

# SmartTraffic QoE

## Traffic Management solutions that deliver optimal end-user Quality of Experience (QoE)

Today's highly competitive CSP landscape is more challenging than ever. To stay relevant, you must cost-effectively deliver top-notch experiences to your customers, while dealing with technological changes and ever-increasing capacity demands. In such a complex environment, delivering optimal QoE is no simple matter.

### What is SmartTraffic QoE

SmartTraffic QoE is a unique solution that enables CSPs to optimize network traffic by enforcing configurable policies that prioritize different types of traffic flows. It transforms KPIs into Key Quality Indicators (KQIs), assesses every traffic flow, and then shapes network traffic to ensure your users get the intended QoE. Additionally, there's an optional, dynamic feature that continually delivers optimal QoE, regardless of traffic load. It's the ultimate Closed-Loop Automation (CLA) tool you need to monitor and control network traffic, ensuring your customers stay delighted and committed to your brand.

#### SmartTraffic QoE includes:



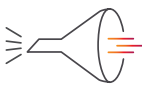
##### Steering and Service Chaining

selective steering and/or service chaining for specific data flows, enabling CSPs to steer relevant subscriber traffic to other servers for the delivery of value-added services.



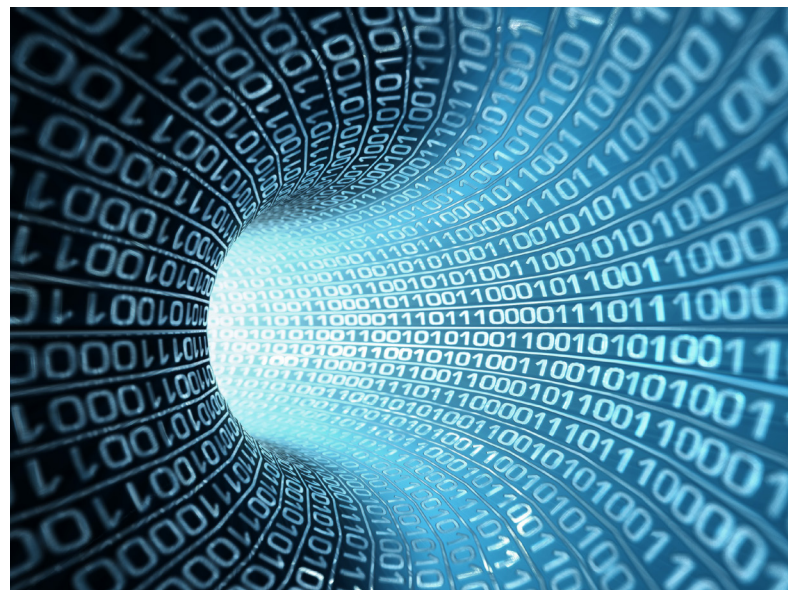
##### QoS Assurance Traffic Shaping

classification of all traffic to enable enforcement of CSP policies that favor business-critical and real-time applications, meeting customer expectations and SLAs.



##### QoE-based, Closed-Loop Congestion Management

dynamic, automated bandwidth management, driven by machine-learned end-user QoE.



## How SmartTraffic QoE Ensures Quality of Experience During Congestion

The Allot automated, closed-loop congestion management delivers optimal QoE by cycling through the following steps:

### Collect

Every 24-hours, the system gathers data on real-time KPIs, such as RTT, retransmission, and other indicators.

Using an algorithm that assigns a relative weight for each indicator, these KPIs are transformed into a performance baseline for each section of the network. The baseline is then used to detect when congestion begins to develop.

### Compare

The system continuously analyzes the baseline indicators and compares them with the real-time QoE statistics, per network section, at 15-second intervals.

### Detect

The system detects congestion conditions by evaluating the aggregated QoE statistics per network section.

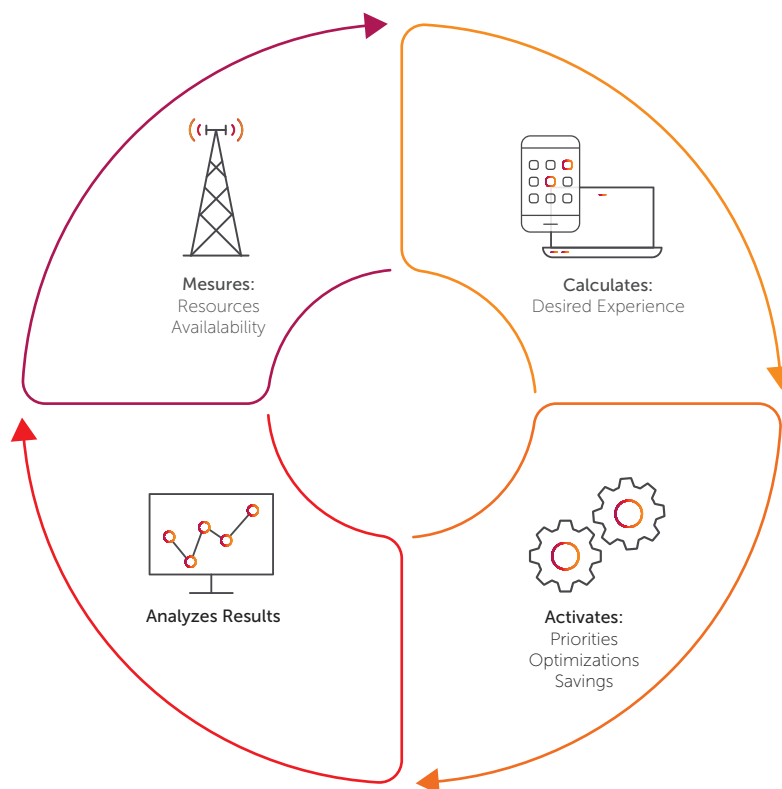
When the QoE level reaches a preconfigured threshold that indicates congestion, the system automatically triggers the QoE congestion management policy.

### Allocate

The system then automatically reallocates the available bandwidth in the network section for the greatest possible efficiency, according to preconfigured levels and subscriber service plan policies. The system continuously samples QoE indicators to get real-time feedback on how the adjustments are affecting the QoE level, and it continues to fine-tune the QoE, as needed.

### Deactivate

Once baseline levels have been restored, the QoE management policy is automatically deactivated and the regular QoE policy is restored.



## Benefits

Allot SmartTraffic QoE enables you to:

- Deliver optimal QoE, enhancing customer satisfaction and brand strength
- Get the most out of your existing infrastructure
- Reduce CAPEX by deferring capacity expansions
- Lower OPEX through automated congestion management