Network QoE Dashboard

Last updated: 11:40:41 | Refresh

NETWORK ELEMENTS
7
7 active / 0 inactive

OVERALL QOE
85%
Based on latest performance data

ACTIVE ALERTS
0
0 total alerts in last 24 hours

PERFORMANCE TESTS
0
Last test: No recent tests

Domain Health

RAN
100.0%
• 2 active / 2 total

TRANSPORT
100.0%
• 1 active / 1 total

CORE
100.0%
• 2 active / 2 total

INTERNET
100.0%
• 2 active / 2 total

QoE Performance Trend

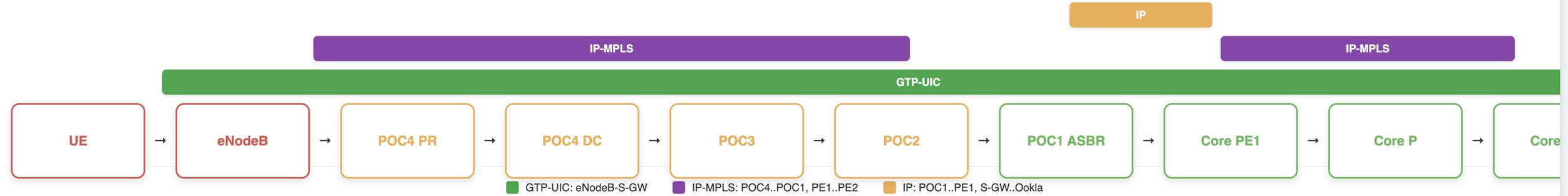
Recent Alerts

View All

No alerts in the last 24 hours.

