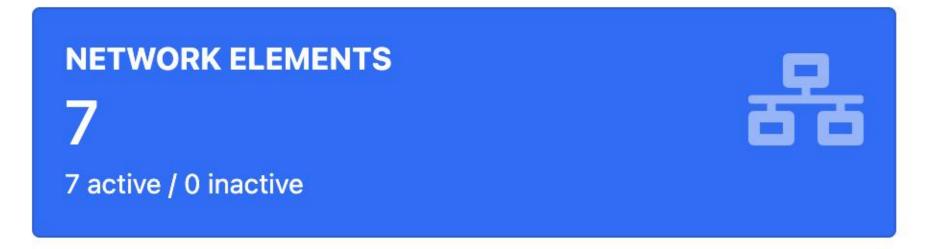
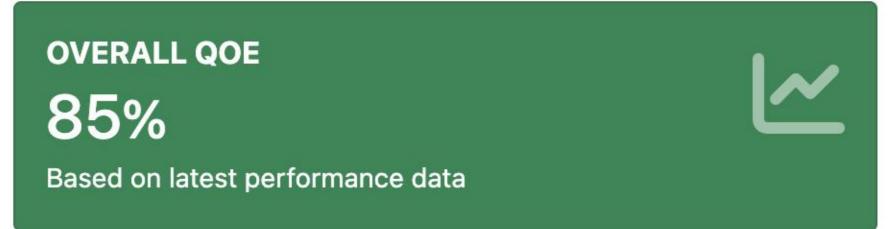
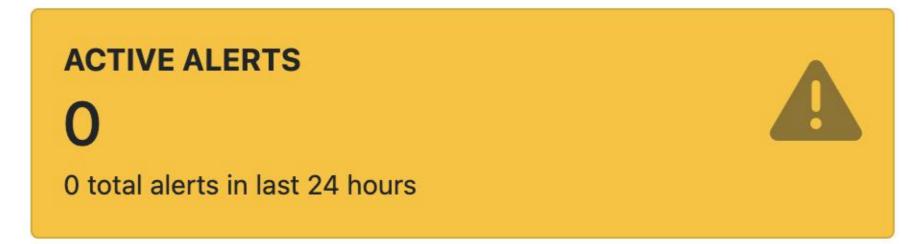
Metwork QoE Dashboard

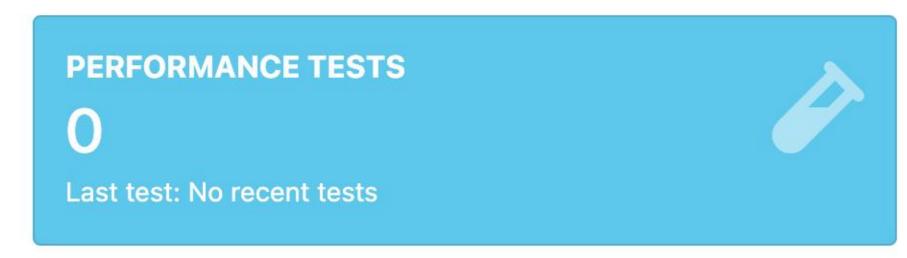


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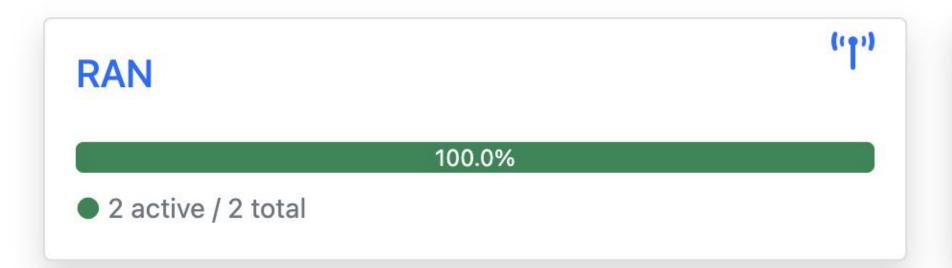


