Services in OSS-RC security
2.4 Modify a User's Authority in TSS Authority Service
2.5 Make use of the TSS Authority Administration CLI
2.6 Perform basic Citrix administration tasks
2.7 Monitor user related Managed Component status and logs
2.8 Perform backup of the user LDAP database

3  Work with CIF Platform
3.1 Describe the OSS-RC Common Integration Framework (CIF) components and services
3.2 Use the CIF Self Management command line interfaces to work with Managed
Components
3.3 View objects managed by the CIF Configuration Service
3.4 Describe the function of the CIF Notification Service
3.5 Status and view the contents of the CIF Directory Service
3.6 List objects registered with the CIF Name Services
3.7 View settings maintained by the CIF Parameter Service

4 Handle Node Integration and Data
4.1 Identify the ONRM, its topology and connection to other OSS-C Subsystems
4.2 Explain the ARNE tool and how data is managed within the ONRM
4.3 Use tools to check on ONRM's integrity and consistency
4.4 Identify the functionality of the Base Station Integration Manager
4.5 Perform Administration of the ENIQ Mediation (ENIQ-M) feature

5 Understand FM Architecture & perform FM Administration
5.1 Investigate the Fault Management Subsystem Architecture
5.2 Determine the Managed Components and Processes used in FM
5.3 Investigate the basic features of GUI Alarm Viewers and FM NMS interfaces
5.4 Navigate the flow of alarms through the FM Subsystem
5.5 List and use troubleshooting tools at different FM internal interfaces

6 Perform AXE specific activities related to administration
6.1 Handle AXE network elements in OSS-RC
6.2 Describe and troubleshoot AXE common applications
6.3 Explain and troubleshoot EAM and the basic network interface to AXE APG & IOG equipment
6.4 Explain and troubleshoot the FM interface to AXE APG & IOG nodes
6.5 Explain the main applications from EMT package (SRM, CLS & TGw)
6.6 Configure and troubleshoot Telnet Gateway (TGw)
6.7 Verify operation of and administrate CNA and BCM/BSM
6.8 Integrate a new AXE network element to OSS-RC
6.9 Verify the setup of SMIA and other recordings on AXE nodes
6.10 Verify the flow of statistical recordings from AXE APG & IOG through OSS-RC SGW

7 Work on SNMP SMT FM Interface
7.1 Handle the SNMP Supervision Manager Toolkit
7.2 Explain the function of an Alarm Adaptation Unit (AAU)
7.3 Follow the flow of alarms from network element to FM Kernel
7.4 Troubleshoot SNMP alarm transport

8 Perform STN Specific activities
8.1 Handle Common Transport Network Elements in OSS-RC
8.2 Explain the functions located on SIU Network Elements
8.3 Explicate the Configuration Management SIU support
8.4 Determine the Software Management support
8.5 Investigate the Fault Management Interface of SIU

9 Perform admin tasks on CPP FM Interface
9.1 Explain the Connectivity Packet Platform (CPP)
9.2 Discuss the 3GPP Alarm and Notification IRP Interface
9.3 Describe the CIRP Manager in OSS-RC
10 Conduct admin tasks on CORE M-Mgw
10.1 Handle M-MGw nodes in OSS-RC
10.2 Clarify the CM interface on M-MGw to OSS-RC
10.3 Explain the Mobile Media Gateway and MSC CM
10.4 Explain the Core Network Configuration Manager
10.5 Explain the overall concept of M-MGw statistical interface to OSS-RC
10.6 Explain the MIA/SGw solution and the data reception in OSS-RC
11 Conduct admin tasks on CORE TSP Specific
11.1 Handle Telecom Server Platform based nodes in OSS-RC
11.2 Explain functions located on Telecom Server Platform
11.3 Explicate the Configuration Management support
11.4 Determine the Software Management support
11.5 Investigate the Fault Management Interface of TSP
11.6 Determine the Performance Management interface to OSS-RC
12 Understand and investigate admin tasks on CORE IS
12.1 Handle Integrated Site based nodes in OSS-RC
12.2 Explain functions located on Integrated Site
12.3 Explicate the Configuration Management support
12.4 Determine the Software Management support
12.5 Investigate the Fault Management Interface of IS
12.6 Determine the Performance Management interface to OSS-RC
13 Handle CORE Redback SE Specific tasks
13.1 Handle Redback Site Edge based nodes in OSS-RC
13.2 Explain functions located on Redback Site Edge
13.3 Explicate Configuration Management support
13.4 Investigate the Fault Management Interface of Redback SE
13.5 Determine the Performance Management interface to OSS-RC
13.6 Setup new recordings and verify the recording file transfer
14 Handle CORE WPP Specific tasks
14.1 Handle WPP based nodes in OSS-RC
14.2 Explain the functions located on WPP Platform
14.3 Explicate the Configuration Management WPP support
14.4 Determine the Software Management support
14.5 Investigate the Fault Management Interface of WPP
14.6 Determine the Performance Management interface to OSS-RC
15 Explore WCDMA/LTE Specific tasks
15.1 Handle WCDMA & LTE Radio Access Network based nodes OSS-RC
15.2 Outline the Configuration Management solution for WCDMA & LTE
15.3 Demonstrate the use of the Common Explorer
15.4 Use tools to verify the CM consistency
15.5 Integrate a new WCDMA network element into OSS-RC
15.6 Explore the use of BSIM to integrate a new LTE network element into OSS-RC
15.7 Explain the PM interface to CPP Based WCDMA & LTE nodes

