

DATA SHEET

Ativa™ Roaming Services, Peering & ILD Monitoring Solution



Improve roaming services in mobile and interconnected networks

With the **Roaming Services, Peering & ILD Monitoring Solution**, Infovista Ativa™ enables network operators and carriers to intuitively visualize and troubleshoot any issues related to inter-network mobility call and media performance. The solution package increases network reliability, reduces time-to-resolve, enhances network performance, and improves quality of experience (QoE) for customers. It simplifies network operations and reduces workload.

Operators use the Roaming Services, Peering & ILD Monitoring Solution to monitor call service quality and SMS performance in different types of mobile and interconnect networks, correlate degradations with the underlying roaming mobile networks, identify and resolve the root-causes of problems, and proactively resolve them with automated troubleshooting.

What we can do

Monitor: Roaming, peering and ILD KPIs/KQIs

Detect: Call and media service failures and network performance degradation

Isolate: Determine the root-cause of failure and prepare for actionable workflows

Analysis: Call and media, Network and service costs

Visualize: Call and media data for international interconnects and roaming subscribers using multiple dimensions (device, location, network elements, etc.)



Benefits for customers

Service visibility: Call performance visibility for mobile roaming subscribers or network peering scenarios

Understand: Call services with analysis across multiple networks

Richer Analytics: Multi dimensional analysis of call services for interconnected networks and roaming subscriber traffic, including call cost analytics

Supporting geographical drill-down from country to cell and device (manufacturers, model and OS) level, the solution package enables a detailed analysis of end-to-end service call quality and network data traffic, validate RAT procedures and improve mobility.

The package provides a multitude of performance indicators using very flexible visualization capabilities with dashboards, reporting and alarm views. Operators use them to generate advanced analytics and actionable workflows for root cause analysis (RCA) and resolution.

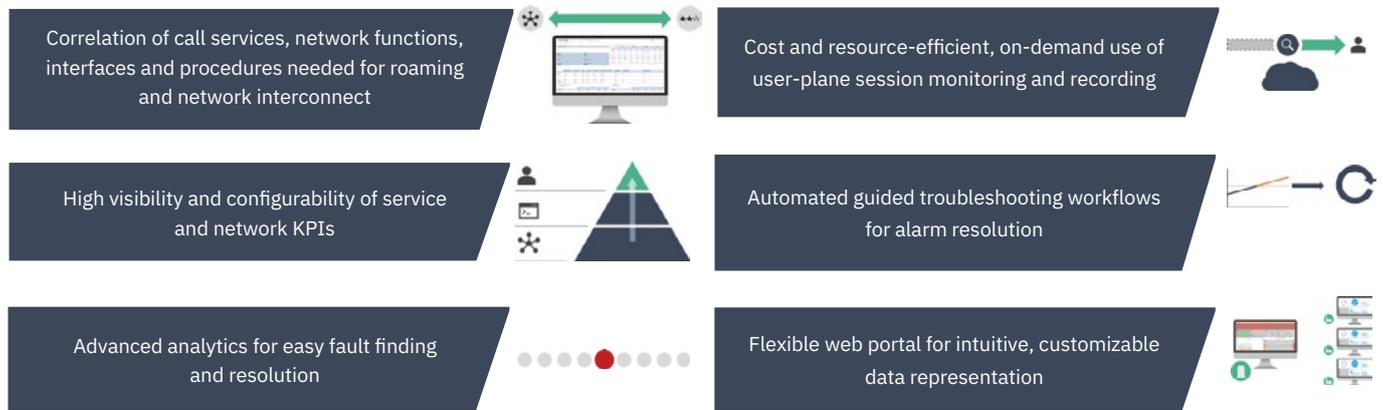


Business challenges addressed by the solution

Current network and service monitoring solutions limit the operators’ ability to visualize and proactively manage their operations with a focus on mobility offerings, resulting in poor customer experience, high OPEX, the reliance on multiple ‘silo’ assurance systems and an inability to respond quickly to changes in network usage and performance. Some typical challenges are listed below:

Limited domain monitoring tools	Monitoring tools are designed for specific network domains, and often used by separate teams, each focusing on other aspects of the network or services. This results in the lack of a comprehensive, correlated view of call service experience, application performance and network resource performance.
Lack of correlation to customer experience	Network monitoring tools traditionally provide network specific KPIs in an isolated way, such as resource availability, utilization and throughput. But these do not translate directly into an understanding of customer experience, as perceived by the users themselves.
Lack of readiness to support SLA	Traditional troubleshooting tools are designed for static, simple network topologies, with easy fault remedy. Cross-domain issues are directly impacting services. This is particularly true when faced with stringent SLA criteria that places direct monetary value on the CSP’s ability to isolate and resolve problems. The result is that CSPs are reluctant to offer voice SLAs.
Manually intensive, increasingly complex operations	New generation networks are dynamic and flexible, increasing complexity for operations. As a result, operational activities are under pressure to provide faster and more efficient answers to existing problems and resolution for them.
High infrastructure resource workload	Visualizing customer experience at scale is increasingly resource-intensive, both in terms of the monitoring tools themselves and the workload placed on the underlying infrastructure, with knock-on effects on compute capacity utilization and costs.

