Cloud Systems 2018
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)

A Technology Primer on Virtualization and Cloud

LZU1082557 R1A

Description:

What is the difference between virtualization and cloud? What about containerization?
How will the cloud improve utilization of computing resources?
If these are some of the questions you are looking for to be answered, this technology primer
will help you to understand the common terminologies often used in the market today.

Learning objectives:

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

1	Describe computer systems used today to support the execution of applications in delivering services to the end users.
1.1	Identify the architecture of the modern computer.
1.2	Identify the concept of distributed computing.
1.3	Describe the enhancements in networking technology in connecting a global network of computers.
1.4	Describe the storage requirement growth per the usage patterns and applications of the current market.
2	Define how virtualization supports the optimized use of computing resources.
2.1	Describe a hypervisor.
2.2	Describe a virtual machine and how applications are executed in the guest environment.
2.3	Explain the evolution of legacy applications to virtualized environments.
3	Describe cloud computing.
3.1	Identify components of a cloud computing environment.
3.2	Describe the concept of automation in the cloud.
3.3	Describe the concept of orchestration in the cloud.
4	Identify emerging technologies that further enhance the utilization of data center resources.
4.1	Describe containers as mechanisms to further improve efficiency of application execution.
4.2	List common providers of container technology such as Docker and LXD. identify further management efforts for containers such as MesOS and Kubernetes.
5	Describe management software to manage the cloud infrastructure.
5.1	Describe data center infrastructure industrialization efforts.
5.2	POD and vPOD definition

5.3   Describe discovery and inventory features for hardware management in the NFVI solution.

5.4   Identify functions for hardware management and control.

Target audience:

This course is suitable for anyone who is required to be familiar with Virtualization and Cloud.

Prerequisites:

Successful completion of the following courses:

None

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

An Overview of the Ericsson Cloud Infrastructure

LZU1082558 R1A

Description

The Ericsson Cloud provides an infrastructure to support all workloads, including next generation applications in the mobile networks such as 5G and IoT technologies. This course will provide the participant an overview of the products and solutions in the Ericsson Future Digital Infrastructure.

Learning objectives

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

1   Describe the future digital infrastructure characteristics.
1.1   Describe the concept of Software Defined Infrastructure (SDI).
1.2   Describe the concept of hardware disaggregation.
1.3   Describe the concept of distributed cloud infrastructure.

2   Identify the Ericsson Hyperscale Datacenter System 8000 as the data center infrastructure hardware solution.
2.1   Describe the foundation of the Hyperscale Datacenter System 8000 with the concept of Intel® Rack Scale Design.
2.2   Identify the hardware components for compute, networking and storage.
2.3   Identify the optical interconnect providing for high speed connectivity within the solution.
2.4   Identify the Command Center as a central management software providing for virtual Performance Optimized Datacenter (vPOD) operation.

3   Describe the solution for cloud infrastructure management software with the Ericsson Cloud Execution Environment.
3.1   Describe the virtualization and abstraction function of the Cloud Execution Environment.
3.2   Describe the virtual infrastructure management features.
3.3   Identify components of the Cloud Execution Environment to manage virtual compute, networking and storage functions.
3.4   Describe the function of Atlas providing a graphical interface for system administration purposes.

4   Explore the Ericsson Cloud Manager product as the BSS function.
4.1   Identify the architecture of the Cloud Manager.
4.2   Describe the service catalog capabilities to build services within the cloud.
4.3   Describe the orchestration function providing automated deployment of applications and services.

4.4   Identify features for building reports and analytics.

5   Describe security solutions provided with the Ericsson cloud infrastructure.

5.1   Identify security features built in to the Ericsson cloud portfolio, from basic physical security fencing to hardening practices.

5.2   Compare the differences between security, integrity and privacy.

6   Describe the Data Centric Security product providing for data integrity through blockchain and hashtree technology.

Target audience

This course is suitable for anyone who is required to be familiar with Ericsson Cloud Infrastructure.

