

TECHNOLOGY OVERVIEW

Analytics & Monitoring

Cellusys Insight transforms signalling data into valuable information enabling real time QoS monitoring, insight on traffic and detection of any usage pattern, across SS, Diameter, SIP, GTP-U and HTTP/2.

Operators face

- Network outage leading to customer complains
- Poor quality of service offered to customers
- Complexity of monitoring with IoT, consumer, travel SIMs, 5G.
- Dependency from network nodes and vendors specific logs and traces
- Lack of visibility of network traffic
- Readiness for 5G QoS management

Typical use cases

- Proactively monitor the network and detect any issues before they occur
- VIP customers requiring specific monitoring
- Detect specific usage on the network (IoT devices, travel SIM, silent roamers...)
- Traffic monitoring for network planning and capacity management
- Quality of service monitoring
- Troubleshooting, traces capture

Solution Portfolio

Product	Description
QoS Monitoring	Monitor, alert and troubleshoot solution to ensure quality of service based on signalling protocols
Insight Platform	Analytics tool to extract valuable information from network signalling
SIM Box Detection	Detection of fraudulent SIM Boxes on the network
Silent Roamer Detection	Detection of Silent Roamers on the network
IoT Inbound	Detection of IoT devices on the network
Travel eSIM	Detection of Travel eSIM on the network
SMS Blaster Detection	Detection of SMS Blaster on the network

Architecture & operation

- Deployed in a passive mode, it captures a copy of the traffic
- Handles SS7, Diameter, GTP-C and U, SIP.
- Probes capture the traffic, mediation handles the information
- Collects and normalises raw network traffic into mediation-ready records
- Correlates sessions, subscribers, and services for accurate usage visibility
- Aggregates and filters high-volume network traffic from multiple sources
- Stores aggregated usage, KPI, and performance data
- Stores detailed, per-session and per-subscriber CDRs
- Supports API and MCP connection for business process of AI integration

Deployment & integration

- Passive probes – non-intrusive
- Require copy of network traffic (TAP, Mirror port, GRE tunnel(s))
- Independency from network nodes
- Full on-premise or hosted
- Hardware or VM supported
- Data export and SIEM or FMS integration
- Redundancy support at hardware, deployment and logical level

How we work

Typical project duration

30–60 days, depending on deployment scope and environment readiness.

Implementation phases

Deployment, configuration, testing and operational handover.

Proof of Concept option

Testing and evaluation can be performed prior to full deployment.

Level of configuration

Fully configurable.

Operator involvement required

Coordination with network teams during deployment and optimisation.

Managed service or support model

Support options include 24x7x365 for live systems or business-hours support for lab environments, with optional Professional or Managed Services available as required.