

AT&T Training Center - Mobility Provisioning Center

AT&T training center – Mobility Provisioning Center is intended for students possessing strong networking and Unix/Linux skills and are interested in mobility network management and provisioning. The course provides an overview of mobility networks and shows AT&T's implementation of mobility network in US. Course topics are intended to improve student's skills required for junior mobility engineer position.

- **Fundamental networking and OS skills**
First part of the course is focused on networking skills that create foundation for understanding complex mobility network concepts. Main topics will be IP networking, legacy networks – ATM, Wireline, etc. and OS skills.
- **GSM and UMTS technology**
Classes about second and third generation mobility networks will introduce topology of mobility networks in RAN and Core part, explain algorithms used for call handling and show how handling of emergency calls works.
- **4G LTE**
Long Term Evolution training will introduce novelty techniques that are currently used for deployment of LTE networks. This part of course will also explain Metrocells and their functions.
- **Mobility network management and automation**
Topic about network management and automation covers operation of OSS servers to handle configuration, software and monitoring of mobility equipment as well as usage of scripting tools to maintain large quantity of mobility nodes.

AT&T training center syllabus

Class 1

Introduction to AT&T

- History of AT&T and Brno center
- Structure of mobility network
- Course overview

Fundamental Networking Skills

- IP networking at a glance
- Wireless vs. Mobility networks
- Legacy networks

Class 2 – Networking and Operating Systems

- Linux command line environment
- OS used in AT&T network

Class 3 – GSM and UMTS

- Radio Access Network, Core Networks
- Call setup and handling
- Emergency call handling and location services

Class 4 – 4G LTE

- Novelty concepts used in LTE
- LTE vs. VoLTE

Class 5 – Metrocells, Location and Emergency Services**Class 6 – Mobility Network Management**

- Teams working with the mobility network and their roles
- OSS – description and tool demonstration – ALU, Ericsson
- Network Quality Management
- CLI tools

Class 7 – Scripting and Automation

- Motivation for automation in network operations
- Scripting tools
- Mobility equipment health check using scripts