Prerequisites

Successful completion of the following courses:

   None

Duration and class size

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation

This is a web-based interactive training course with multimedia content.

Creating High Impact Business with Cloud

LZU1082559 R1A

Description:

Cloud computing is widely stated to support and enhance businesses in delivery and optimized operations. However, the implementation is not generic and requires high levels of optimization in order to reach the best performance possible.
This module highlights benefits of the cloud in delivering high impact business, focusing on hyperscale and hyperconverged infrastructure.

Learning objectives:

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

1   Review cloud computing concepts.
1.1   Define the characteristics of the cloud.
1.2   Identify benefits of the cloud in business.
1.3   Explore new ways of working introduced with cloud such as Agile, DevOps, etc.

2   Describe how the cloud supports applications
2.1   Describe the different application delivery model, through virtual machines and containers
2.2   Describe management functions available to manage the cloud supporting applications.
2.3   Describe BigData and Analytics concepts.

3   Define what is "hyperscale" and "hyperconverged".
3.1   Define hyperscale in terms of large scale industrialized data center infrastructure deployments.
3.2   Define hyperconverged in terms of data center infrastructure capable of managing large scale, multi workload environments.

4   Explain how the cloud, 5G and IoT will drive high impact business.
4.1   Identify 5G being the next generation radio networks capable of handling both largescale and mission critical applications and devices.
4.2   Identify IoT and the concept of the Internet of Things, comprising of connected devices and the potential architectures supporting its implementation.
4.3   Describe sample business use cases for 5G, IoT and cloud infrastructure.

Target audience:

This course is suitable for anyone who is required to be familiar with Business Impact with Cloud.

Prerequisites:

Successful completion of the following courses:

None

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

Ericsson CEE Overview R6.6

LZU1082719 R1A

Description:

The Ericsson Cloud Execution Environment (CEE) provides virtual infrastructure management for cloud services. This allows various applications to make use of the virtual resources for compute, storage and networking. The CEE provides virtual machine lifecycle management in a high available and low latency performance environment.
Upon the completion of this course, the participant will be able to understand the basic function of the CEE, its architecture and VM lifecycle management in CEE R6.6.

Learning objectives:

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

1   Describe the highlights of the Cloud Execution Environment (CEE)
1.1   Discuss the positioning of the CEE software in the overall Ericsson Cloud System solution
1.2   Identify the logical architecture of the CEE
1.3   List the hardware integrations for the CEE
1.4   Discuss the enhancements introduced with the CEE R6.6 release

2   Describe the functions of the CEE for virtual machine lifecycle management
2.1   Explore the virtual machine lifecycle management through the Openstack services in CEE
2.2   Describe the services running in the infrastructure hosts, such as operating system, hypervisor and storage architecture

3   Describe the virtual infrastructure management function of the CEE.
3.1   Describe the function of the vCIC in CEE
3.2   List high availability (HA) features in CEE for services and databases
3.3   Describe the function of Atlas as a virtual infrastructure management dashboard

Target audience:

This course is suitable for anyone who is required to be familiar with CEE R6.6.

Prerequisites:

Successful completion of the following courses:

None

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

Ericsson CEE System Administration R6.6

LZU1082536 R1A

Description:

The Ericsson Cloud System provides enterprises with a flexible, secure and highly scalable solution for all types of workloads. Deployed as an Infrastructure as a Service (IaaS) solution, the Ericsson Cloud Execution Environment (CEE) abstracts and manages resources for compute, data and network infrastructure for applications.

The CEE System Administrator R6.6 course explores the CEE architecture to allow a better understanding of the components and functions of the CEE.

Upon completion of this course, the participant will be able to manage the various functions provided by the Ericsson CEE such as fault management and understand the overall architecture to enable management of the virtual infrastructure.

