HTTP Traffic Optimization Proof of Concept to Enhance Customer Quality of Experience

Customer profile

The end customer was an Eastern European operator that operates 3G and LTE mobile network. Since its establishment on the market back in 2004 the former market challenger has become the fastest growing company, reaching 10 million customers with 44% postpaid subscribers; 70% of the customers that change their operator choose now this operator on the market it operates. After acquiring LTE frequency and making substantial investments in network infrastructure the operator’s marketing message was built around „the fastest and most reliable network on the market” concept. Data services play an important role in the mobile operator’s current business and future strategy.

Business challenge

The operator realized that HTTP data optimization was a way to ensure better Quality of Experience for its Customers, especially in avoiding drop in service quality when roaming back from LTE to 3G or when the network congestion occurred. The operator considered that potential Gbps data savings must be achieved without negative influence on end user satisfaction.

Computaris contribution and solution

To address the operator’s requirements, Computaris proposed a complete HTTP traffic optimization solution based on Openwave Mobility commercial products. The proposed platform covers sophisticated TCP, HTTP, Audio and Video optimization features; it provides advanced caching mechanisms, adds network congestion awareness and enables new business opportunities with subscriber engagement enablement. Operators can also benefit from additional data traffic analysis and reporting capabilities.

The operator decided to execute a comprehensive Proof of Concept project for the proposed solution. After a successful test lab phase, the commercial traffic was sent to the platform, this allowing us to collect required data from the live network. The trial was run for PC/dongle and subsequently for Smartphone users in April and May of 2013.
Computaris worked together with Openwave Mobility specialists during PoC scope definition, platform delivery and integration, our engineers supporting tests execution on site. The gathered results, including data traffic analysis, were presented to the mobile operator comprised in a detailed report and a summary presentation for the company management.

**Results and benefits**

The PoC project shown visible enhancement in the Quality of Experience supported by the proposed solution:

- More reliable video streaming, meaning faster start, less buffering and stalling
- Quicker Web page download times

Substantial Client side data savings (35%-50%) could be observed without scarifying image or video quality perception. This leads to possible significant CAPEX deferral. Thanks to utilizing caching mechanisms also savings at internet site of data traffic were measured.