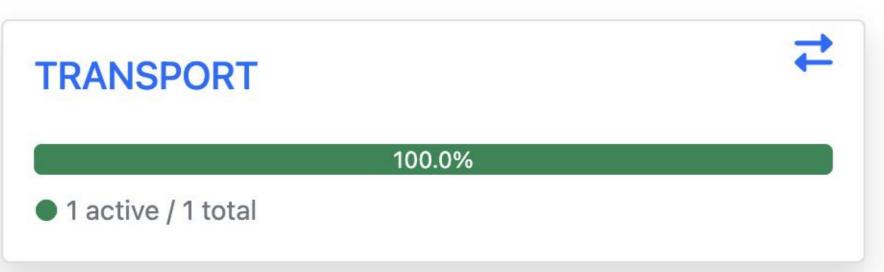


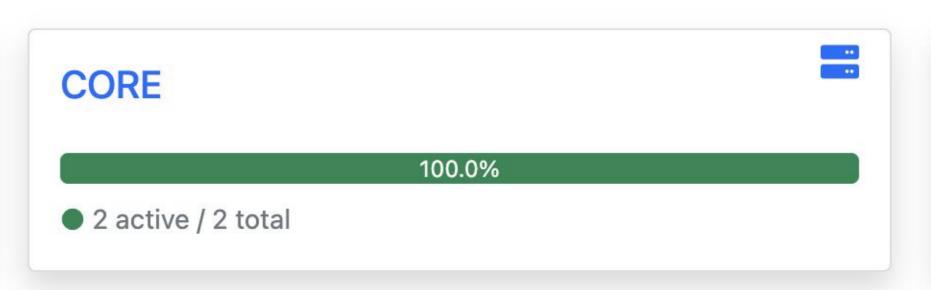


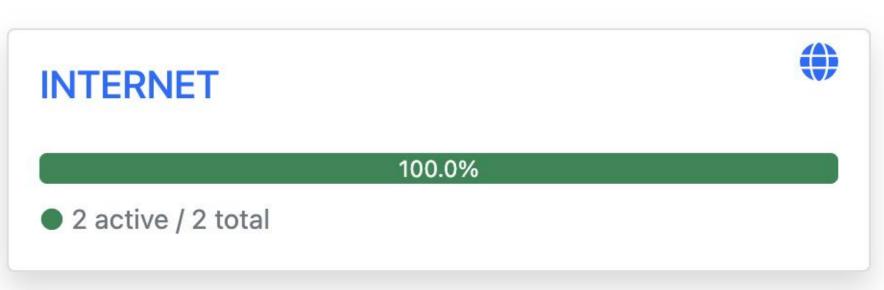


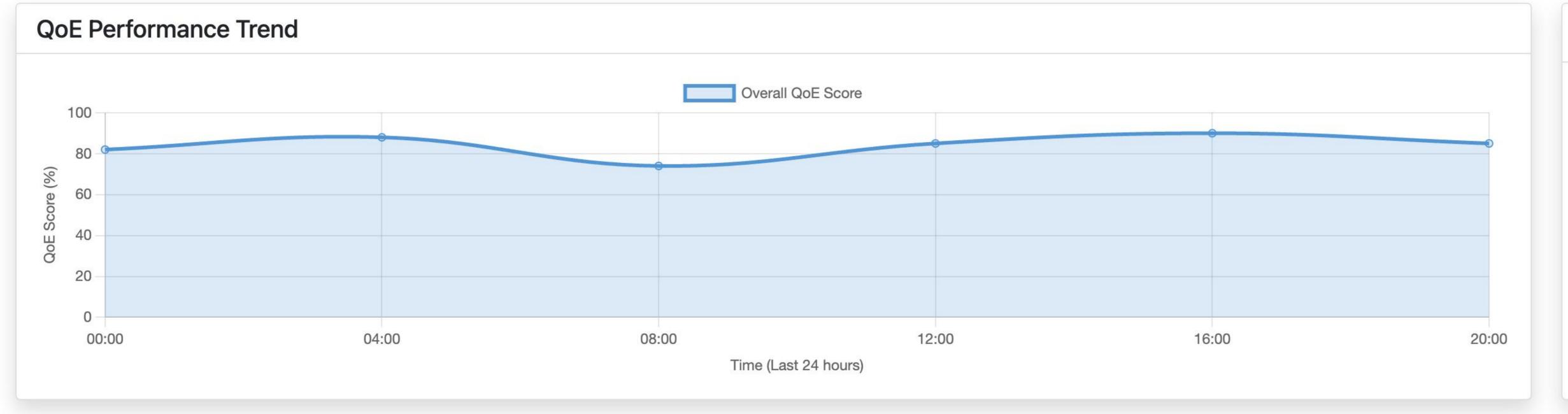