Learning objectives:

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

1   Review the CEE architecture
1.1   Describe the virtual infrastructure management services in the CEE
1.2   Describe the dashboard service Atlas and its functions
1.3   Identify O&M tools in the CEE

2   Perform system administration activities on the CEE
2.1   Navigate the Atlas user interface
2.2   Perform basic virtual infrastructure management tasks through the CLI interface
2.3   Perform application deployment through the orchestration function in the CEE

3   Perform health check and fault management on the CEE
3.1   Identify infrastructure alarms using the dashboard
3.2   Explore the CEE CPI library to find more information to interpret system alarms

4   Perform performance management on the CEE
4.1   Identify CEE tools available for performance management
4.2   Extract information for counters and meters in the CEE

5   Perform software management activities on the CEE
5.1   Identify software management tools for upgrade and update
5.2   Discuss CIC domain data backup and restore

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Ericsson CEE

Prerequisites:

Successful completion of the following courses:

Ericsson CEE Overview R6.6 LZU1082719

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 both classroom and in a technical environment using equipment and tools, which are accessed remotely.

www.ericsson.com/ourportfolio/services/learning-services

Ericsson Cloud Manager 18.0 Operations

LZU1082746 R1A

Description:

In today's information-driven marketplace, gaining a competitive edge takes a new level of agility that can only be reached through a more dynamic approach to managing the service and the resource upon which they depend. Ericsson Cloud Manager (ECM) provides an end-to-end multivendor cloud application and services management capability, addressing access management, service management and service optimization.

The students will be introduced to the functionality of the Ericsson Cloud Manager and its Graphical User Interface. Through a series of hands-on exercises, the students will learn how to perform user tasks, such as creation of virtual data centers, virtual networks and virtual machine images.

Learning objectives:

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

1	Understand the Cloud Fundamentals and Cloud Manager
1.1	Establish the fundamental concepts of Cloud
1.2	Differentiate between Cloud Manager components

2   Introduction of User Administration, Basic Navigation and High-Level Architecture
2.1   Navigate the user interface
2.2   Manage tenant(s)/sub-tenant(s) and user(s)

3   Describe the Internal NFVO and VNF-M Operations
3.1   Create orders of all asset types from the Cloud Manager service catalog
3.2   Operate as a Provider Administrator to manage resources
3.3   Operate as a Tenant to manage virtual assets
3.4   Identify supported VIM zones in Cloud Manager

4   Explore the ETSI MANO
4.1   Distinguish between ETSI MANO "or-vnfm support" in Cloud Manager 18 and
4.2   Interpret HOT/OVF based VNF templates
4.3   Apply generic VNF-Management tasks
4.4   Examine the ETSI MANO reference architecture and interfaces

5   Determine the Network Service Orchestration
5.1   Interpret TOSCA based network services descriptor
5.2   Perform Network Service Orchestration tasks
5.3   Perform Network Service life cycle management tasks

6   Understand the Custom workflows

6.1   Review capabilities of Custom workflows

7   Explain the Performance Management
7.1   Recognize capabilities for retrieving Performance Management data from VIM zones
7.2   Locate PM data in Cloud Manager
7.3   Practice running Performance Management tasks on assets deployed on NFVI

8   Explain the Fault Management
8.1   Locate Fault Management data in Cloud Manager
8.2   Detect service impacting fault management alarms in Cloud Manager

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain
Ericsson Cloud Manager.

Prerequisites:

Successful completion of the following courses:

General knowledge of cloud fundamental concepts.
Knowledge of the NFV ETSI MANO framework an advantage
Basic knowledge of OpenStack or similar virtual infrastructure
Basic knowledge of REST API an advantage

Duration and class size:

The length of the course is 4 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.

www.ericsson.com/ourportfolio/services/learning-services

Ericsson Cloud Manager 18.0 System Administration

LZU1082747 R1A

Description:

In today's information-driven marketplace, gaining a competitive edge takes a new level of agility that can only be reached through a more dynamic approach to managing the service and the resource upon which they depend. Ericsson Cloud Manager provides an end-to-end multivendor cloud application and services management capability, addressing access management, service management and service optimization.
Upon the completion of this course, the participant will be able to understand the how to perform first level troubleshooting and problem isolation.

