

Data Sheet

About Netradar

Netradar helps telecom operators to identify poor mobile experience and assist them to focus their investments in places where it matters the most for their customers. We provide an end-to-end solution for collecting network performance data directly from mobile handsets. Our unique hybrid measurement technology provides detailed, continuous measurements about network performance, revealing true quality experienced by mobile users. Data is stored securely in a private cloud or in our customers' own data centers.

Netradar's hybrid technology solves problems associated with active and passive data collection solutions. Instead of executing synthetic measurements and trying to infer something and claim performance issues, Netradar studies the consumer's real daily data usage, real app traffic, and can tell the performance of your network and the impact on the consumer.

Netradar does not sell data collected from 3rd party apps. Instead, we provide leading data-collection technology to operators. This enables collection of vast amounts of detailed data to be used in strategic and operational decision making. Use cases include network planning, optimization, troubleshooting, quality assurance and competitive benchmarking.

Key Features

• Service Level Score[™] reveals user experience issues with the network and mobile apps. Netradar technology monitors each data session and identifies the root cause for poor user experience. It distinguishes app issues from network issues, highlighting when the root cause is a poorly performing app and when the network. For operators, this ability to identify when and where network limits user traffic is a crucial insight that legacy tools do not provide.

Figure 1 - Monitoring the indoor coverage and capacity is critical with 5G rollouts.

log User experience	Finland Coverage SLS	SLS-10 Indoor SLS-multiple	DNA Elisa Telia	
Network				
Anomaly detector	5 anomalies found		Indoor anomaly details	
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Lo Devices	Filter by a city			
🍪 Data usage			- Manager - Add	
BII Customer care	Vantaa	Lat: 60.28806 Lng: 25.03261		
& GNSS		Lat. 60.20000 Dig. 25.05201	Cont and	
œ Wifi	Population Density: 675.1 / km ²	Users: 6 Sessions: 1864	Contraction of the second	
Administrator			Un Carton in	and the second s
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	Helsinki	Lat: 60.16723 Lng: 24.93084		
		Users: 13		
	Population Density: 1337.1 / km ²	Sessions: 4491		
			N.C.	Rustold Bor shall
	Lahti	Lat: 60.98053 Lng: 25.65862	NOT COM	
		Users: 6	ANT LA RESIDE	
	Population Density: 319.2 / km ²	Sessions: 156	196 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			AS AS A	
			A CARLON DE DE COMPANY	
	Helsinki 	Lat: 60.16856 Lng: 24.94171		E F
	Population Density: 1337.1 / km ²	Users: 15	A PART A	
		Sessions: 345		

• **Indoor Analytics** maps data sessions into indoor-outdoor zones including detailed location and altitude. Operators get real insight into network performance in different conditions. Indoor Analytics enables pinpointing indoor performance issues to small areas, buildings, and even floors (Figure 1).

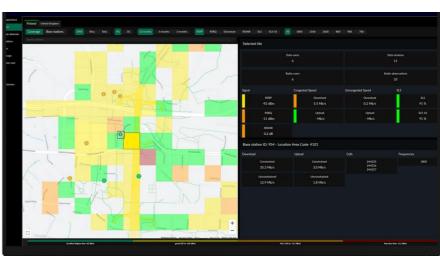
• Advanced Troubleshooting with **Anomaly Detector**. Netradar's Artificial Intelligence algorithms detect network anomalies not easily spotted through network statistics. Anomalies are identified and highlighted based on poor customer experience, indoor/outdoor coverage, and network performance issues (Figure 2).

> Figure 2 – Netradar algorithms like Advanced Network Capacity Analysis highlight areas with coverage and capacity challenges and enables linking them back to network elements.



• Network View gives operators familiar view to their network from the end customer point-of-view (Figure 3). All cellular technologies (including 5G NSA and SA) and frequencies are featured in addition to WiFi to a build complete 360-degree view. Technical teams can drill down to individual base stations to analyze issues and performance.

Figure 3 - Network view links performance metrics back to respective network elements. This data is used to complement network statistics for optimization and troubleshooting.



Solution Overview

• Netradar data is collected via SDK activated in any Android app, typically operator own apps. Activation of Netradar SDK is very simple process. Solution backend consists of Netradar core technology, data storage and key algorithms. Netradar Dashboard gives a quick overview of operator service performance as seen through the eyes of end users. Netradar is typically deployed in operator's private cloud environment (Google Cloud Platform or Amazon AWS) or virtual machines in their own data center. Netradar collects 290 KPIs per each data session. (Figure 4)

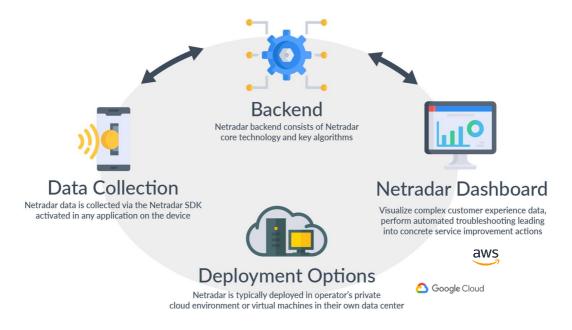


Figure 4 - Overview of Netradar end-to-end solution

Tailored for Mobile Operators

• With Netradar Dashboard operators can visualize complex customer experience data, perform automated troubleshooting leading into concrete service improvement actions – ultimately into efficient and effective investments performance.

• Netradar Hybrid technology enables collecting significantly more data than legacy solutions. Lightweight SDK is quickly activated in any Android app. Data and battery consumption are negligible. Solution solves issues with sampling bias, data consumption and battery drain, which are big issues with legacy crowdsourcing methodologies.

• Fast Deployment Process guarantees a hassle free and quick solution deployment. Standardized solution modules are deployed, configured, and activated expediting operators to have a quick access to unique insights.



Benefits Summary

- **Optimize investments and deliver best possible customer experience** by targeting network investments and activities at places with the biggest impact on the true customer experience.
- Detect and solve major customer issues before they have significant impact on user experience.
- OPEX Savings as less or even any drive and walk testing, are needed
- Turn-key solution enables operators to focus on the results and not the integration process or complex tools.



Want to learn more? Request a Demo! Contact us to schedule a free demonstration.

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