MENTOR SUITE

Advanced Geo-Analytics and Network Optimization

TEOCO's Mentor Suite is a comprehensive portfolio of products delivering advanced subscriber geolocation analytics and network optimization by leveraging network measurements and geolocation algorithms.

The products within the Mentor Suite are each tailored to meet the needs of specific groups of users. They are multi-technology, covering 2G, 3G, 4G and 5G, and support all the major network equipment vendors. Our best-in-class geolocation algorithms employ innovative machine learning based positioning techniques. Automation and closed-loop capabilities deliver improved operational efficiencies and the Mentor Suite is fully GDPR compliant.

CogniSense

Multi-technology network monitoring, analytics, structured troubleshooting and reporting.

Mentor

Multi-technology user-driven troubleshooting and automated cluster-wide optimization.

Forte

Automated GSM frequency planning, neighbor list optimization and spectrum refarming.

Mentor Server

Single common backend for data collection, system monitoring, administration and APIs.

TEOCO is a network engineering tools market leader

For over 5 years, Analysys Mason has ranked TEOCO as a leading vendor of network engineering software tools.

MENTOR

Mentor is a GIS-based solution leveraging network measurements and geo-location algorithms to deliver advanced network troubleshooting, optimization, and subscriber experience analytics across 2G, 3G, 4G, and 5G networks.

GEO-ANALYTICS AND TROUBLESHOOTING

By leveraging geolocated call trace data, Mentor allows engineers to conduct advanced, ad-hoc and dynamic investigations into network performance issues across multiple technologies from 2G to 5G. Ad-hoc filtering for map queries and the ability to apply mathematical functions to multiple map layers enables engineers to customize maps on the fly thereby showing only the most pertinent information to their investigation.

CLUSTER-WIDE OPTIMIZATION

To compliment its geo-analytics capabilities, Mentor provides automated cluster-wide optimization underpinned by traffic-oriented algorithms. Capabilities include load balancing, RSI optimization, VoLTE SRVCC optimization, scrambling code / PCI conflict resolution, neighbor list optimization, antenna parameter optimization (power, tilt and over-undershooting), paging area optimization, swapped sector analysis and more. Optimization workflows are wizard driven and provide current vs. optimized plan analysis.

AUTOMATION, SCALABILITY AND INTEGRATION

Automatic Problem Detection highlights geographical polygons where performance KPIs have not been met. The detected problems are assigned a severity level, enabling engineers to focus on the most severe service-impacting ones first. Hadoop support ensures the scalability and application performance required to support the largest and most complex networks. A collection of APIs stream data to 3rd party applications and customer data lakes.

COGNISENSE

CogniSense delivers network improvement, monetization and subscriber profiling data insights through advanced, web-based geo-analytics. Use case are grouped into seven Apps covering key business areas.

ENGINEERING ANALYTICS

Monitoring, investigation & troubleshooting of network usage & performance

SUBSCRIBER ANALYTICS

Analysis, investigation & troubleshooting of subscriber quality of experience

VIP ANALYTICS

KPI monitoring & historical performance analysis of individual VIPs or VIP Groups

AUTOMATIC PROBLEM DETECTION

Automatic identification & severity assignment of geographical problem area polygons

BUSINESS ANALYTICS

Marketing & sales analytics covering roaming & subscriber profile segmentation

CONFIGURATION ANALYTICS

Monitoring and auditing of network parameter configuration settings

PM KPI ANALYTICS

Monitoring and investigation of network performance based on PM KPI counters

Forte is a powerful 2G optimization tool delivering highly automated, measurement-based, spectrum refarming, and GSM optimization.

As operators focus on their 3G, 4G and 5G networks, the 2G network still has an important role to play. By maximizing spectrum efficiency of the 2G network, excess spectrum can be refarmed and utilized for additional capacity on newer technologies.

Additionally, in many areas, the 2G network is still the primary voice and emergency calling network. A well optimized 2G network is therefore still a critical necessity for many subscribers.

Forte delivers automated frequency planning, spectrum refarming and neighbour list optimization to maximize the quality and mobility of the GSM network.

Proposed frequency plans can be benchmarked against existing configurations in order to see potential performance improvements, or to model the performance degradation that could occur when spectrum is drastically reduced.

Optimize and refarm your multi-vendor GSM network with minimal effort

AUTOMATED

Automated data collection, parsing, analysis and provisioning scripts deliver engineering efficiency

ACCURATE

Precise Interference Matrix based on Mobile Measurements delivers accurate results

MULTI-VENDOR

Compatible with all the major GSM network equipment vendors.

Mentor Server is the single common backend of the Mentor Suite, responsible for data collection, system monitoring, administration and APIs

All the products within the Mentor Suite sit on the single common backend known as Mentor Server. Mentor Server handles all aspects of data collection, processing, enrichment and geolocation.

Mentor Server also delivers comprehensive system administration and scheduling of automation tasks and client requests. Mentor Monitor, a module of Mentor Server, provides performance monitoring of all components of the Mentor solution.

Finally, Mentor Server includes a number of APIs for streaming data to 3rd party applications and customer data lakes ensuring value from geolocated data is delivered across the organization.

Mentor APIs

EVENT STREAMER

Streams parsed events from raw call trace data to external systems via Kafka

GEO DATA FEEDS

Provides processed geolocated Mentor data to a data lake or 3rd party system

ASSET GEO

Enables performance and traffic geo maps to be used in ASSET for network planning

TEOCO is a leading provider of analytics, assurance and optimization solutions to over 300 communication service providers (CSPs) worldwide.

Our solutions enable the digital transformation of CSPs while enhancing their network QoS, improving their customer experience and reducing their operational costs.

Through advanced analytics, TEOCO products provide actionable and measurable insights into network and customer behavior. This includes the optimization, effective monetization, and delivery of new and existing services, such as 5G.

Our commitment to network flexibility and agility makes TEOCO the obvious choice for CSPs looking to maximize the revenue potential of 5G investments and capitalize on new opportunities tied to the emerging Internet of Things (IoT).

Global Footprint

Extensive Portfolio

Proven Solutions

"TEOCO's market leading position in Engineering Systems reflects the success of its extensive network planning and optimization solution set, built by some very cohesive acquisitions and integrated effectively to form a leading portfolio"

- Analysys Mason