Learning objectives:

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

1	Understand the Ericsson Cloud manager 18.0 System Administration
1.1	Discuss the architecture of Cloud Manager 18.0
1.2	Review relevant deployment models in Cloud Manager
1.3	Discuss the architecture of Cloud Manager 18.0
1.4	Review relevant deployment models in Cloud Manager
1.5	Discuss component up-lift in Cloud Manager 18.0 release
1.6	Practice using the language support tool
1.7	Describe method for obtaining licenses in Cloud Manager
1.8	Review logs
1.9	Maintain user profiles and roles
1.10	Health-check/Troubleshoot on the Core VM.
1.11	Health-check/Troubleshoot on the Activation VM
1.12	Check and verify service orchestration logs

Target audience:

This course is suitable for anyone who is required be able to administer Ericsson Cloud Manager.

Prerequisites:

Successful completion of the following courses:

Ericsson Cloud Manager 18.0 Operations, LZU1082746

Duration and class size:

The length of the course is 1 day 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.

Ericsson Cloud NFVI Overview R5

LZU1082720 R1A

Description:

This course gives the audience an overview of the Ericsson Network Function Virtualization Infrastructure.
The Network Functions Virtualization Infrastructure (NFVI) provides the virtual resources required to support the execution of Virtualized Network Functions(VNF). It includes hardware as well as virtualization and management software components that abstract the underlying hardware. The network providing connectivity between the hardware components is considered part of the NFV infrastructure.

Learning objectives:

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

1	Describe ETSI NFVI architecture
1.1	Discuss Ericsson's approach to NFVI
1.2	Describe concepts and functions of Ericsson's architecture
1.3	Explain the benefits and features of Ericsson NFVI
1.4	Compare Ericsson and 3PP NFVI
2	Identify the different Ericsson NFVI components
2.1	Describe Ericsson NFVI base configuration
3	Explain Ericsson NFVI hardware architecture
3.1	Describe Ericsson HDS hardware management
3.2	Describe Ericsson BSP platform
4	Explain NFVI Datacenter approach to networking
5	Explain Ericsson Orchestrator
6	Describe Virtual Infrastructure Manager
7	Discuss Ericsson Cloud SDN
8	Explain the different tools used for operation and maintenance

Target audience:

This course is suitable for anyone who is required to be familiar with Ericsson Cloud NFVI

Prerequisites:

Successful completion of the following courses:

Ericsson CEE Overview R6.6 LZU1082719
Ericsson Hyperscale Datacenter System 8000 Overview R2.7 LZU1082723

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

Ericsson Cloud NFVI System Administration R5.1

LZU1082755 R1A

Description:

This course gives the audience an understanding of the Ericsson Network Function Virtualization Infrastructure (NFVI). The NFVI provides the virtual resources required to support the execution of Virtualized Network Functions(VNF). It includes hardware as well as virtualization and management software components that abstract the underlying hardware. The network providing connectivity between the hardware components are considered part of the NFV infrastructure. The course will give participants to administer the NFV infrastructure with different management tools.

Learning objectives:

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

1	Review the Ericsson NFVI system architecture
1.1	Describe the different NFVI components
1.2	Acknowledge the different integration points in the Ericsson NFVI systems
1.3	Explain the NFV Orchestration possibilities using ECM, Atlas and CLI
1.4	Understand how the virtual datacenter is realize in Ericsson NFVI
2	Perform application on-boarding using Ericsson Orchestrator
2.1	Describe the networking definition between cloud SDN controller and cloud SDN switch
2.2	Explain the networking definition between cloud SDN controller and NRU switches
2.3	Describe HOT, OVF and TOSCA templates
3	Understand how the internal and external gateway is realized in the NFVI
3.1	Describe how the network between the NFVI and DC-GW is realized
3.2	Elaborate how overlay network support using cloud SDN can help with packet forwarding
3.3	Create IP internal gateway using the CCM
3.4	Configure IP external gateway towards the external DC-GW
4	Explain the concept of VNF scaling
4.1	Describe how scaling is realized in Ericsson NFVI
4.2	Perform manual scaling of a VM
4.3	Perform vPOD scaling
5	Describe REST api in Ericsson NFVI
5.1	Perform api interaction with some network elements in Ericsson NFVI
6	Review the operation and management architecture of Ericsson NFVI
6.1	Perform basic health check on different components

