XCAL

IOT / Site Acceptance / Field Optimization / Mobile debug

The World's Leading Drive Test Tool

Used extensively on many of the world's largest networks, the intuitive and flexible XCAL series of drive test tools are designed to troubleshoot, monitor, maintain and optimize wireless voice and data network performance – all in realtime. XCAL assesses QoS/QoE and ensures seamless service integration with existing GSM, WCDMA, HSPA, EVDO, Mobile WiMAX, TD-SCDMA, LTE, LTE-A and LTE-3CA.

By automatical recording and deciphering messages from the air interface, XCAL detects any network bottleneck and impediments to delivering high quality voice and data services, giving you invaluable input for your network enterprise. Especially strongly recommended for 4G VoLTE measurement and analysis.

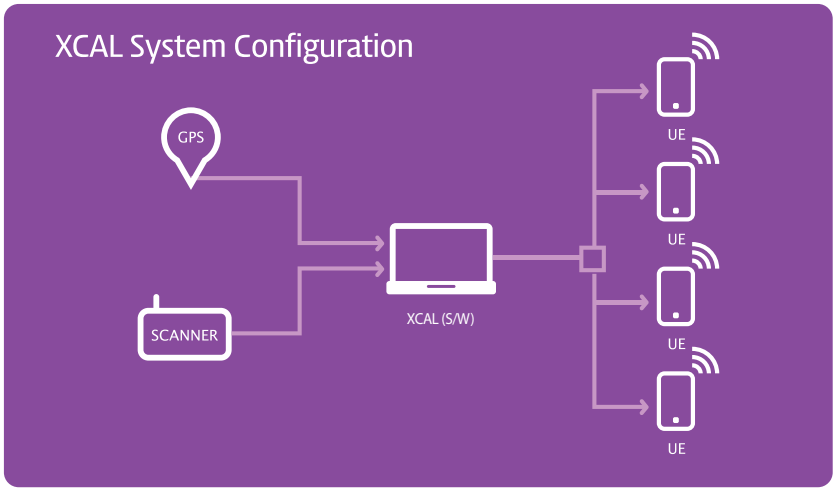
Use XCAL to

- Perform drive tests for service verification and gauge 'success' of network upgrades
- Benchmark network performance
- Carry out QoS, QoE measurements
- Carry out end-to-end application testing (MMS, SMS, video etc)
- Minimise OPEX by automating many labour-intensive workflows
- Intelligently manage massive volumes of drive test data, maps and performance counters
- Conduct indoor and outdoor network performance analyses
- Optimise handover performances
- Carry out Multiple data sessions on each test terminal
- Carry out ADB Script for Smart Phone Performance Measurement

Benefits

- Technology independent : GSM, GPRS, EDGE, WCDMA, HSDPA, HSUPA, CDMA2000, EVDO Rev.0, Rev.A, Rev.B, TD-SCDMA, DVB-H, Mobile WiMAX, LTE, LTE-A and LTE-3CA
- Huge return on investment, because many technologies can be measured on the same simple platform (eg. GSM, GPRS, WCDMA, WiMAX and LTE technology etc)
- Single platform for QoS, QoE and benchmarking
- Intuitive – very simple to use with minimal / no training involved
- Highly customisable, stable and robust
- User modifications (eg. New features/functions) are encouraged and custom delivered
- Easy and low cost maintenance

XCAL System Configuration



Features

- **Collect various data**
  Collecting Layer 1,2,3 Message, TCP/IP packet information by interworking with device and scanner
  L1 : PDCCH/PCFICH/PDSCH and so on
  L2 : MAC/RLC/PDCP and so on
  L3 : RRC/NAS and so on
- **Support various chipsets**
  Qualcomm, LGE, Samsung, Altair, Sequans, Infinion, GCT, Nokia and so on
- **Support various wireless technologies**
  - WiBro, WiMAX, WiFi
  - IS-95A/B, 1xRTT, EVDO Rev0/A/B, GSM/GPRS, EDGE
  - WCDMA, HSDPA, HSUPA, HSPA+, DC-HSDPA
  - LTE, LTE-A, TD-CDMA, LTE, LTE-A, LTE-3CA
- **Support various application automation test**
  - Voice, SMS, MMS
  - FTP, Ping, UDP, E-mail, VOD, VT, WAP, VoLTE, mVoIP, YouTube, Google Play, Android APP automation Test
- **Support various Scanners**
  - DTI(PCTel), DRT, RnS, Anritsu, Panasonic
- **Support Remote Access Control**

System Requirements

Item	Minimum	Recommended
CPU	Intel i5 2.0GHz or higher	Intel i7 2.0GHz or higher
Monitor	1280 X 1024	1680 X 1050
RAM	4GB or above	6GB or above
Hard Drive	120GB or above	500GB or above
Operation System	Windows XP or higher	Windows 7