

Introduction to IPTV Systems

An overview of next generation TV and video delivery systems

Overview

With the wider availability and capacity of Internet access, providers are looking to enhance their revenue channels through offering TV and Video on Demand (VoD) services. IPTV systems offer more flexibility in service provision to customers over an IP based network. Unlike traditional TV broadcasting, a 'return path' opens up endless possibilities of interactivity such as competitions & voting, buying merchandise, selecting movies on demand etc. This course is designed to provide an end to end view of the IPTV network architecture and will explain how this network provides the customer with an enjoyable and enhanced viewing experience while protecting the provider's services & content with security and digital rights management.

You Will Learn

- How IPTV adds value to television service delivery
- The different standards for IPTV systems
- How content is protected through DRM
- How TV and video content are encoded
- A comparison of wireless and wired delivery systems
- The structure and components of an IPTV system
- Meeting quality requirements
- A comparison of different IPTV implementation scenarios

Who Can Benefit

All staff who need to understand the technologies and issues related to implementing an IPTV network

Prerequisite Knowledge:

No particular prerequisite knowledge is required other than a basic understanding of the communications & broadcasting industry

Outline

Introduction

- What is IPTV
- Trends in the media & broadcasting industry
- The market for IPTV
- New market players & delivery methods
- Triple play networks
- IPTV System Architecture & Components
- Home distribution scenarios
- SD TV and HD TV
- Streaming, downloading, Video on Demand (VoD) and DVR
- Over the top services (OTT) & interactive TV
- Bandwidth requirements
- Issues with licencing & content
- Digital rights management, security and billing

IPTV Standards

- Standards for digital video
- Coding of video information
- Key coding standards
- The Internet Protocol (IPv4/IPv6)
- Delivering quality for video

IPTV Delivery

- Network architecture & distribution
 - Satellite systems
 - FTTx and PON
 - Mobile networks
- Issues with wireless delivery
- Channel control & zapping
- QoS provision and common QoS issues
- Local and remote storage
- Set top boxes and media players

IPTV Implementation Case Studies

- TV provider migration to IPTV
- Triple play fixed broadband example
- Telco mobile network example
- Equipment specifications

Simple examples and demonstrations throughout

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| DURATION | 1 days |
| MAX CLASS SIZE | 12 |