6.2   Perform performance management exercises
6.3   Create backup on different components on different network elements
6.4   Understand how to perform Software upgrade on the NFVI.

Target audience:

This course is suitable for anyone who is required be able to administer Ericsson NFVI.

Prerequisites:

Successful completion of the following courses:

Ericsson Cloud NFVI Overview R5
Ericsson CEE System Administration R6.6
Ericsson Hyperscale Datacenter System 8000 System Administration R2.7

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 theoretical and practical instructor-led lessons given in a technical environment using equipment and tools.

Ericsson Cloud SDN Overview 6.1

LZU1082721 R1A

Description:

This course gives the audience an overview of the Ericsson Cloud SDN product which is tightly integrated with Ericsson Cloud Execution Environment. It provides an introduction to the Cloud SDN architecture, and its main components and functions. This course also describes the Cloud SDN product interfaces relevant to Openstack Neutron-based services and cloud SDN Operation and Maintenance functions

Learning objectives:

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

1   Describe cloud SDN in a nutshell

2   Explain Ericsson cloud SDN functional architecture
2.1   Discuss Cloud SDN controller
2.2   Describe the different interfaces and specifications
2.3   Discuss Cloud SDN switch
2.4   Discuss use case and non-use case scenarios

3   Describe Ericsson cloud SDN benefits and features

4   Explain the different tools used for operation and maintenance 4.1 Describe the configuration management framework of cloud SDN
4.1   Explain life cycle management of cloud SDN
4.2   Elaborate the security framework of Ericsson cloud SDN

Target audience:

Overview training - This course is suitable for anyone who is required to be familiar with Ericsson Cloud SDN

Prerequisites:

Successful completion of the following courses:

Ericsson CEE Overview R6.6_LZU1082719

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

Ericsson Cloud SDN System Administration R6.1

LZU1082722 R1A

Description:

This course gives the audience an overview of the Ericsson Cloud Software Defined Networking (SDN) product which is tightly integrated with Ericsson Cloud Execution Environment (CEE). It provides an introduction to the Cloud SDN architecture, and its main components and functions. This course also describes the Cloud SDN product interfaces
relevant to Openstack Neutron-based services and Cloud SDN Operation and Maintenance functions.
Upon completion of this course, the participant will be able to manage the Ericsson Cloud SDN products and understand the overall architecture to enable management of the virtual infrastructure.

Learning objectives:

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

1	Review the Ericsson CEE architecture
1.1	Explain the OpenDayLight architecture
1.2	Describe the Ericsson Cloud SDN Controller
1.3	Identify the Ericsson Cloud SDN Switch
2	Identify the Transport Networks
2.1	Explain the CSC topology in CEE
2.2	Discuss the difference between underlay and overlay transport networks
3	Determine the Cloud SDN Features
3.1	Explain the L2 Service and L3 Routing in Cloud SDN
3.2	Outline the BGP L3VPN Service
3.3	Describe NAT Service and Floating IPs
3.4	Identify the Security Groups and describe Anti-Spoofing and traffic filtering
4	Identify the Cloud SDN Operation and Maintenance
4.1	Explain the Fault Management
4.2	Describe the Performance Management
4.3	Discuss the Configuration Management
4.4	Understand the Software Management
5	Explain the Cloud SDN Security Management framework
5.1	Describe hardening guidelines
5.2	Outline the Identity and Access Management

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Ericsson Cloud SDN.

