

Course ID
3GLTEOPT
Course Duration
5-6 days

Course Title
3G/LTE Performance Analysis & Optimization

Related Courses

This course is designed to complement the Eogogics [3G](#) and [LTE](#) technology and planning courses.

Aimed At

Primarily, engineers involved in RAN planning, performance management, QoS, and optimization. However it may also benefit RAN RF tuners and RNC-LTE optimization teams in Network Management Centers (NMC's) or Operation Management Centers (OMC's).

Prerequisites

Those wishing to take this course should be well-versed in UMTS/HSPA and LTE.

Course in a Nutshell

Performance statistics and KPI's are an important subject of study for RAN optimizers, performance analysts, and planners/tuners. This course, part of our 3G/4G interoperability series, will help you acquire an intuitive mastery of the 3G and LTE performance metrics and leverage them to plan, revise, optimize, and troubleshoot 3G/LTE networks. As such, this course is a valuable adjunct to the 3G and LTE technology and planning courses.

Customize It!

- We can adapt this course to your own technical environment.
- It can also be shortened to five days by omitting IMS, VoLTE, or other topics that are less important to you.

Learn How To

- Define 3G and LTE KPIs
- Trouble shoot 3G and LTE networks using performance counters
- Combine 3G and LTE signaling with statistics and counter performances
- Revise 3G and LTE plans in light of statistics and performance metrics
- Better understand and exploit the 3GPP optional radio features

Course Outline

- Day 1 Agenda
 - 3G radio technology overview
 - 3G functionality overview
 - 3G accessibility
 - 3G accessibility KPI's
 - Optimizing 3G accessibility
 - **Exercises:** WCDMA accessibility log files analysis (using TEMS)
 - **Case studies** with real network statistics (using Excel spreadsheets)
- Day 2 Agenda
 - 3G retainability
 - 3G retainability KPI's
 - Optimizing 3G retainability
 - 3G integrity
 - 3G integrity KPI's
 - 3G integrity optimization
 - **Exercises:** WCDMA retainability/integrity log files analysis (using TEMS)
 - **Case studies** with real network statistics (using Excel spreadsheets)
- Day 3 Agenda
 - HSPA radio technology overview (air interface, MAC protocol)
 - HSPA mobility overview
 - HSPA performance and KPI's
 - HSPA optimization
 - **Exercises:** HSPA log files analysis (using TEMS)
 - **Case studies** with real network statistics (using Excel spreadsheets)
- Day 4 Agenda
 - LTE radio technology overview
 - LTE functionality and optional features
 - LTE accessibility
 - LTE accessibility KPI's
 - LTE accessibility optimization
 - **Exercises:** LTE accessibility log files analysis (using TEMS)
 - **Case studies** with real network statistics (using Excel spreadsheets)
- Day 5 Agenda
 - LTE retainability
 - LTE retainability KPI's
 - LTE retainability optimization
 - LTE integrity

- LTE integrity KPI's
- LTE integrity optimization
- **Exercises:** LTE retainability/integrity (using TEMS)
- **Case studies** with real network statistics (using Excel spreadsheets)

- (Optional) Day 6 Agenda
 - IMS platform
 - VoLTE overview
 - VoLTE optimization
 - CS-Fallback overview
 - CS-Fallback optimization

- Wrap-up
 - Course recap and Q/A
 - Evaluations

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