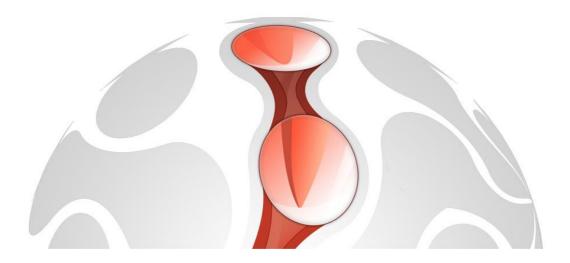
## Netrac Service Assurance



Automated,
Proactive and
Customer Centric
Approach to Service
Assurance

Real-time, Centralized Monitoring of Complex Networks

Highly Reliable & Scalable Performance Management

TEOCO's solutions to assure peak performance of your services distill massive amounts of information into valuable insights, and power profitable business decisions.

# OUR SERVICE ASSURANCE SOLUTIONS HELP CSPs IMPROVE NETWORK SERVICES QUALITY & AVAILABILITY.

With increasing customer requirements, tougher competition, more complex networks & information systems; Communication Service Providers (CSPs) cannot properly deliver without a "holistic view" of their activities. Operational Support Systems (OSS) must provide them with the ability to:

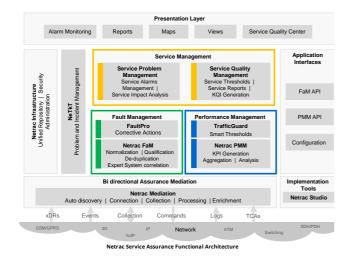
- Quickly identify and resolve service and network faults
- Automate business processes
- Smoothly integrate new technologies from multiple vendors
- Significantly improve quality and availability of service while reducing operating expenses

TEOCO's Service Assurance product portfolio delivers an automated, proactive, and customer-centric approach to Service Management, Performance Management and Fault Management.

We provide CSPs with the solutions to model and measure network and non-network-related data from various perspectives such as customer specific, service generic, and network components.

Our solutions satisfy the entire scope of requirements for next-generation services (VoIP, video, data, and value-added services, as well as legacy telephony services), and supports various fixed and mobile technologies, including LTE, 3G, CDMA, GSM and IMS-based networks, switched & optical networks, Ethernet & MPLS transport services.





#### NETRAC SERVICE MANAGEMENT

TEOCO's Netrac® Service Management solution promotes a customer-centric approach to operations management. The Service Management product line offers an interactive, telecom-oriented GUI for presenting, managing, and analyzing service oriented information.

Our Service Management Solution serves as a unified portal for all service quality issues, providing information on customers, services, networks, and devices. Using this pre-integrated and multi-dimensional view, service providers can focus on VIP customers, maintain high service levels, and improve revenue generation, while easily navigating from the service problems down to the cause of service degradation.

#### **NETRAC® FAULT MANAGEMENT**

Our Netrac® Fault Management solution delivers realtime, centralized monitoring of complex networks and empowers CSPs to solve service & network problems swiftly and efficiently, even before customers are affected.

The product line couples scalability with a flexible architecture and delivers:

- Work process automations,
- Probabilistic root cause analysis,
- An automatic or semi-automatic correction mechanism.
- Robust event management to support environments of any size.

Netrac's Fault Management solution enables network operations staff to hone in on the most critical problems and automate their isolation and resolution.

#### NETRAC PERFORMANCE MANAGEMENT

TEOCO's Netrac Performance Management solution provides CSPs with the ability to **proactively manage services**, **network performance**, **and Quality of Service (QoS)** in a comprehensive and intuitive manner.

Our performance management solutions enable carriers to analyze overall Key Performance Indicators (KPI), Key Quality Indicators (KQI), and Quality of Service, along with key factors such as availability and traffic. Providing a detailed and accurate picture of systems behavior, the solution can handle large amounts of data from multiple sources, such as Operational Measurements (OM), and Call Detail Records (xDRs).

Together with our state-of-the-art threshold alert tool, CSPs can proactively assure quality of service by detecting irregular network and service behavior in near real-time with the generation of Threshold Crossing Alarms (TCAs) based on user-defined thresholds.

### **NETRAC FRAMEWORK**

Netrac Framework is the foundation layer of the Netrac® Service Assurance Suit, which serves the various solutions and provides them with core capabilities to handle large scale networks, multi-technologies, domains and vendors. The framework includes Netrac's Mediation for Assurance, Netrac's Base Configuration that can hold the network's topology and inventory, GIS components, Topology views & Netrac Studio for rapid implementations & APIs.

Netrac® Mediation for Assurance has a distributed and scalable multi-threaded architecture that efficiently supports multi-vendor and technologies, networks with numerous protocols and interfaces. It is a robust bidirectional engine that collects network data and sends commands to the network. The solution can collect data from numerous sources (i.e.: Operational Measurements, KPIs, and xDRs). This data can be easily parsed, transformed, formatted, and validated, to store in a database or sent to external applications such as Fault and Performance Management systems.

TEOCO's solutions help assure peak performance of the CSP business, and distill massive amounts of information into valuable insights to power profitable business decisions.

Our Service Assurance solutions help CSPs improve network services quality and availability.

