Fairshare Traffic Management for any Access Network

Sandvine's Fairshare Traffic Management solves the problem of access network congestion, extending infrastructure lifetime and reducing costs for communications service providers (CSPs), improving subscriber quality of experience, and complying with regulatory requirements

QualityGuard Congestion Response System

The actual capacity of a network resource is dynamic – it is not constant. This reality is true of both mobile networks and fixed networks, and causes many complications for network operators fervently trying to deliver a high-quality subscriber service. QualityGuard is a superior alternative to the blind addition of unmanaged capacity. It generates massive cost-savings by automatically and dynamically preventing congestion whenever and wherever it occurs. Three capabilities allow QualityGuard to do this:
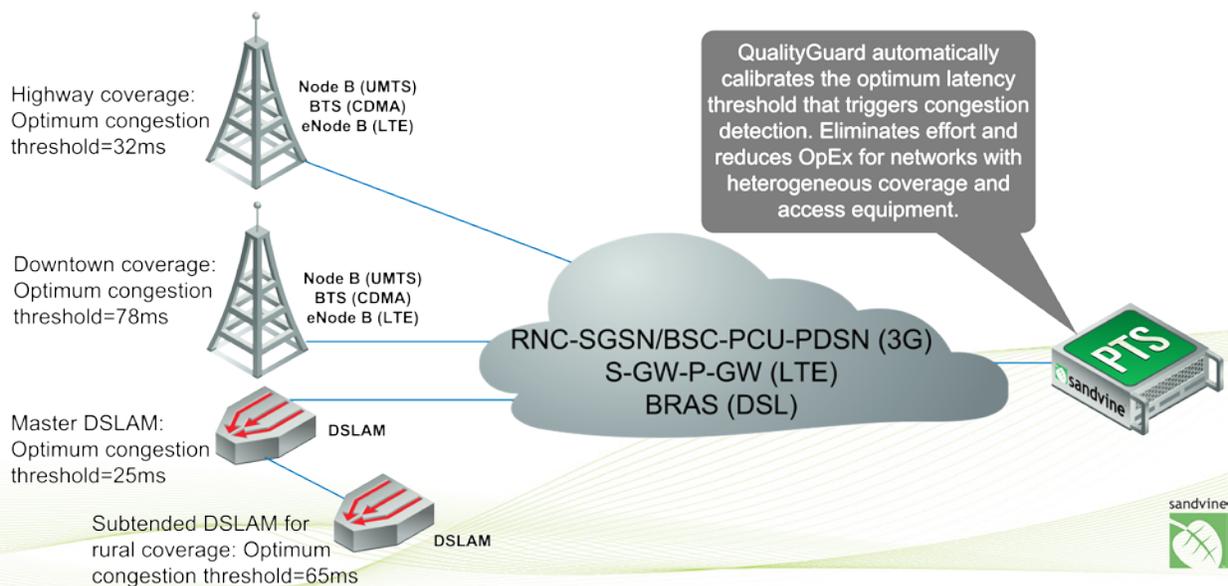
- Real-time awareness of subscriber access location and short-term usage
- Automatic calibration of proper latency thresholds for every location to accurately trigger congestion management
- Real-time measurement of access round trip time (aRTT) to detect and respond to congestive collapse

Completely Automated Access Network Congestion Management

Using this powerful quality awareness, operators can prioritize high-value traffic over low-value traffic during congestion events using fair criteria applied proportionally at the location where the problem occurs. When the network is no longer congested, the management ceases. The criteria used to determine relative value of traffic are rich and at the CSP's discretion and can include: application, application type, subscriber service plan, and recent subscriber consumption.

Automatic calibration

The latency tolerance for the onset of congestion varies depending on the resource type, manufacturer and location – a mobile cell that covers a highway has a different tipping point for congestion than a cell located in the downtown core. QualityGuard automatically learns and configures the appropriate latency benchmark for every individual access resource. With tens of thousands of locations automatically benchmarked in fixed and mobile networks, configuration effort is eliminated and congestion detection accuracy and consistency are easily achieved across a heterogeneous access network.

Fairshare Traffic Management pays for itself in just a few months and generates incredible cost-savings within the first year. Operators can extend the life of their access network resources while ensuring:

- Access network congestion is continuously detected and managed based on real-time subscriber QoE
- The vast majority of subscribers have access to the majority of available bandwidth during congestion events
- Only the true contributors to congestion are affected by a regulatory-compliant policy

QualityWatch Congestion Reporting System

QualityWatch provides the operational business intelligence CSPs need to comprehensively understand congestion in their network with detailed network congestion reports specific to location and subscriber. Real-time, and historic operational and strategic reports allow service providers to determine the location of issues ("is it with my own network, or the third-party service?"), plan capacity expansions, see opportunities for additional cost-savings, and monitor congestion management policies for continued effectiveness.

Unmatched cost-saving insight and instant policy verification

QualityWatch allow CSPs to verify subscriber QoE, monitor congestion management enforcement hotspots, determine how long resource lifetime has been extended and calculate how much money has been saved through efficient network management.

Network Analytics Capacity Planning Dashboard

Measured Business Benefits

Shows the total savings for the entire network across all locations and location types.

Annual Discount Rate	15%
Capacity Upgrade Cost	$20,000
Min. Acceptable Quality Score	90
Avg. Network Deferral Period	28 months
Total Network Savings	$13,445,127

sandvine®
Intelligent Broadband Networks