Prerequisites:

Successful completion of the following courses:

Ericsson CEE Overview R6.6 LZU1082719
Ericsson CEE System Administration R6.6 LZU1082536
Ericsson Cloud SDN Overview R6.1 LZU1082721

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.

Ericsson Hyperscale Datacenter System 8000 Overview

LZU1082723 R1A

Description:

Ericsson Hyperscale Datacenter System (HDS) 8000 is a software-defined infrastructure system (SDI) based on Intel® Rack Scale Design, and is a key component of Network Function Virtualization Infrastructure (NFVI) solution. It provides a common managed hardware pool for all NFV workloads that can be dynamically scaled and provide multiple environments to enable fast service rollout, performance optimization and efficient hardware utilization.
This course introduce you to the Ericsson HDS 8000, its hardware and software architecture.

Learning objectives:

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

1	Identify the Ericsson solution for data center hardware with HDS 8000 in a cloud environment
1.1	Explain the concept of Software Defined Infrastructure (SDI)
1.2	Review the HDS 8000 and the Intel Rack Scale Architecture (RSA)
2	Elaborate the HDS 8000 architecture
2.1	Explain the HDS hardware architecture
2.2	Discuss the characteristics of HDS components
3	Explore the HDS management possibilities with Command Center Manager (CCM)
3.1	Describe the CCM management architecture
3.2	Identify the CCM and all its components

Target audience:

This course is suitable for anyone who is required to be familiar with Ericsson HDS 8000.

Prerequisites:

Successful completion of the following courses:

None

Duration and class size:

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation:

This is a web-based interactive training course with multimedia content.

www.ericsson.com/ourportfolio/services/learning-services

Ericsson Hyperscale Datacenter System 8000 System Administration R2.8

LZU1082724 R1A

Description:

The Ericsson HDS 8000 is a cutting edge data center hardware solution, built on the Intel RSA architecture for disaggregated hardware. The Command Center Manager or CCM is Ericsson's data center management interface software which allows the data center administrator the ability to discover and manage physical resources into virtual Performance Optimized Datacenters (vPODs).

Upon the completion of this course, the participant will be able to perform tasks such as discovering and managing resources using the CCM, create networks to connect the resources and manage vPODs.

Learning objectives:

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

1	Review the HDS 8000 solution architecture
1.1	Describe the HDS 8000 hardware, networking and CCM components
1.2	Explore the support for third party hardware management provided by CCM
2	Explain and handle HDS 8000 operational support functions
2.1	Explore the different components of CCM
2.2	Describe IPMI technology and how it relates to management of the hardware
2.3	Describe the CCM GUI and its use to create and manage tenants
3	Describe CCM management architecture
3.1	Identify the management interfaces for CCM
3.2	Describe the REST API functions available through the CCM interface
3.3	Create and manage vPOD using the CCM
3.4	Create networks for vPOD connectivity using CCM
3.5	Describe asset management using CCM
4	Explain and manage the fault management functions of HDS 8000
4.1	Explain the alarm Operating Instruction (OPI) and Check alarms
4.2	Explain and perform health check
4.3	Explain the log management and possibility to create external log server
5	Explore the process of performance and software management in HDS
5.1	Describe the backup and restore procedure
5.2	Describe the metrics chats and its use
5.3	Explain the data collection guidelines

Target audience:

This course is suitable for anyone who is required be able to configure/operate/maintain Ericsson HDS 8000.

Prerequisites:

Successful completion of the following courses:

Successful completion of the following course:
Ericsson Hyperscale Datacenter System 8000 Overview R2.7 LZU1082723

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.

Foundation Series - Cloud Security

LZU1082355 R1A

Description:

Organizations within various verticals are steadily migrating to the Cloud as well as adopting its technologies. They have found new ways of delivering their services through the Cloud and in addition to reaching new customers. While adopting the Cloud brings new ways for organizations to reduce costs and extend their services, it also introduces security risks.

