



ariesoGEO User LTE

(ARI0013)

Course Outline

ariesoGEO User - LTE

Detailed Course Outline

This two day course enables engineers, who are responsible for the activities related to LTE planning, optimization or monitoring, to get familiar with the ariesoGEO interface and its key features. It includes interactive demonstrations, as well as multiple student activities which allow the attendee to explore ariesoGEO. The course is designed to run on your live LTE ariesoGEO system. In so doing, individual students gain experience of the ariesoGEO product, as well as specific knowledge of how it operates on their system.

Pre-requisites

This class is aimed at network engineers who work on optimizing and troubleshooting LTE networks. Knowledge of LTE networks, optimization and troubleshooting is pre-requisite knowledge for attending this course.

Section 1: ariesoGEO Capabilities

- Overview of Arieso Platform – insight, performance, analytics and SON
- What information radio planners and optimizers need
- How ariesoGEO captures data and what information is available to end user
- How GEO analyzes and displays data
- How GEO can analyze handset model penetration and performance
- How GEO geographically positions users, including use of devices with GPS

Section 2: Product Architecture and Operation

- GEO platform architecture
- Local GEO support available to users
- Introduction to the GEO user interface
- Demonstration of GEO's core functions
- Introduction to filtering, and the importance of, for obtaining the required results
- Defining geographical areas using bounding box and polygons
- Overview of analyzes categories

Section 3: Network Topology and System Pre-Checks

- Investigating Data Loading
- Investigation of Loading Errors

Section 4: Correlation Module

- Network Alarm Monitoring and Investigation
- Network Configuration Checking
- Cell Performance Monitoring, Macro and Femto

Section 5: RF Analysis – Network and Cell

- Investigation of Key KPIs, including power and quality measurements
- Analysis of Channel Quality KPIs
- Footprint analyzes on individual cells based on Power and Quality KPIs
- Investigation and analysis of RF Health Index
- Simulating Antenna Changes

Section 6: Call and Connection Analysis

- Plotting LTE calls (VoLTE & ViLTE) and handover locations
- Detailed explanation of Spider and Layer 3 drill-down analyzes
- Investigation of connections and session bearers

- Call failure reason investigation for individuals and geographical areas

Section 7: Analyzing Data Throughput Performance

- Usage investigation in the uplink and downlink channels
- Geographical investigation of Performance KPIs

Section 8: Subscriber and Device Group Analysis

- Device performance investigation
- Analyzing individual Subscribers performance
- VIP Investigation
- Roamer Analyzes

Section 9: PCI Tuning

- Explain the features of the PCI Tuning analyzes
- Run through examples of how to utilise GEO to suggest PCI changes

Section 10: Grid Calculator

- Demonstrate how ariesoGEO can be used to create complex performance KPIs analysis
- Make use of the Grid Calculator to locate and optimize RF problem areas
- Measure the impact of the optimization plans in RF and footprint performance KPI
- Measure the impact of 4G deployment on the data rates of existing 3G systems

Section 11: Creating Reports and Exports

- We introduce templates and report facilities and when these are used
- Discussion of benefits and interworking with MapInfo and Google Earth
- How to create one off and scheduled reports
- Use of GeoWeb for report viewing and VIP monitoring
- Exporting analyzes results to other formats

Section 12: Changing and Applying Colour Schemes

- Changing the Colour Schemes used in ariesoGEO
- Applying colour to Tables
- Applying specific colours to Points Analysis

Section 13: Problem Identification Wizard

- Explain the feature of the Problem Identification Wizard
- Demonstrate the use of the Wizard