Domain Health

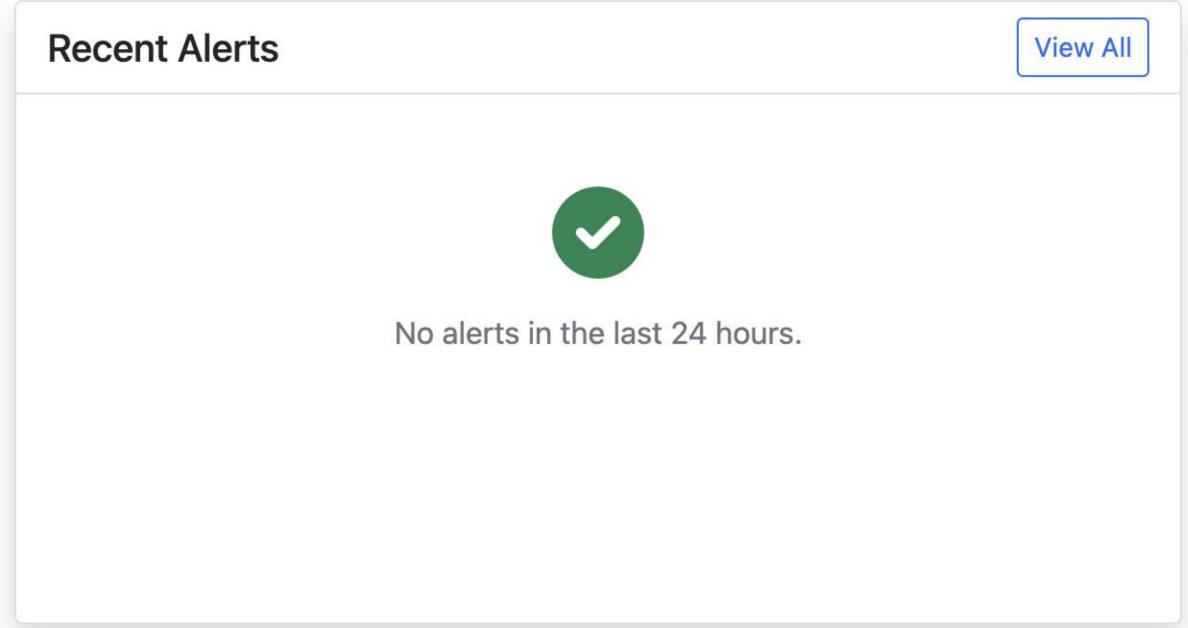






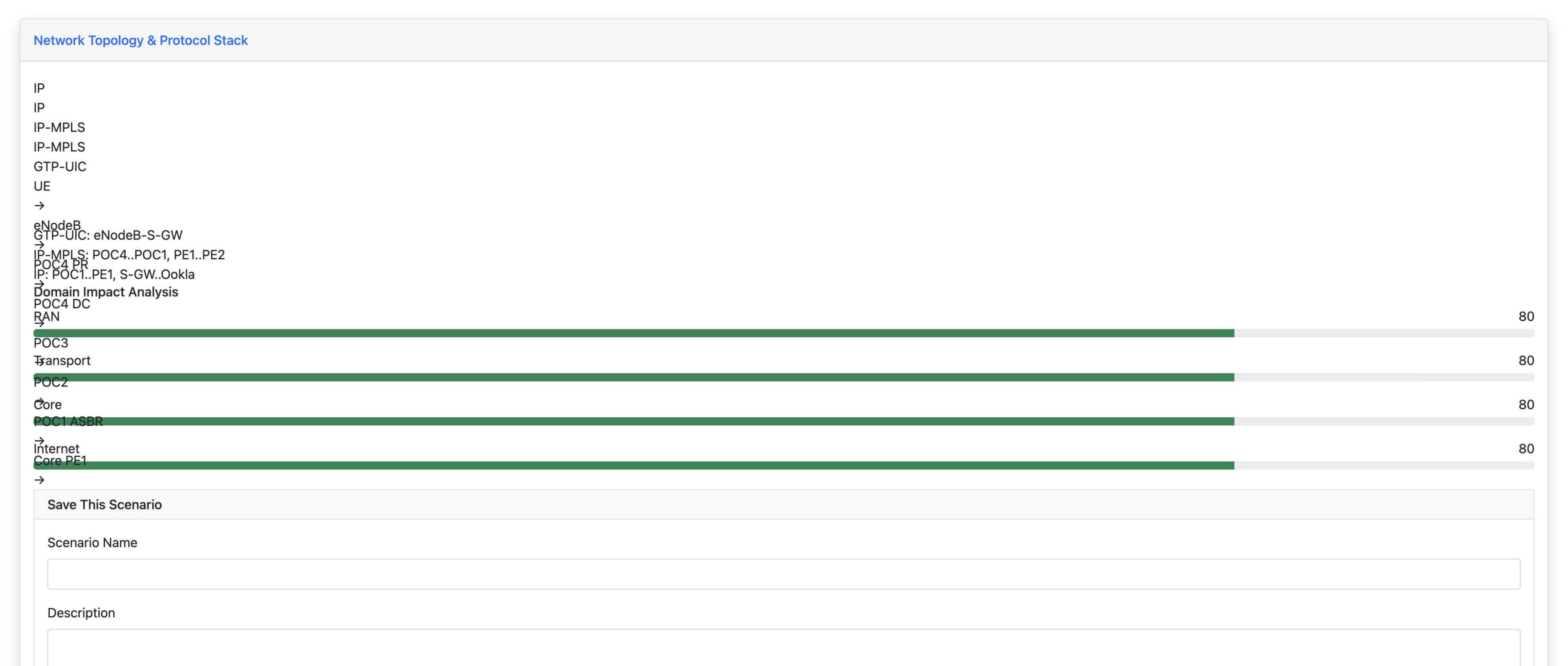






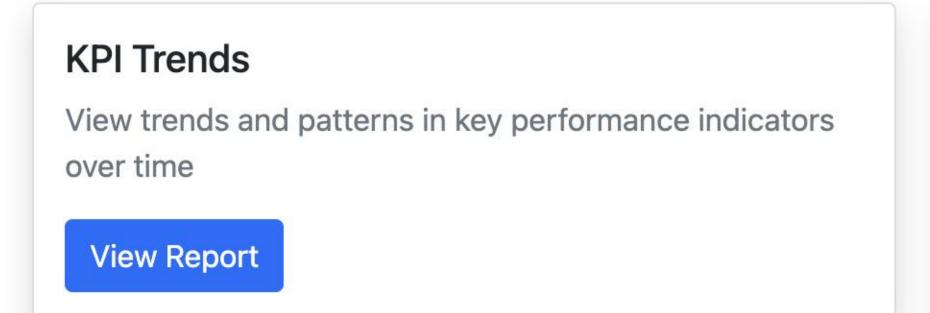
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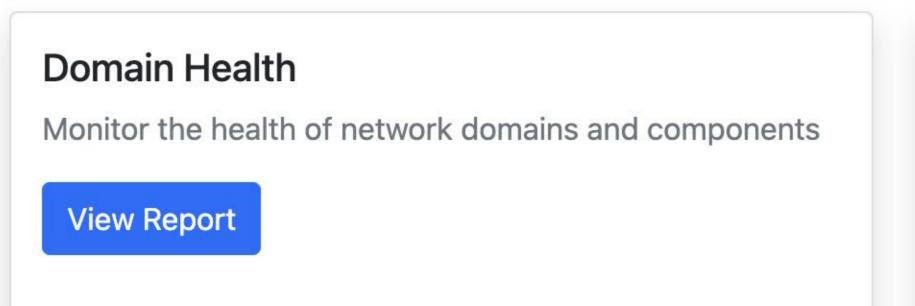
Mobile Network QoE Impact Simulator with Protocol Layers

