Analyzer is a desktop solution for drive test post-processing supporting network optimization, network acceptance and validation. In use at over 230 operators, including 25 of the top 30, Analyzer supports 2G, 3G and now LTE rollouts with flexible and powerful drive survey analytics.

- **Multi-vendor and multi-technology:** ensuring support for all data sources now and in the future
- **KPI reporting:** sophisticated management quality KPI reports for acceptance of network improvements
- **Ease of use:** map-centric visualization organized around an engineer’s most common tasks
- **Spotlight automated analysis:** embedded workflow automating identification, analysis and diagnosis of the most common issues
- **Data services analysis:** embedded workflow specifically focused on the issues impacting user experience of data services
- **2G, 3G and LTE:** Comprehensive support for GSM, GPRS, CDMA, EVDO, WiMAX, UMTS, HSPA, HSPA+ and LTE across all chips, devices and test equipment
- **Indoor:** Support for all indoor test equipment, enabling validation of the indoor network and its interaction with the macro network
- **Configurability:** streamline the testing of new technologies and services and share expertise with the engineering team

### Multi-vendor and multi-technology

Actix actively maintains a library of over 225 interfaces providing support for the latest logging formats from all major vendors, including drive test, walk test, handsets, scanners, call traces and protocol analyzers, across GSM, GPRS, CDMA, EVDO, WiMAX, UMTS, HSPA, HSPA+ and LTE radio technologies.

This unrivalled capability allows our customers to use a variety of logging equipment. Analyzer normalizes this data so engineers see a consistent set of data across different data sources.

### KPI reporting

**Flexible KPI definition:** Analyzer’s event and query engines allow virtually any KPI to be built from network and service measurements. The ability to define and measure a rich set of KPIs is essential to acceptance reporting.

**Out of the box performance reports:** Analyzer enables operators to quickly create validation and acceptance reports that establish the coverage, quality and capacity achieved during rollout. Reports can use exclusion zones and other exceptions to paint an accurate picture of network quality.

![KPI reporting](image)

### Ease of use

Analyzer provides advanced visualization of performance data through synchronized maps, charts, graphs and tables. Analyzer supports the import of MapInfo map files and allows Microsoft BING maps to be used as background images.

Drive data and events can be plotted on maps, charts and tables, and all views are fully synchronized. Flexible query and visualization options enable the creation of maps from any attribute collected in the drive data.

Data can be exported in a variety of formats including CSV, MapInfo TAB and Google Earth KML.
Spotlight automated analysis

Designed by optimization engineers, for optimization engineers, Spotlight identifies key performance indicators, provides automated root-cause troubleshooting, coverage and interference identification, and concise reporting. Engineers can solve and report on more problems faster by eliminating time-consuming data manipulation and manual deduction.

Call event explorer: provides engineers with a detailed analysis, identified cause and diagnosis of drive events. Selecting an individual event displays the KPIs and the event on the map for detailed analysis.

Radio network analysis: enable the analysis and verification of RF conditions including:
- Coverage and overshoot analysis
- Pilot pollution
- Neighbor list analysis

Data services analysis

Analyzer enables drill down to a detailed session analysis providing all the information required by engineers to understand the root cause of the problems affecting service performance.

The analysis covers the entire session, correlating service performance with the underlying network measurements. This enables engineers to establish whether the underlying cause of poor service performance is due to poor radio quality or congestion on the core or radio networks and to understand when and where network features were available and used.

IP packet inspection: Analyzer provides full IP layer decode and session analysis to provide full inspection into the IP traffic layer. This allows KPIs to be built that cover jitter, packet loss, retransmission and other measures of IP performance.

2G, 3G and LTE

GSM / UMTS: Analyzer is the leader in GSM and UMTS rollout, and the product continues to provide leading capabilities optimizing new and existing GSM and UMTS networks.

HSPA: Continued investment in data network rollout has allowed Actix to enhance Analyzer by adding sophisticated data service analysis capabilities that will allow operators to get a true picture of performance of their data network. Analyzer supports the latest HSPA+ features including dual-cell, MIMO and 64QAM.

LTE: Actix is maintaining its leadership in mobile network analytics and has gained real world LTE experience. It has helped leading edge operators rollout some of the world’s first LTE networks.

Analyzer supports the latest LTE logging formats, enabling the collection and analysis of key LTE network measurements, including IRAT to HSPA and eHRPD.

Indoor analysis

Analyzer geo-references all collected RF measurements and events and overlays them with an image for visualizing the layout of the venue. Measurements are distributed linearly across the image using waypoint interpolation. Sophisticated KPI reports can be generated to automatically evaluate the readiness of the in-building network ahead of launch.

Configurability

Analyzer’s configuration capabilities enable expert engineers to define new KPIs, events and analyses to stream-line the testing of new technologies and services. They can also share their expertise with the broader engineering team.

Analyzer has many layers of configuration including events, queries, KPIs, reports, screen layouts and state views.

About Actix

Actix is a world-leading mobile network analytics company, helping mobile network service operators provide reliable connections on a global scale. Established in 1991, we’ve grown to support more than 500 customers, with over 10,000 active software licenses deployed.