Global Services

IPTV Application Platform (IAP) 2.0

Learning Solutions

Package Description

ERICSSON

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1 Introduction

Ericsson has developed a comprehensive competence development service to satisfy our customers' need for expertise, which varies from the skills and knowledge required to operate a network to the expertise required to develop new end-user services.

1.1 Learning Solutions

Traditional pre-defined training programs can only go a certain distance in building the expertise to meet organizational demands. Today, organizations need to be guaranteed that they will have timely access to the exact skills, knowledge and expertise needed in the complex, and evolving, world of mobile Internet and Third Generation Networks. Such organizations need to be able to build just-in-time competence rapidly so that they can meet new market demands or deploy new technology. What is increasingly required is a competence solution that addresses job performance requirements and has clear links to the customer's business and operational requirements. The training needs to be tailor-made to suit the actual level of expertise of the staff. In addition, staff need to be trained on the exact tasks with which they have to work on a daily basis. Ericsson has state-of-the-art processes, methods and tools to meet these requirements.

1.1.1 Training based on Competence Gap Analysis

Ericsson's Learning Architects can help operators to analyze their competence needs from a business perspective, using *Competence Gap Analysis (CGA)*, and then assist them to deliver a flexible competence development program suited to their needs. The experts can also assist with the evaluation of the training effectiveness against *Key Performance Indicators (KPIs),* conducting pre-tests before the program begins and post-tests to evaluate progress made during the program.

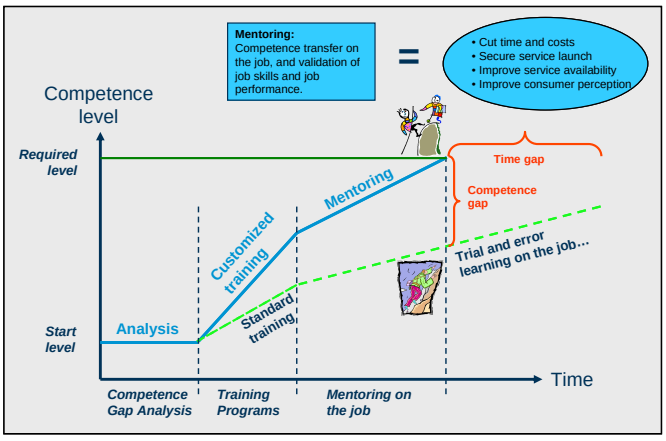


Figure 1. Analysis (CGA), Customization and Mentoring – How to add value relating to your business.

The result is a flexible program which is not only aligned with the business and operational requirements but is also customized to suit the requirements of the group or individuals to which it is directed. Flexibility is ensured; those with expertise spend less time achieving the required standard for task completion, while those at a more basic level get the help and time they need to reach this standard.

1.1.2 Mentoring or Instructor Led Training

Ericsson offers the operator two routes to optimized training for the main training activities described in this package: mentoring in the customer's work environment or instructor led training in an Ericsson lab environment.

Structured Knowledge Transfer (SKT) provides intensive on the job mentoring. A mentor works with a small group (max. 4) on live equipment in the customer's work environment, and ensures that the participants master the tasks from a job task list. This list is drawn up for each identified job role and duty or responsibility, and is agreed with the customer in advance. The result is accelerated learning tailor-made to the customer's needs and objectives.

As there is no room for error when working on live equipment and to maximize the benefits of the training, it is essential that the participants have completed the prerequisite theoretical and practical training courses before undertaking the SKT.

The mentor demonstrates the tasks involved in the job, working with the participants until they successfully perform each duty and task. Therefore, while participants complete the essential tasks for their job they complete them in their own working environment.

As an alternative to SKT, "off-the-shelf" training can be taken on Ericsson test equipment with a larger group (max. 8). The training is standard but can be tailored (to a certain extent) if requested.

A task driven methodology – often termed Task Oriented Learning (TOL) – is employed to encourage participants to learn how to carry out practical job tasks based on the responsibilities, work processes and procedures of their specific job role. The instructor/expert acts as a facilitator by enabling the participants to work proactively with the tools and resources to perform job tasks and solve typical problems. Staff become productive shortly after undergoing this form of training.

In summary Ericsson offers operators the following suite of Learning Solutions components:

- Competence Gap Analysis and Report

- Pre-tests / assessments
- Pre-requisite training
- Structured Knowledge Transfer (SKT) or Instructor Led Training (ILT), including checklists which provide a step-by-step guide for the tasks and responsibilities of each identified job role.
- Post-tests / assessments.

When choosing between the two training approaches the operator has to consider the circumstances of the business, the costs involved and the following differences between the two forms of training:

	ILT	**SKT**
Max. Participants	8	4
Equipment/Network	Ericsson lab	Customer site
Trainer	Instructor	Mentor/Coach
Range of Tasks	More configuration type tasks possible. Less customer solution adapted tasks.	Some tasks may not be possible on commercially live system.
Time to Job Competence Level	Fast, but not learning in own environment.	Very fast and customer specific, since learning job in own environment.
Travel	Travel is usually required.	No travel required. Performed on customer site.

