Mobile Data Optimization

Mobile data traffic is projected to grow over 50% CAGR until 2020. By then, over 75% of the data traffic will be video. This dramatic increase means operators need to maximize capacity without sacrificing end-user experience. Congested networks deliver a poor user experience, encourage subscriber churn and impact profitability. Today, with more than 60% of mobile traffic encrypted and Over-The-Top players embracing their own proprietary protocols, problems are magnified further.
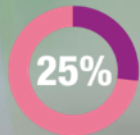
MDO By Numbers

50%	25%	25%	25%	30%
STALL TIME REDUCTION	FASTER RENDERING	HIGHER THROUGHPUT	ENCRYPTED VIDEO SAVINGS	HTTP SAVINGS

The Solution

Builds on Openwave Mobility's Integra all-IP Traffic Management Engine, which enables operators to rapidly adapt to changing traffic demands by means of a QoE-driven powerful service orchestration engine. Beyond brute-force optimization, flexible granular rules can be created by combining multiple contextual conditions that are evaluated at line-rate speeds.

Congestion status, client player, device, bearer, roaming status, cell ID, time of the day, type of content, content provider, video resolution, bitrate, etc – as well as PCRF rules – are only a few sample indicators that the solution evaluates in real-time in order to determine the optimum policy to be applied for each subscriber, type of content and QoE.

Why Openwave Mobility?

Find Out More!
Request your optimization demo today

Encrypted Video User Experience Under the Operator's Control
Act based on real-time QoE metrics that take into account picture and playback quality

Manage Google's QUIC Video
Can you think about mobile video without YouTube?

See in the Dark
Differentiate web from video encrypted requests for the same site and act differently

Encrypted Traffic and Video Analytics
Network metrics, QoE indicators, savings, devices, resolutions, domains

Faster Networks Through Superior TCP Optimization Performance
A self-learning and auto-tuning engine that scales at line-rate speeds

True NFV
Live in multiple Tier-1 Mobile Network Operators

Secure Traffic Manager
Encrypted Video Optimization

Extend your traffic management capabilities into the encrypted path with Secure Traffic Manager. By intelligently adjusting HTTPS and QUIC Adaptive Bitrate video, its impact on the RAN is reduced by 25%

◆ **Detect and categorize encrypted TCP and UDP**
Support for HTTPS and QUIC; built on top of an extensible framework ready to handle HTTP2.0

◆ **Transparent video and device classification**
An upgradeable flow-based heuristics engine differentiates ABR and PD video, as well as containers, codecs, resolutions, bitrates and devices to create individual optimization policies

◆ **Selective delivery optimization**
As opposed to DPI-based throttling, STM video management is selective per flow, allowing the endpoints to negotiate specific qualities and to prevent stalling

◆ **Video QoE protection**
Optimization is dynamically released or adjusted as needed to preserve playback experience

◆ **Video quality driven**
Quality of Picture-driven optimization through real-time MOS quality video evaluation

DynaBoost
Next-Generation TCP Optimization

A dynamic and learning-based engine that reacts to congestion more effectively than traditional TCP optimization, improving mobile users' QoE through 25%+ higher throughput and faster content loading

◆ **All TCP Clientless & Transparent Optimization**
Optimizes the transport of all TCP traffic, including HTTP and HTTPS

◆ **Dynamic & Learning-Based**
As opposed to loss or delay-based algorithms, analyzes in real-time and tracks TCP flows

◆ **Auto-Tuning**
Eliminates the need for traditional profile-based TCP optimization and iterative tweaking

◆ **Enhanced Packet Loss Handling**
Features early loss detection through pattern learning and early recovery as it only retransmits missing packets

◆ **Context-Aware**
Contextual information, such as the type of device, is used to complement the optimization engine

DynaMO
Web and Media Optimization

HTTP web, video and audio optimization reduces peak RAN consumption, improving browsing and streaming experience. Saves 30% of HTTP data and eliminates 50% of video stall time in mobile data networks

Media Content & Delivery Optimization								Web Optimization		Cache	
Real-Time & Offline Video and Audio Encoding	Enhanced HD+ Optimization	Device Aware Resolution Adaptation	Content-Aware Encoding	Congestion-Triggered Optimization	Dynamic Bandwidth Shaping	Just In Time Video Delivery	ABR Video Optimization	Image Optimization & Content Compression	SW Update Management	In-Memory Web Cache	Optimized Video and Large Object Cache