



# Performance and Operational Monitoring

Proactively troubleshoot problems in real time by monitoring service performance and quality indicators



Sandvine's network intelligence and service innovation capabilities can be

leveraged in 5G core and edge environments, delivering critical contextual and slice awareness to feed new service creation and strengthening an operator's position in the 5G value chain for consumer and enterprise markets.

## PERFORMANCE AND OPERATIONAL MONITORING DELIVERS:

### Real-Time Network Dashboards

View network anomalies and monitor overall network behavior with Sandvine's real-time APIs

### Interactive Network Troubleshooting

Review network performance by service and location to help diagnose network problems

### Network Quality Monitoring

Leverage ScoreCard to identify network quality hotspots in your network

### MARKET OVERVIEW

When network problems occur, operators need the tools to determine exactly what is happening on their infrastructure. Applications are far more sensitive to network issues than ever before and customers' quality expectations continue to increase, causing them to complain quicker when issues arise.

Modern networks are incredibly complex; they're made up of many elements, often spanning vast geographies, working together to deliver crucial services to consumers, businesses, government organizations, connected cars, and an ever-growing list of internet-capable devices. A lot can go wrong and seconds matter.

Keeping today's networks up and running requires rich, deep, and broad real-time data analysis to diagnose problems, prioritize operational activities, and inform actions. With the right performance and operational metrics, network operators are empowered to make quick and accurate decisions that can save the day; without these metrics, operators must play a high-stakes guessing game when troubleshooting network issues.

### SOLUTION OVERVIEW

**Sandvine's Performance and Operational Monitoring use case is designed to give operators real-time visibility into how their network is delivering service to their users.**

The extensive data collected by Sandvine's ActiveLogic ensures operators have a granular view of how each network segment is performing and how specific high-value applications are performing throughout the network. Any abnormal traffic behavior is immediately visible – whether viral content, an attack in progress, or the start of a live event – and operators can adjust their network configuration, resources, or policies to adapt to new conditions.

Contextual dashboards provide insights into the performance of the network for the services being delivered.



### Service Health

Quickly see application performance and understand network-impacting events with the Service Health dashboard. This aggregate view shows application quality of experience (QoE) – packet loss, throughput, and latency for each application – updated every five minutes. More importantly, it allows network operators to focus on the popular, quality-sensitive applications on their network, providing them with context they need to understand real-time network events.

Figure 1

Monitor application performance in real time to understand subscriber experience during network-impacting events

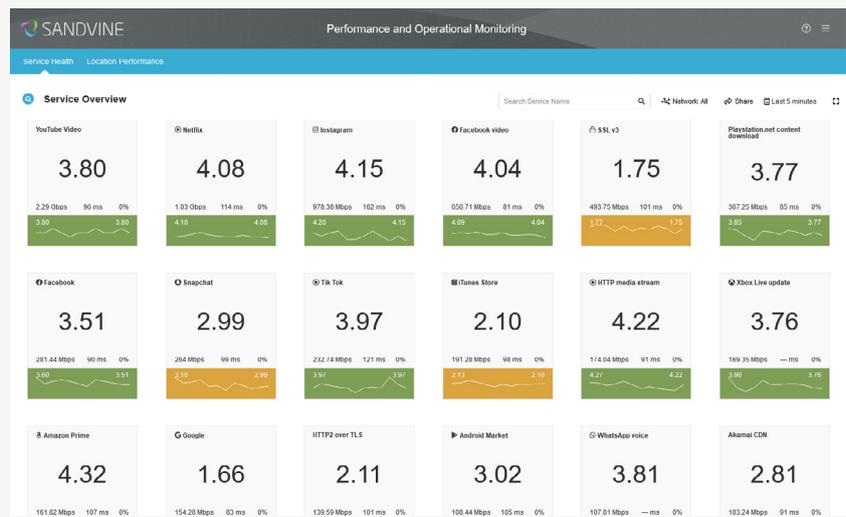
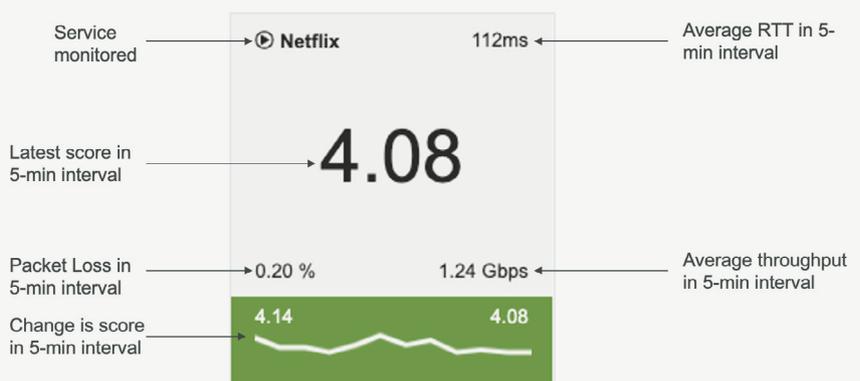