The Roaming, Peering & ILD Monitoring Solution addresses these problems with an end-to-end view of service experience, with cross-domain correlation and automated guided workflows for rapid problem identification, root-cause analysis and resolution.



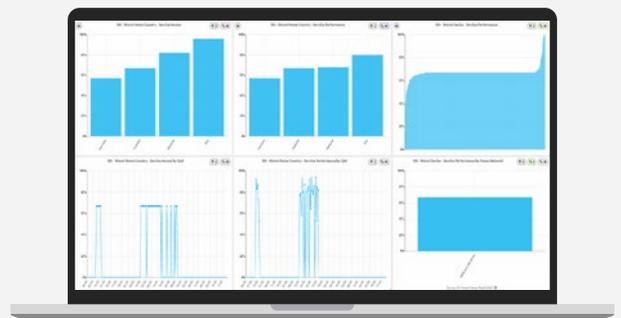
Key features of the solution

The solution package includes pre-configured dashboards, KPIs and analytics / troubleshooting capabilities specific to roaming within mobile networks, including:

Dashboards and reports

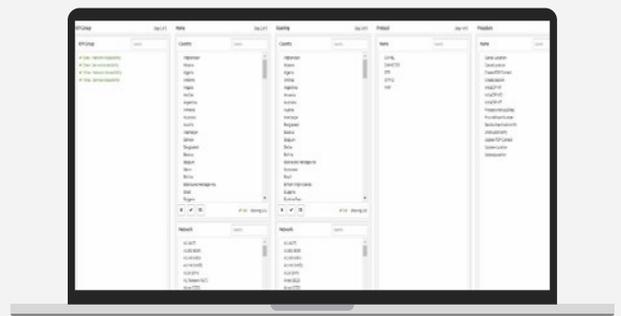
Service dashboards showing key roaming network and call service KPIs that can be filtered by geographical location, device types and others. They summarize KPIs including call success and failure rates, quality of service and protocol procedures. These dashboards include:

- Roaming inbound & outbound performance dashboards
- Service alarm roaming dashboards
- Peering - network analysis: node, route, SBC
- Peering - call, carrier & media analytics dashboards
- Peering - cost analysis



Alarm dashboards for Roaming, Peering and ILD and roaming that provide real-time awareness of network alarms, with guided workflows for further investigation and troubleshooting.

Interactive reports enable faster isolation of problem areas or focus areas, by filtering dashboard views by any combination of factors, with a focus on network interconnect, roaming and call/media performance.



Analytics and troubleshooting

End-to-end tracing tools, providing a single solution for analyzing multi-service and multi-protocol 5G network environments from a single pane of glass. Features include:

- Support for cross-protocol correlation for the rapid identification of problems and root-causes
- Support for drill-down analysis across user plane, control plane, transport and security plane data
- End-to-end session tracing, regardless of access point or service delivery method



KPIs and interfaces

Comprehensive interface support, including all interfaces, protocols and monitoring points to address network interconnection and roaming, supporting multiple service models:

- Geography: country, region, city, cell
- Device: manufacturer, model, OS
- Roaming differentiation: abroad, international visitor
- Protocols: GTPv1, GTPv2, PFCP, MAP, CAMEL, SIP, SIP_TDR, ISUP, Diameter
- General metrics: volumes and ratios (total, successful, failed)
- Call leg metrics: ASR, ALOC, NER, average PDD
- Call metrics: volume and duration
- Traffic: client-, server-, network response time
- Service group stats: service access and service performance



About Infovista

Infovista is the global leader in network lifecycle automation (NLA) for the next-gen networks era. With its unique NLA approach, Infovista allows communications service providers (CSPs) and enterprises to improve their network performance and customer experience, optimize their productivity, and reduce their costs, while maximizing return on their investments. Spanning the entire network lifecycle, Infovista's products and solutions leverage an open, integrated, cloud-native portfolio that automates tasks, flows, analytics, and decisions to the greatest extent possible. More than 1,500 customers, including 400 mobile network operators, around the world rely on Infovista to plan, design, deploy, test, operate, support, optimize, evolve, report on and monetize their networks.