Figure 2. Comparison of Instructor Led Training (ILT) and Structured Knowledge Transfer (SKT).

2 Why invest in the IPTV Application Platform (IAP) 2.0 package?

IPTV Application Platform (IAP) is the middleware component within an end-to-end IPTV solution and central to the overall Ericsson IPTV solution. It is the platform which allows service providers to launch IPTV related services to home subscribers, such as Broadcast and Time-shift TV, Video on Demand (VoD), Electronic Program Guide (EPG), Personal Video Recording (PVR).

IAP has been designed to be modular with the aim of providing a unified middleware application platform for converged TV services regardless of the underlying network type.

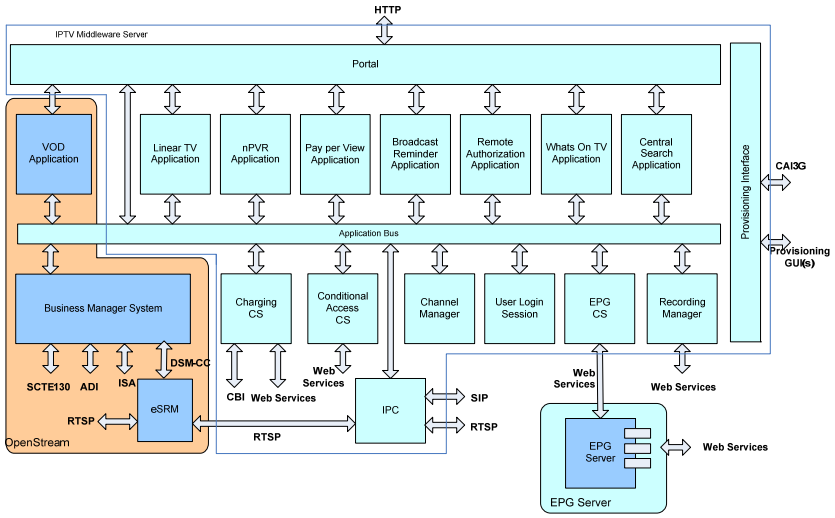


Figure 3: IPTV Application Platform (IAP) 2.0 Architecture.

This learning solution has been designed to provide the background knowledge and practical skills necessary to manage your implementation of Ericsson's IPTV Application Platform (IAP).

The Ericsson IAP 2.0 Learning Solution enables the network operator to optimize the value and impact of their competence investment through customized training that allows them to:

- **Deploy attractive services that differentiate your offering and take advantage of new business opportunities**
  Participants will be able to provision and administer the necessary features and data (subscribers, services, STBs and system components) to deploy attractive and innovative service offerings and value add applications based on Broadcast and Time-shift TV, VoD, EPG and so on.

- **Administer core and end-user services effectively to secure excellent end-user experience**
  Participants in this training will learn how to manage IAP core and end-user services effectively. They will be able to provision the necessary service data, manage the underlying support systems and troubleshoot typical problems to provide an excellent end-user experience.

- **Operate your solution effectively and efficiently using best practices to achieve operational excellence**
  Participants, by completing relevant job tasks based on best practices, will be able to use system tools to perform essential O&M tasks on system components in order to provide a high-quality and cost-efficient operation.

3 What's in the IPTV Application Platform (IAP) 2.0 package?

The following section describes each of the flows in detail. Each flow states the prerequisite knowledge. This training focuses on the following job categories:

Fundamentals

- Fundamentals

Operations Center

Back Office

- System Engineer
- Service Engineer

4 Fundamentals

4.1 IAP Fundamentals

4.1.1 What is achieved by attending the Flow

Participants will develop a broad and clear understanding of IAP in terms of its: role and position in the IPTV solution, features and functions, hardware and software architecture, components, interfaces, main traffic cases and management tasks to support the node.

4.1.2 Rationale for Flow design

This flow provides the necessary background knowledge for anyone requiring a good overview of IAP. This includes engineers who require further specialized training or staff, such as business managers and business developers, who simply need a good overview of IAP, its features, components and related terminology.

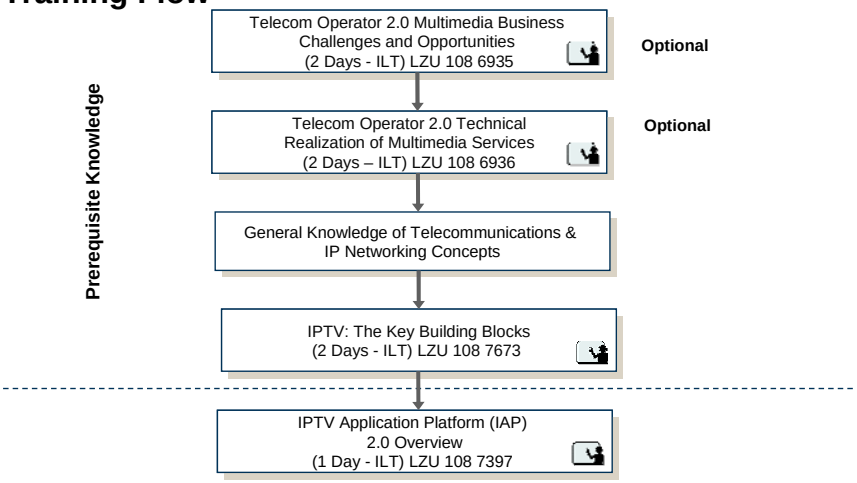
4.1.3 Prerequisites

IAP interacts with many different products in the service network environment and a good understanding of this environment (and general mobile Internet) from both a business and technical perspective will provide a solid background for IAP training.