16 Investigate Disk & Volume Management
16.1 Discuss the Unified Storage solution
16.2 Navigate the OSS-RC file system structure
16.3 Explain the disk configurations used in OSS-RC
16.4 Differentiate between the uses of Solaris Volume Manager and Veritas Storage Foundation
16.5 Investigate DMR, the standard backup solution for backup and restore.
16.6 Determine and describe the functions of DMR
16.7 Handle DMR to take file system backups and restores

17 Learn to perform O&M Backup Solution
17.1 Use and maintain the O&M Backup Solution (OMBS)
17.2 Describe the OMBS Hardware & Software Architecture
17.3 Investigate the use of the GUI/Command line interfaces to configure Backup Profiles
17.4 Employ the tools to perform and verify the backup execution
17.5 Identify the functionality of Bare Metal Restore as part of OMBS

18 Understand the concept of High Availability
18.1 Discuss the High Availability Solutions
18.2 Describe the High Availability Cluster Server Solution
18.3 Analyze the HA Cluster Communications
18.4 Describe the Administration tools for HA Cluster Systems
18.5 Describe the High Availability Replication Solution
18.6 Compare the different HA-RS Scenarios

**Target audience**
The target audience for this course is:
System Administrator

**Prerequisites**
Successful completion of the following courses:
The participants should be familiar with OSS-RC operations applications related to the Core Network. Suitable courses include:
OSS-RC Overview LZU 1089803 R1A
WCDMA Network Management with OSS-RC 14 LZU 1089796 R1A
LTE Network Management with OSS-RC 14 LZU 1089797 R1A
IMS Network Management with OSS-RC 14 LZU 1089798 R1A
GSM Network Management with OSS-RC 14 LZU 1089799 R1A

Successful completion of the following external courses or equivalent knowledge:
Sybase: Fast track to Adaptive Server Enterprise
Sun: Solaris 10 System Administration I and II
The participants should also be familiar with Veritas Volume Management and have general knowledge of TCP/IP.

**Duration and class size**
The length of the course is 8 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 are accessed remotely.
## Time schedule

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

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<thead>
<tr>
<th>Day</th>
<th>Topics in the course</th>
<th>Estimated Time (hours)</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>2 hours</td>
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<td>User management</td>
<td>4 hours</td>
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<td>2</td>
<td>CIF Platform</td>
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<td></td>
<td>Node Integration General and Data Handling</td>
<td>2 hours</td>
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<tr>
<td>3</td>
<td>Node Integration General and Data Handling (Continued)</td>
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<td>FM Architecture &amp; Administration</td>
<td>4 hours</td>
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<td>4</td>
<td>AXE Specific</td>
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<td>SNMP SMT FM Interface</td>
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<td>STN Specific</td>
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<td>5</td>
<td>CPP FM Interface</td>
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<td>CORE M-Mgw Specific</td>
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<td>8</td>
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<tr>
<td></td>
<td>High Availability</td>
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