

Ensure network performance excellence for your Control Plane traffic



Real-time network monitoring for mobile core networks CS & PS, EPC & 5G-SA

Key Features

Real-time dashboard

DataMon's dashboard provides a continuous real-time view of the network health based on smart network performance and user experience KPIs. Information is available from 1-minute intervals.

Signalling real-time & history browser

The Signalling browser provides detailed, drill down views of all signalling procedures for deep troubleshooting. Searching based on different filter types (e.g. protocol and interface, per subscriber, Network Element, error cause, etc.) allows targeted investigation for root cause analysis by engineering teams.

Information is available real-time, as soon as it occurs in the network!

IP flow tracking filters

On-demand, real-time IP filters can be used for the analysis of user plane traffic. Engineers can obtain access to the protocol stack (e.g. HTTP/TCP) using standard tools in order to perform offline root cause analysis and troubleshooting.

Configurable alarms

DataMon's configurable alarms functionality helps Network Operations teams not to miss changes in the status and performance of the defined KPIs at any given time. SNMP support allows the easy integration of DataMon to existing NOC tools.

Operating Mobile Networks that offer a unique end user experience to subscribers can be a difficult undertaking. Uninterrupted, real-time network monitoring and analysis is the cornerstone of high-quality service delivery. Based on real-time monitoring & analysis of metrics derived from network data, DataMon can assure network performance and user experience quality.

Mobile data network performance affects subscriber Experience

Interruption in service delivery is critical for subscriber experience. Mobile Operators are aware of this fact because they are constantly under pressure to deliver a uniquely tailored experience to their subscribers. In order to maintain a competitive advantage, they need to find ways to assure that their mobile data networks remain highly performant.

However, this is not always easy to achieve.

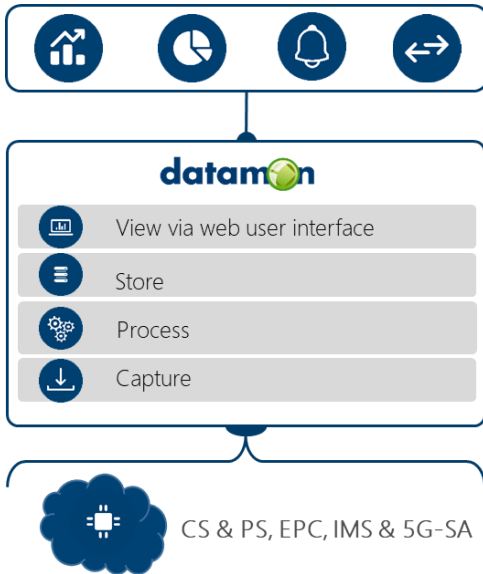
Network incidents can happen unexpectedly and can degrade the performance of subscriber-used services. For some of these incidents, the root cause can not be immediately identified. If Mobile Operators can proactively prevent network incidents, be aware of how services used by subscribers perform and - in case of low subscriber experienced service quality - can carry out fast troubleshooting, they have better chances of meeting subscriber expectations.

The answer is in the network

Mobile Operators need to identify and isolate network problems as they arise. They always need to monitor mobile data networks in real-time - at all times. They need to identify the root cause analysis of issues based on metrics captured and intelligently interpreted in real-time and resolve them so that they deliver better service to their subscribers, minimally disrupting their experience.

DataMon architecture

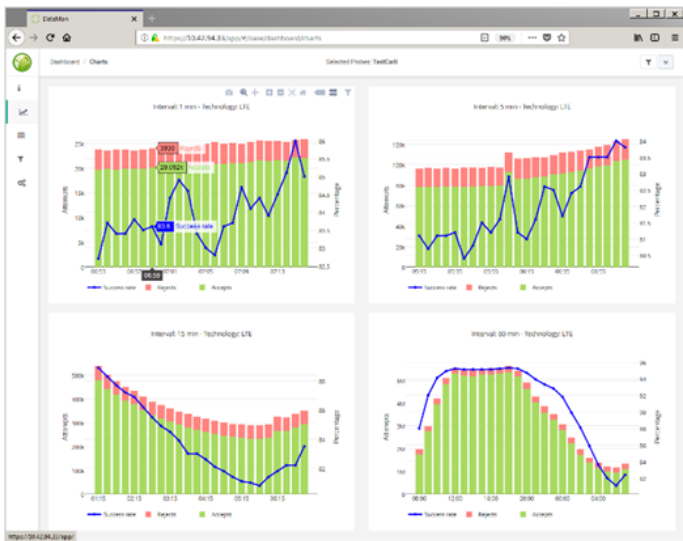
DataMon captures, decodes and processes control plane messages and user plane traffic in real-time from various Network Elements and interfaces.



It correlates all captured traffic to generate signalling records for real-time and historical drill-down troubleshooting. DataMon calculates KPIs that can be presented in real-time dashboards, historical trending views or trigger threshold-based alarms.

DataMon for real-time monitoring

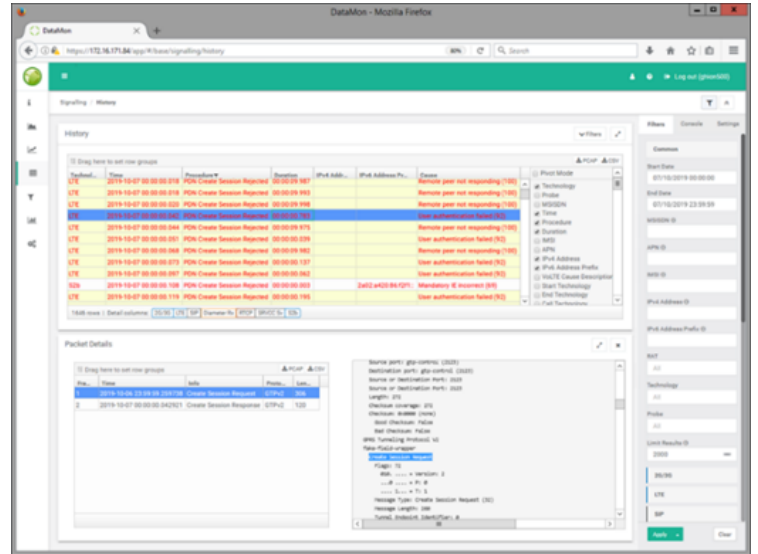
Network teams can make use of the real-time statistics provided through DataMon's configurable dashboards. They can guarantee network performance & service availability by using its alarming functionality to quickly address incidents occurring in the network.



DataMon for Engineering teams

Troubleshooting is easy: For each network transaction, DataMon generates detail records, also called procedures, that can be filtered & drilled-down to perform root cause analysis. In addition, Core network, Roaming & RAN teams can use DataMon's decode functionality to analyse raw protocol messages. These can also be exported in Wireshark format for offline usage.

All data records can be exported as a data feed to third party systems such as Big Data platforms and BSS/OSS systems.



Engineering teams can use DataMon's trending views to assess network performance during different days. Results can be viewed for different dimensions like APN, Network Elements, Operators or Roaming type of traffic (inbound or outbound). For each day, the corresponding hourly profile is also presented.

Drill-down functionality to identify problematic root-cause behaviour is also available. Failed signalling procedures with the corresponding reject causes are available to the end-user. Both network impact but also number of affected subscribers is calculated.