Figure 2

Application tile details



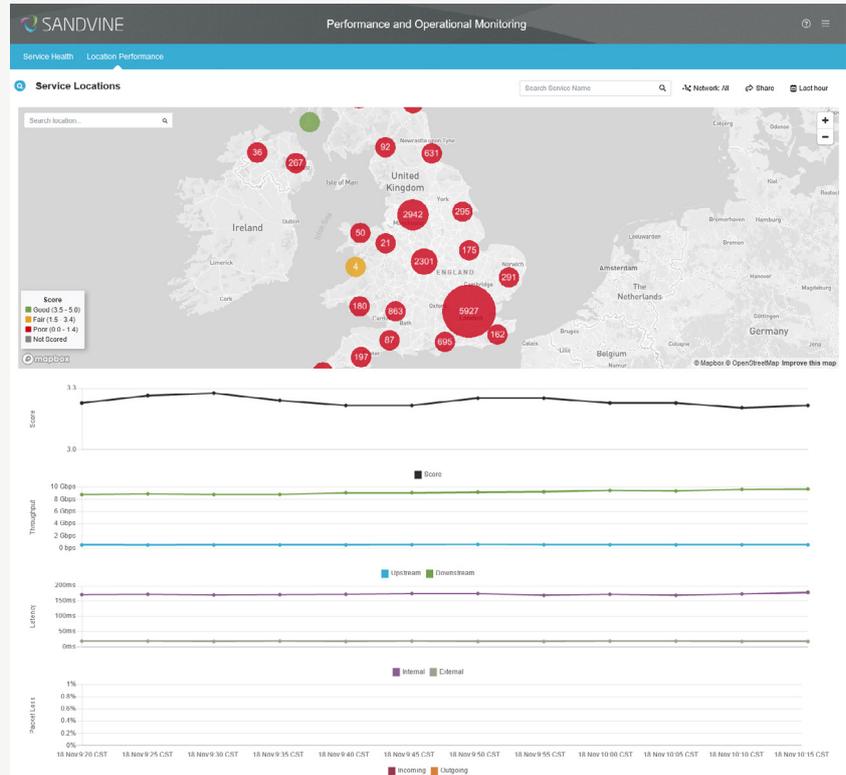


### Location Performance

This view shows the geographical distribution of network usage and performance trends for root cause analysis, enabling operators to quickly identify high-usage areas and – with visual markers based on QoE scores – highly problematic areas.

Figure 3

Review QoE score, packet loss, throughput, and latency trends for specific locations to gain context for service performance issues



Sandvine’s Performance and Operational Monitoring use case lets operators quickly diagnose issues before they become service-impacting problems, and respond in a timely fashion should problems arise. Ultimately, network users are more satisfied and operational efficiencies increase, enabling operators to increase customer satisfaction and retention.

### ABOUT SANDVINE

Sandvine’s cloud-based Application and Network Intelligence portfolio helps customers deliver high quality, optimized experiences to consumers and enterprises. Customers use our solutions to analyze, optimize, and monetize application experiences using contextual machine learning-based insights and real-time actions. Market-leading classification of more than 95% of traffic across mobile and fixed networks by user, application, device, and location creates uniquely rich, real-time data that significantly enhances interactions between users and applications and drives revenues. For more information visit <http://www.sandvine.com> or follow Sandvine on Twitter @Sandvine.



**USA**  
5800 Granite Parkway  
Suite 170  
Plano, TX 75024  
USA

**EUROPE**  
Svärdfiskgatan 4  
432 40 Varberg,  
Halland  
Sweden  
T. +46 340.48 38 00

**CANADA**  
410 Albert Street,  
Suite 201, Waterloo,  
Ontario N2L 3V3,  
Canada  
T. +1 519.880.2600

**ASIA**  
RMZ Ecoworld,  
Building-1, Ground Floor,  
East Wing Devarabeesanahalli,  
Bellandur, Outer Ring Road,  
Bangalore 560103, India  
T. +91 80677.43333

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