Mobile Network QoE Impact Simulator with Protocol Layers

Network Topology & Protocol Stack



Domain Impact Analysis

RAN 80

Transport 80

Core 80

Internet 80

Save This Scenario

Scenario Name

Description

Network QoE Reports

Export

KPI Trends

View trends and patterns in key performance indicators over time

View Report

Domain Health

Monitor the health of network domains and components

View Report

QoE Analysis

Analyze Quality of Experience scores and performance patterns

View Report

Alerts Summary

Summary of network alerts and issues by severity and domain

View Report

Report Filters

Time Range

Last 24 Hours | Last 7 Days | Last 30 Days

Network Domain

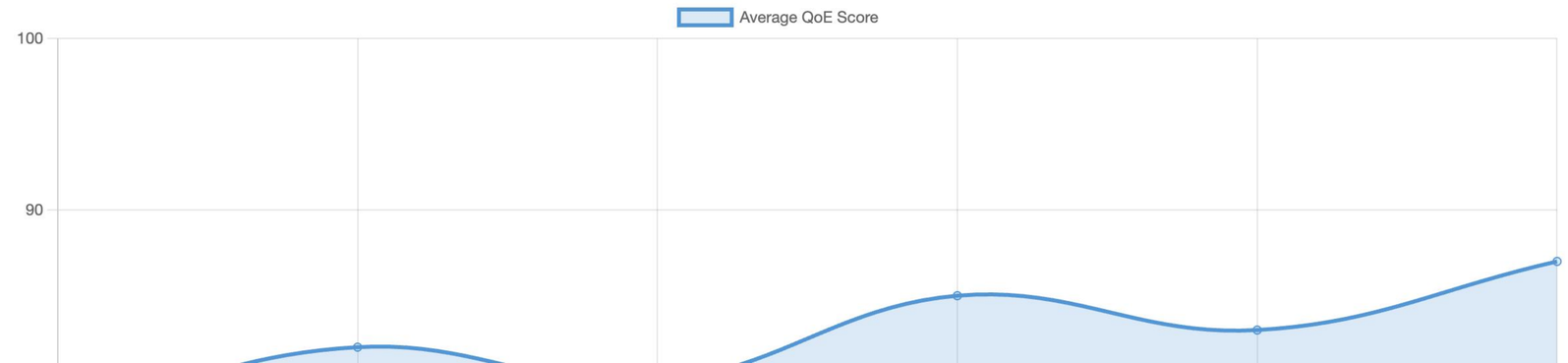
All Domains

Apply Filters Reset

Quick Insights

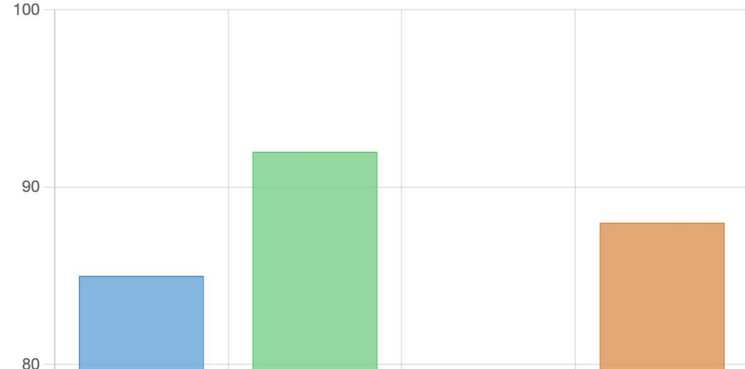
QoE Performance Trend

Full Report



Domain Health

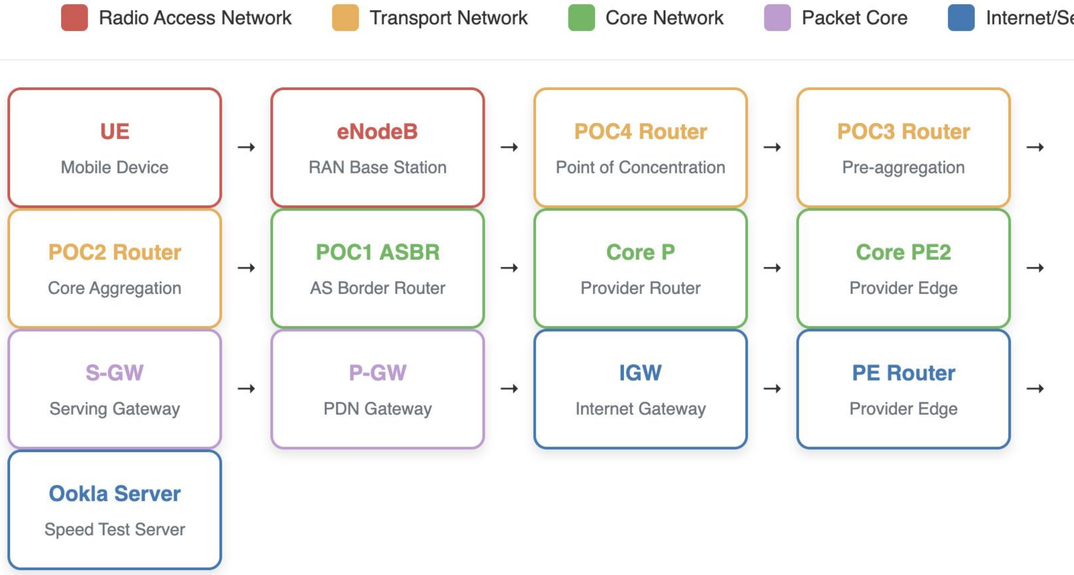
Full Report



Network Performance Troubleshooting Guide

A comprehensive analysis of the Mobile network architecture for troubleshooting poor Ookla speed test performance.

Network Architecture & Call Flow



End-to-End KPI Framework

Monitor these critical metrics across the entire path:

1. **Throughput** (DL/UL speeds)
2. **Latency** (Round trip time)
3. **Jitter** (Delay variation)
4. **Packet Loss** (Loss percentage)
5. **Availability** (Service uptime)
6. **Quality** (Signal quality index)

Troubleshooting Methodology

1. Start with radio layer analysis (signal quality, interference)
2. Check transport network utilization and congestion
3. Verify core network routing and MPLS performance
4. Analyze packet core gateway performance
5. Test internet connectivity and server response

Critical KPIs by Layer

Radio Access Network (RAN):

- **UE:** Signal strength (RSRP/RSRQ), device capabilities

Mobile QoE Impact Dashboard

Real-time Network Performance Optimization

56

Overall QoE Score

Needs Improvement

Key Performance Indicators

Download Speed	90 Mbps
Upload Speed	36 Mbps
Latency	32 ms
Jitter	5.1 ms
Packet Loss	0.01%
Reliability	99.9%

Technical Deep Dive

This page will provide a detailed reference for EUTRAN network architecture, protocols, and KPIs. Implementation is in progress.

EUTRAN Network Architecture

UE
eNodeB
MME
S-GW
P-GW
HSS
PCRF
Internet/IMS
LTE-Uu
S1-MME
S1-U
S11
S6a
Gx
S5/S8
SGi

GTP Tunnel Context

eNodeB
S-GW
P-GW
User Plane (GTP-U)
Control Plane (GTP-C)

LTE Interface Specifications

Interface	Description	Protocols
S1-MME	Control Plane between eNodeB and MME	S1-AP, SCTP
S1-U	User Plane between eNodeB and S-GW	GTP-U, UDP/IP
S6a	Authentication and Authorization	Diameter
S11	Control Plane between MME and S-GW	GTP-C, UDP/IP