SRS presents AirScope

Capture all downlink traffic in any LTE cell in any frequency band using off-the-shelf laptop or PC hardware and generic radio front-end devices from a wide range of suppliers.

Observe all network activity, quickly troubleshoot problems and rapidly implement solutions. Passively analyze end-user quality of experience for the complete cell, identify cell-edge users and flag potential coverage, congestion and interference issues.

Monitor per-user DL and UL traffic volumes, examine cell load distribution and identify bandwidth hogs. Easily integrate AirScope with third-party tools using our non-proprietary signal capture formats. Wireshark captures and text-based logs provided as standard.

Optimize new NB-IoT deployments and monitor performance with the AirScope NB-IoT extensions.

FEATURES AND BENEFITS

OBSERVE
- All real-time traffic
- Cell configuration
- Active user distribution
- Per-user channel quality
- Cell spectral efficiency
- Congestion patterns
- Scheduler performance

CAPTURE
- Master Information Block
- System Information Blocks
- Paging Messages
- Downlink Control Information
- DL/UL Resource Allocation
- HARQ Indicators
- Timing Offsets
- NB-IoT extension for M2M traffic

ANALYZE
- Detailed log files
- Per-packet metrics, hex captures
- Wireshark MAC packet captures
- Web-based graphical interface
- Standalone or distributed deployment with cloud-based interface
SOFTWARE RADIO SYSTEMS (SRS) is a global leader in the delivery of high-performance L1, L2 and L3 software for wireless systems. We are an Irish company providing modular, portable libraries and applications for a range of wireless technologies including LTE, NB-IoT and DVB-S2/RCS2. Our software-defined radio approach targets commodity off-the-shelf hardware to deliver low-cost cutting-edge wireless solutions.

OPERATORS
Use AirScope to monitor performance of your own and competing networks and to quickly troubleshoot problems and implement solutions.

REGULATORS
Use AirScope to carry out independent network performance assessments and to verify key coverage and quality-of-service targets for example under rural broadband public-private partnerships.

ENTERPRISE PROVIDERS
Use AirScope in planning, deploying and managing your in-building solutions for 4G.

RESEARCHERS
Use AirScope to carry out live measurements of real networks in the field and observe real-time traffic and congestion patterns.

SPECIFICATIONS
- SIB and Paging
- PDCCH, PDSCH, PHICH
- PHY/MAC/RLC usage
- DL/UL grants
- Cell-wide scheduling
- Per-user MCS, PRB, TBS, RV
- DL/UL timing offsets
- RSRQ, RSRP, SINR, RSSI, CFO
- NB-IoT NPDCCH/NPDSCH support
- Per-packet logging
- MAC-layer packet captures
- HTML5 graphical front-end

HARDWARE
- Intel and ARM processors
- NI/Ettus USRP RF front-ends
- BladeRF front-ends
- LimeSDR front-ends

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