

Traffic Management: Product Overview

Sandvine's Traffic Management product allows operators to achieve fair-use and traffic optimization objectives that preserve subscriber quality of experience (QoE) in compliance with regulatory requirements, and without capacity expansion.

By deploying Traffic Management, communications service providers (CSPs) enjoy the following cost savings by managing traffic volume and composition:

- **Deferred capital investments** resulting from extended infrastructure lifetime
- **Lowered infrastructure requirements** due to precise congestion management
- **Predictable expansion schedules** based on detailed measurements, reporting and analytics

Take Control to Sustain Growth, Manage Costs and Preserve Quality

Service providers worldwide are embracing traffic optimization strategies in response to three converging trends:

- **Rapid data growth**, driven by powerful consumer devices and popular online services
- **Uneven subscriber resource utilization**, particularly during peak traffic periods
- **Increasing network congestion**, in both frequency and duration

The traditional response to data growth is to deploy additional capacity whenever a resource exceeds a particular bandwidth threshold, in an effort to outpace subscriber demand, but for many operators these trends exist against a backdrop of limited net subscriber addition, so there are few new revenue sources to pay for capacity expansion.

Traffic Management provides operators with an alternative to unbounded capacity investment by giving them precise control over network traffic. CSPs are able to control traffic peaks, prioritize sensitive application categories, and respond automatically to congestion based on real-time subscriber QoE. Policies can address specific applications, devices, and subscribers, for exceptional precision that delivers optimal results with minimum subscriber impact.

These capabilities deliver a win for operators and subscribers alike, by providing a maximum quality of experience for the maximum number of users, for the maximum amount of time.

Traffic Management Functionality

Traffic Management saves operators money by extending the lifetime of existing resources to extract cost savings by reducing bandwidth requirements and deferring capital investment events. The Traffic Management product consists of features and capabilities divided into two functional areas:

- **Base Traffic Management** gives service providers the tools needed to achieve their high-level traffic composition and volume objectives
- **Fairshare Traffic Management** includes all Base Traffic Management features and the QualityGuard congestion response system with real-time congestion-awareness based on topology and subscriber QoE for automated and precise removal of congestion whenever and wherever it exists in the access network.

Key Benefits

Deploying Traffic Management lets service providers enjoy **cost savings** from **optimized capital investments**:

- **Deferred capital investments** resulting from extended infrastructure lifetime
- **Lowered infrastructure requirements** due to precise congestion management
- **Predictable expansion schedules** based on detailed measurements, reporting and analytics

Sandvine's Traffic Management product allows operators to achieve **fair-use and traffic optimization** objectives that **preserve subscriber quality of experience in compliance with regulatory requirements**.

Key Features of Traffic Management

Like all Sandvine products, Traffic Management leverages the **Sandvine Policy Engine** to deliver access technology-agnostic network policy control, so whether your network consists of a single access technology or a converged combination of many, Traffic Management will let you achieve your traffic optimization objectives.

Traffic optimization policies are managed through **Control Center**, Sandvine's policy definition and element management graphical interface.

Additionally, Traffic Management gives CSPs insightful reporting and analytics from **Network Demographics** and the **Network Analytics Traffic Management Dashboard**.

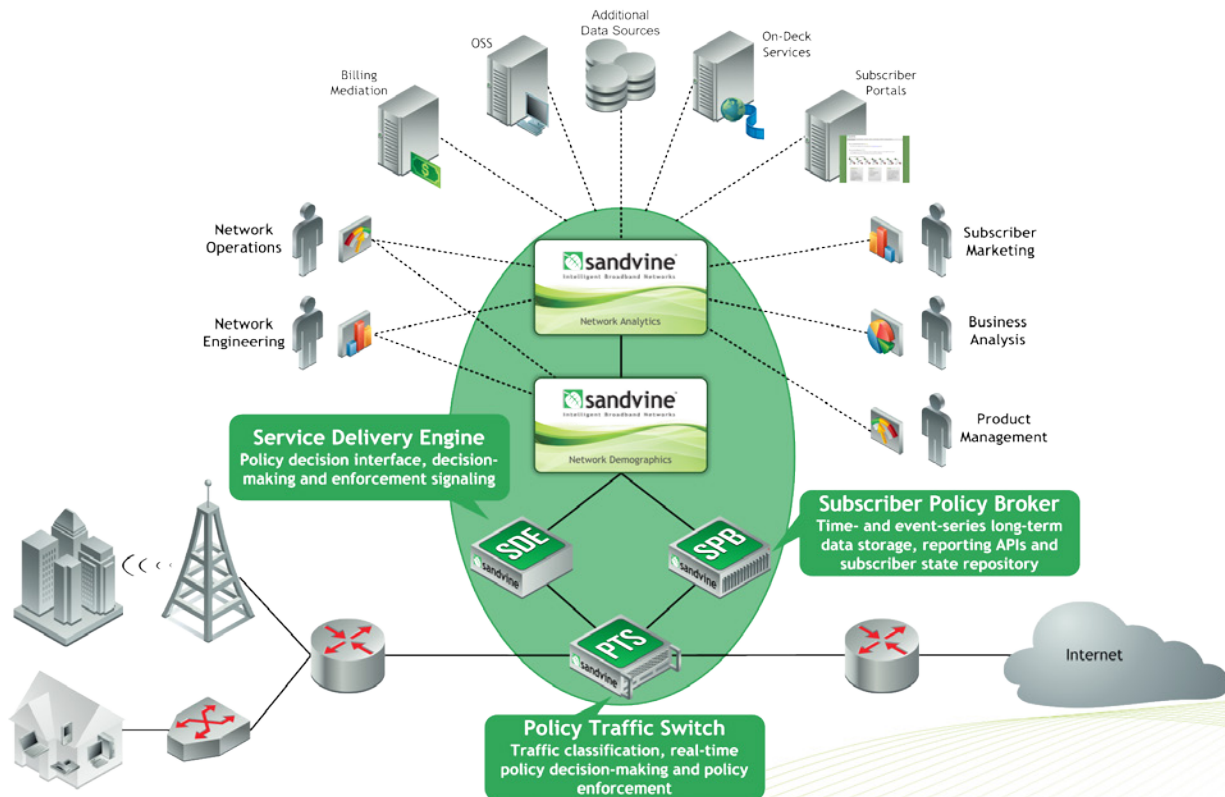
Applying Sandvine's Policy Engine to Traffic Management

The Sandvine Policy Engine can be thought of as a "green box" into which conditions and subscriber entitlements flow, and out of which charging updates, management actions and signals emerge.

When applied to traffic optimization use cases, the policy engine determines management actions based on conditions specified by a broad range of criteria and implements traffic management with powerful enforcement techniques. These features allow CSPs to create complex workflows that combine multiple conditions and enforcements to enable unique cost saving use cases. To learn more, please refer to *Sandvine Policy Engine: Technology Overview*.

Adding Traffic Management to Your Network

Any network operator can achieve their traffic optimization goals by deploying Sandvine's Traffic Management product.



Related Resources

If you want to learn more about Sandvine's Traffic Management product and related enabling technologies, then these resources are available:

- [Base Traffic Management: Details](#)
- [Fairshare Traffic Management in 3G Networks](#)
- [Fairshare Traffic Management in DSL Networks](#)
- [Fairshare Traffic Management in Cable Networks](#)
- [Fairshare Traffic Management in LTE Networks](#)
- [Capacity Planning Dashboard](#)
- [Technology Showcase: QualityGuard Congestion Response System](#)