The Telecom Operator 2.0 Multimedia Business Challenges and Opportunities (LZU 108 6935) describes the business aspects, such as understanding end-user needs, launching new services and the service lifecycle, the supply chain and establishing business models. The Telecom Operator 2.0 Technical Realization of Multimedia Services (LZU 108 6936) provides a good overview of Multimedia Services environment in terms of enablers, standards and protocols, service delivery platforms and so on. Both courses are optional.

The participants should have a general knowledge of telecommunications and IP networking concepts. They should also have knowledge of the end-to-end IPTV solution as provided by the IPTV: The Key Building Blocks (LZU 108 7673) course.

4.1.4 Training Flow



5 Operations Center

5.1 IAP Service Engineer

5.1.1 What is achieved by attending the training

This training provides the background knowledge and practical skills necessary for service engineers to manage and troubleshoot the IAP node features in order to provide reliable end-user services. Participants will manage key service components, including Openstream services, IAP Portal, EPG server, channels and charging features as required to the level of service engineer.

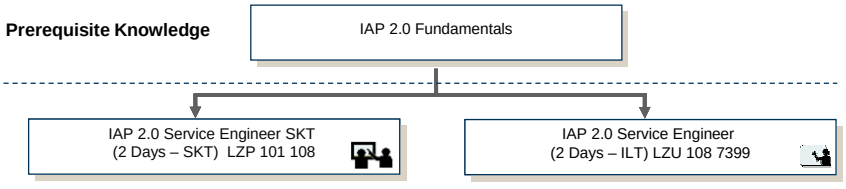
5.1.2 Rationale for training design

This training builds on the knowledge gained in the Service Technician flow by enabling the participants to perform more advanced service management tasks and troubleshooting.

5.1.3 Prerequisites

Participants must have attended the IAP 2.0 Fundamentals training.

5.1.4 Training Flow



5.2 IAP System Engineer

5.2.1 What is achieved by attending the training

Participants will be able to manage the IAP node from a systems perspective in order to provide a reliable platform for IPTV services. Participants will perform preventative and corrective maintenance tasks on system components (hardware, software and interfaces) to a level of system engineer. Tasks include alarm and log monitoring, user administration, database administration, hardware management and interface configuration.

5.2.2 Rationale for training design

This flow provides the necessary background knowledge and hands-on skills for IAP System Engineers to maintain the main platform components in order to provide a reliable system for the provision of IPTV services based on your particular system configuration and job role tasks.

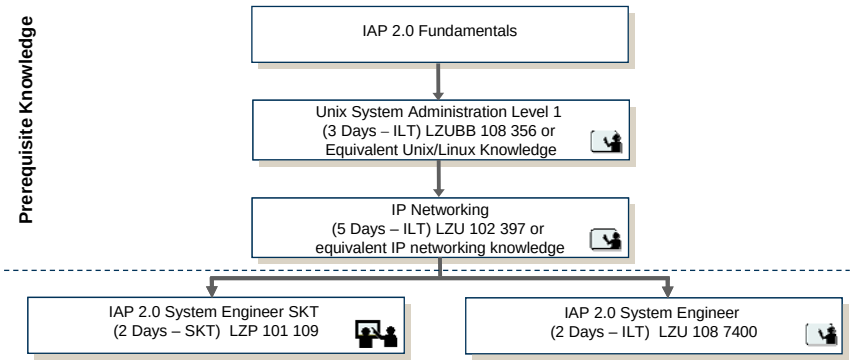
5.2.3 Prerequisites

Participants must have attended the IAP 2.0 Fundamentals training.

Students require Unix/Linux administration knowledge to understand and perform certain administration tasks. The following course can be provided by Ericsson: Unix System Administration Level 1 (LZUBB 108 356).

A good knowledge of IP networking is required. The following course can be provided: IP Networking (LZU 102 397).

5.2.4 Training Flow



6 Related training packages

The related training packages:

- IP Television (IPTV)
- Service Integration Gateway (SIG)
- Charging System (CS)
- Ericsson Multi Activation (EMA)

can be found at:

http://www.ericsson.com/solutions/learning

Further information about the following Learning Solutions components:

- Competence Consulting
- Structured Knowledge Transfer (SKT)

can be found at :

http://www.ericsson.com/solutions/learning/

7 Third party related training references

The training outlined in this package adequately covers the use of third party products for performing essential IAP tasks. However, if you wish to take specific training for these products then please visit the following sites:

- Sun Microsystems:
  http://www.sun.com/training
- F5:
  http://www.f5.com/training-support/
- HyC
  http://hyccampus.hyctv.com/iptv_courses.html