

Essentials of Machine to Machine Communications

Overview

Machine to Machine (M2M) communications is an important growth area both for Telcos and for organisations that wish to communicate with or automate operations over a network. The program will examine commercial, business and technical aspects & issues related to machine to machine communication, in particular over wireless/mobile networks.

This workshop will provide a brief overview of M2M technology and its application in the telecommunications network environment. All of the terminology and jargon is explained in a clear and precise manner as the course progresses by our highly skilled trainer.

You will be able to

- Understand the M2M ecosystem
- Understand the terminology associated with M2M
- Explain M2M in a business context
- Understand the business direction & trends for M2M
- Describe several application scenarios for M2M

Who can benefit

Managers, Marketing Executives, Sales Executives, Operations Executives, Network Engineers and all those who need an overview of emerging trends for telecommunications

Pre requisite knowledge

Basic technical knowledge of telecommunications

Outline

Introduction

- Changing environment for the Telco
- Convergence of services on IP-based platform
- Demand for and growth of data services
- What is M2M
- Application drivers for M2M
- The M2M ecosystem
- The state of M2M technology
- M2M market data
- Why are mobile networks a good infrastructure option?
- Example M2M application areas

M2M Architecture & Jargon

- M2M end devices
- Network domain terminology: services, network and capillary
- Local connectivity & Wireless Sensor Networks (WSN)
- Interfacing with "real-world" devices
- M2M application/service layer
- Over the air provisioning
- M2M management

- M2M Network Environment
- The Internet Protocol
- IPv6 and the "Internet of Things"
- Why is addressing important?
- Security issues & considerations
- Mobile networks
- Issues with large subscriber base and data/control traffic volume

M2M Business Environment

- Building a business with M2M
- Operator business models
- Relationships & value chain
- Solution provision
- M2M and MVNOs
- Interaction with Cloud & Big Data
- SIM card management
- Charging & billing
- Regulatory & interoperability issues
- Roaming considerations
- SLAs and support for critical applications

M2M Applications

- M2M application development environments
- Transport, fleet management & telematics
- Medical & healthcare applications
- Industrial Control Systems (ICS) & SCADA
- Surveillance & security
- Retail sector applications
- Public utilities & services
- Asset tracking & management
- Demo: M2M application

DURATION	2 day
MAXIMUM CLASS SIZE	12