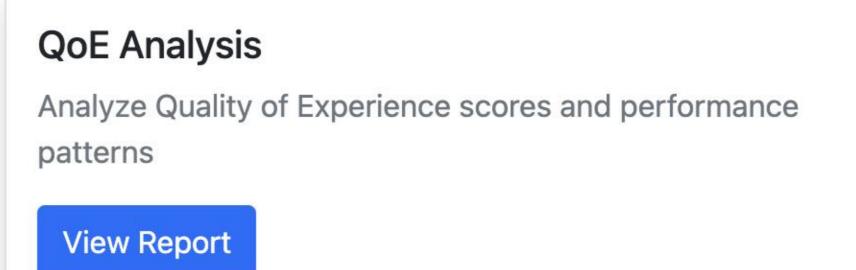


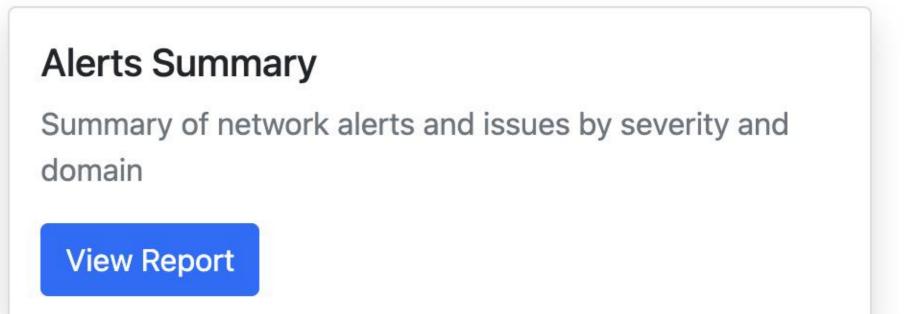
Network QoE Reports

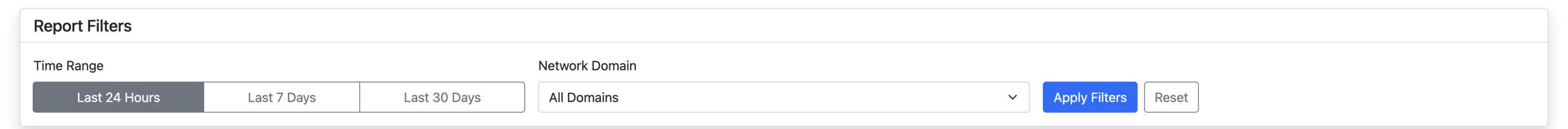




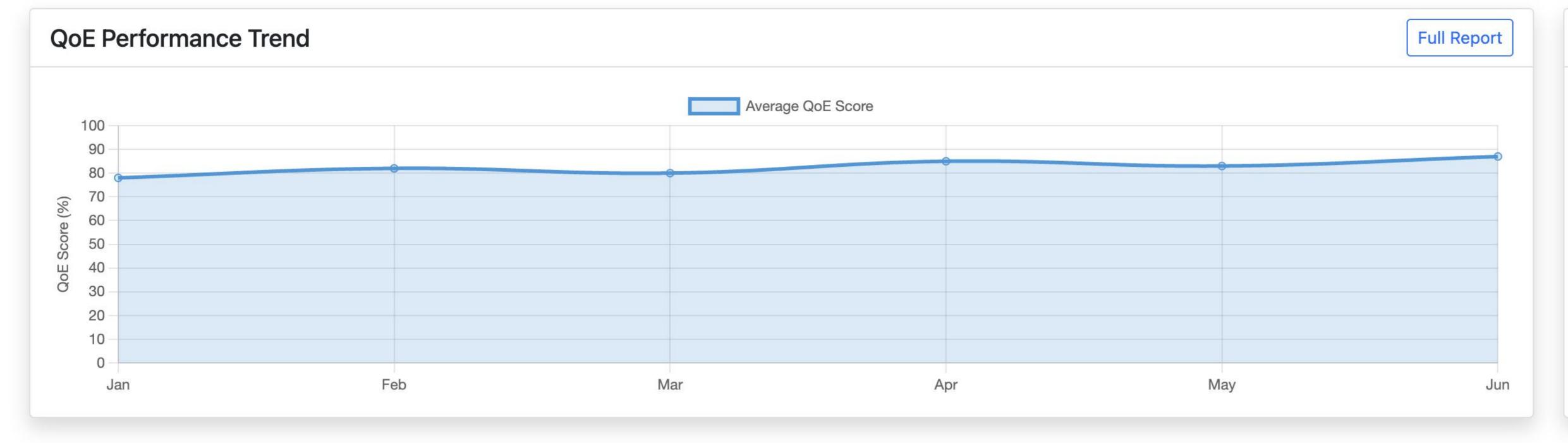


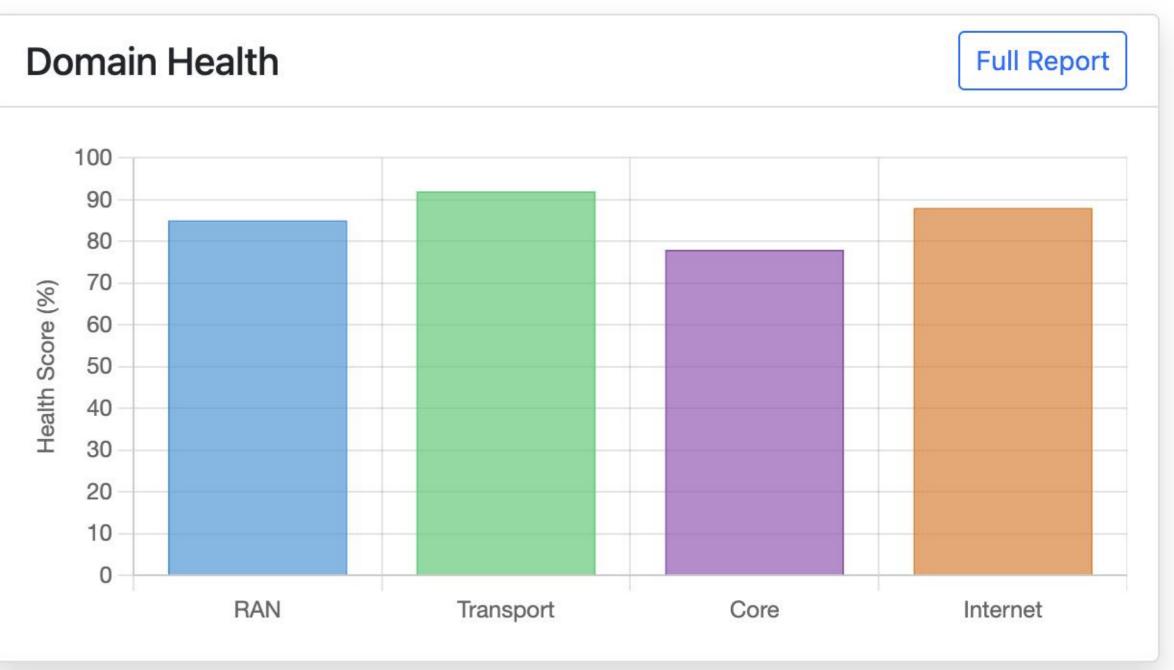






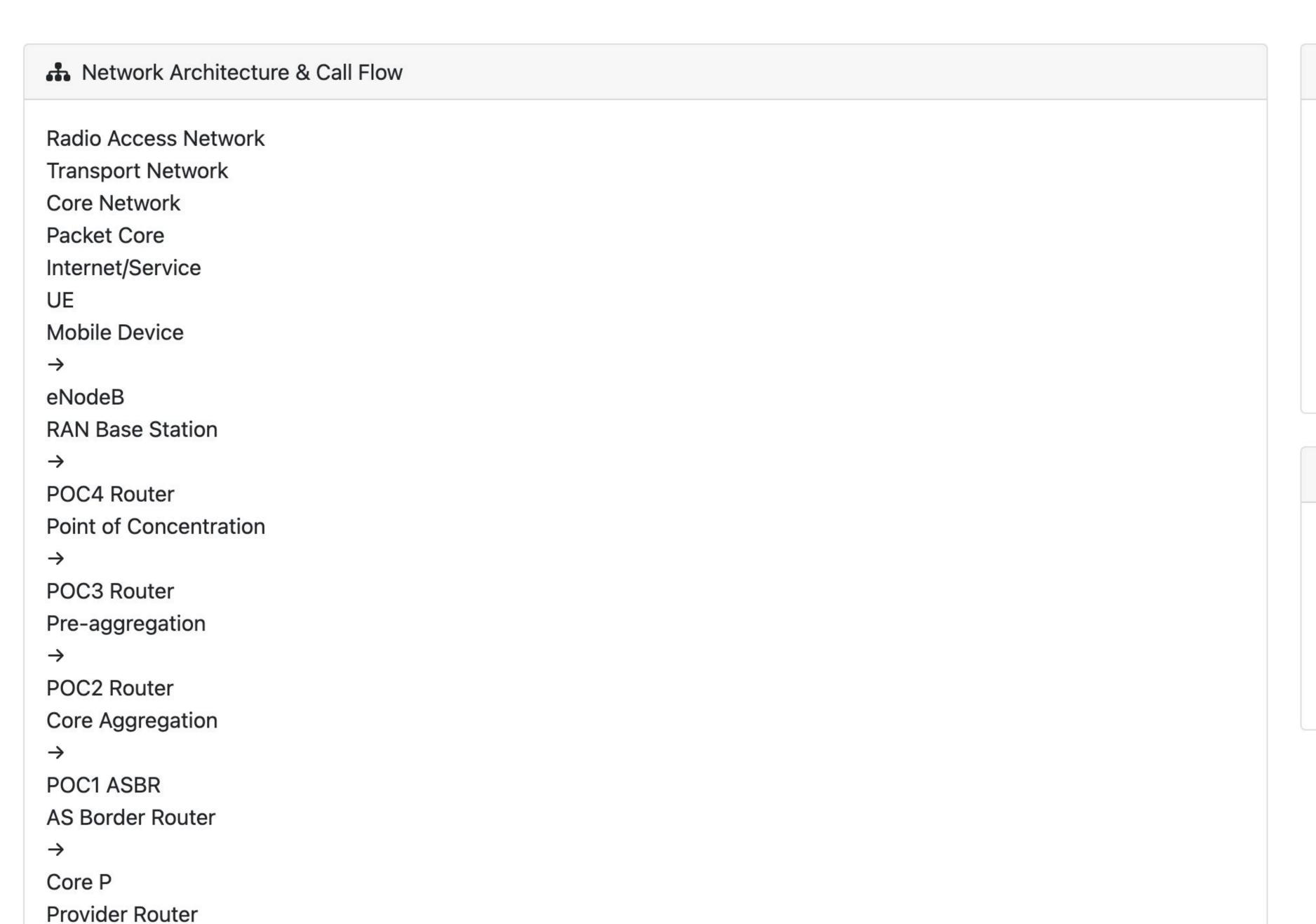
Quick Insights





Network Performance Troubleshooting Guide

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



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

Mobile QoE Impact Dashboard

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Real-time Network Performance Optimization

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Overall QoE Score

Needs Improvement

Key Performance Indicators

Download Speed
Upload Speed
Latency
Jitter
Packet Loss

Performance Radar

Reliability

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

SGi

S5/S8

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