The purpose of this overview course is to introduce you to the components that make up the Cloud and the security considerations thereof.

Learning objectives:

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

1	Define cloud computing and its benefits, service models and deployment models.
1.1	Explain the essential characteristics of the cloud.
1.2	Define cloud computing and its benefits.
1.3	Describe its service models.
1.4	Define its service models and in what respect services are consumed.
1.5	Describe its deployment models.
1.6	Define its deployment models and how they are implemented.

2	Describe Cloud Actors and threat landscape.
2.1	List the Cloud Actors
2.2	Describe cloud threat landscape.
2.3	Recognize the cloud security threat landscape relative to physical or virtual assets & consumer or provider assets.
2.4	Explain multi-tenant threat within the context of Service Models.
2.5	Document the top cloud computing threats.
2.6	Explain the impact of multi-tenancy on private and public clouds.
2.7	Discuss risks and concerns associated with virtualization.
2.8	Describe and explain tenant and cloud provider security management responsibilities.

3	Describe cloud security risks and concerns.
3.1	Explain the components of a cloud security architecture.
3.2	Analyze Ericsson's Logical Cloud Security Architecture
3.3	Discuss the components of a risk-based approach to security

4	Expose a risk-based approach to be used in mitigating security risks.
4.1	Explain critical security areas
4.2	Describe cloud security areas in terms of provider and consumer assets

4.3   Discuss the connection between service models within the context of security management

5   Describe cloud security within OpenStack and Ericsson Cloud Execution Environment (CEE) 16B.

5.1   Describe the security components of OpenStack

5.2   Explain the components that make up Ericsson's CEE

6   Describe best practices and recommendations.

6.1   Discuss Ericsson's 6+1 Security Functions.

6.2   Assess the thinking behind cloud security principles, best practices and recommendations.

Target audience:

This course is suitable for anyone who is required to be familiar with Cloud Security.

Prerequisites:

Successful completion of the following courses:

None

Duration and class size:

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

Learning situation:

This course is based on theoretical instructor-led lessons given in a classroom environment.

NFV Infrastructure for Telecoms Transformation

LZU1082560 R1A

Description

The Ericsson Network Functions Virtualization Infrastructure (NFVI) is a comprehensive solution for building a cloud capable of supporting both Telco and IT workloads.
The foundation of this solution is disaggregated hardware architecture, based on Intel RSD, enabling right-sized infrastructure with the economics of the hyperscale cloud providers.

After completing this module, the participant will be able to describe the architecture and components of the Ericsson NFVI.

Learning objectives

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

1   Identify the ETSI NFV reference architecture.
1.1   Identify the components of the ETSI NFV architecture.
1.2   Identify the MANO architecture.
1.3   Describe the NFV Orchestrator, VNF Manager and VIM components of the NFVI architecture.

2   Describe the Ericsson solution for NFV Management and Orchestration.
2.1   Identify the Ericsson products for NFV MANO including ECM, HDS 8000, CEE and Cloud SDN.
2.2   Describe the NFVI deployment options for medium/large and micro datacenters.
2.3   Describe lifecycle management, fault management and performance management aspects for the NFVI solution.

3   Identify the NFVI component for Hardware Management.
3.1   Describe discovery and inventory features for hardware management in the NFVI solution.
3.2   Identify functions for hardware management and control.

4   Identify the Data Center Networking and Orchestration component for NFVI.
4.1   Describe the networking architecture in the NFV Infrastructure.
4.2   Identify SDN capabilities in the networking layer.

Target audience

This course is suitable for anyone who is required to be familiar with the Ericsson Network Functions Virtualization Infrastructure (NFVI).

Prerequisites

Successful completion of the following courses:

None

Duration and class size

The length of the course is 1 hour and the maximum number of participants per session is 1

Learning situation

This is a web-based interactive training course with multimedia content.