



Overview





Problem Statement: End users can experience degraded quality, leading to suboptimal application performance. This can be caused by various factors across the network between the end device and the service, or issues within the application itself.

Session Insights is a concept of Network as a Service that transforms applications into network monitoring tools by leveraging a set of APIs to facilitate two-way communication between applications and the network, enhancing customer experience.

This approach provides true visibility into user experience by allowing applications to share real-time Key Performance Indicators (KPIs) and network requirements that can be correlated with network performance.

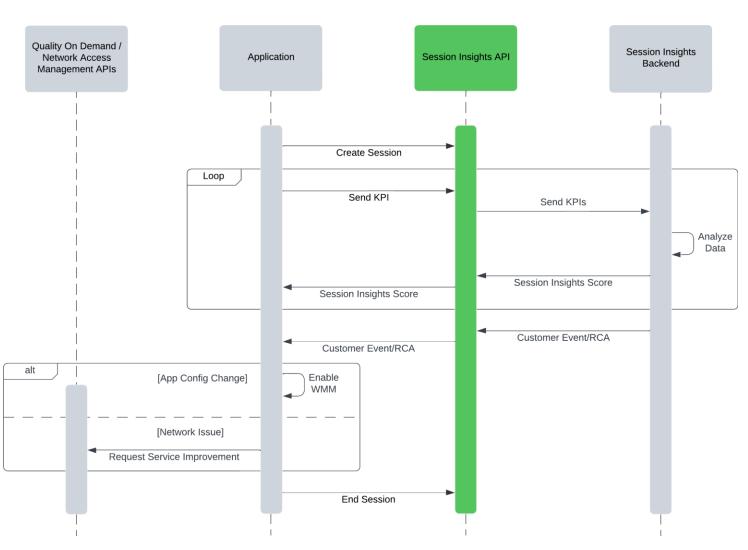
Example Flow



Session Insights API Example Flow

Allows application to:

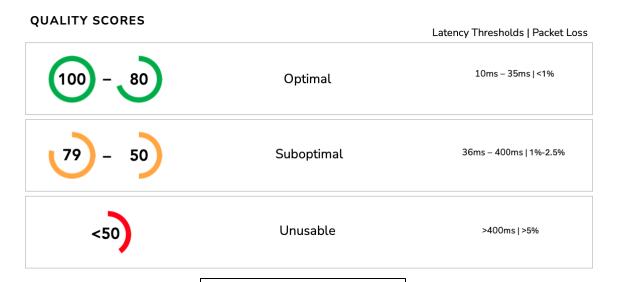
- Create session (subscription)
- Send KPIs to network operator
- Receive Session Insights score
- Receive event/RCA
- Respond to RCA
 - Update app config
 - Request service improvement
- End Session



Use Case – Wi-Fi Congestion



Common Wi-Fi congestion scenario affecting performance for applications such as video conferencing.



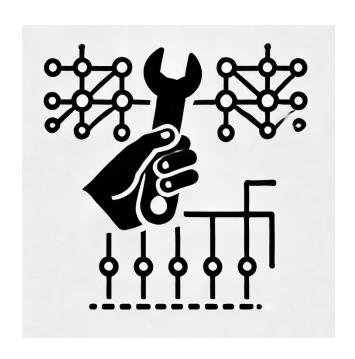
Sample Thresholds

- Application configures thresholds for KPIs such as latency and packet loss
- Network operator analyzes KPIs sent and calculates Session Insights score
- When score drops below threshold, event is triggered to start root cause analysis
- Example: root cause is Wi-Fi congestion.
 WMM could be enabled for the application to prioritize network traffic and improve video quality

Use Case – Access Network Impairment



Access Network experiencing issues causing degradation of application performance.



- Session Insights configuration and analysis performed
- If issue is determined to be with the access network, the application could request service improvements with the network operator by calling APIs such as:
 - QualityOnDemand API
 - NetworkAccessManagement API