Section D. Leaflet

Quality-of-Experience in video streaming in wireless networks
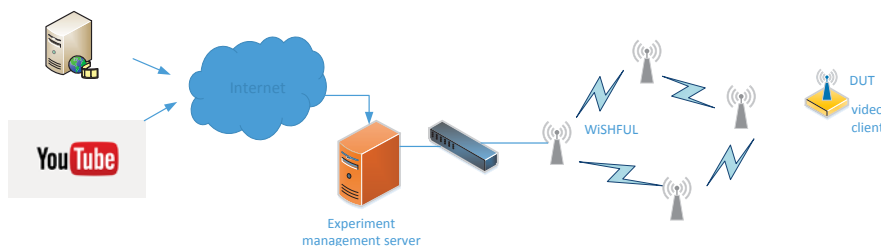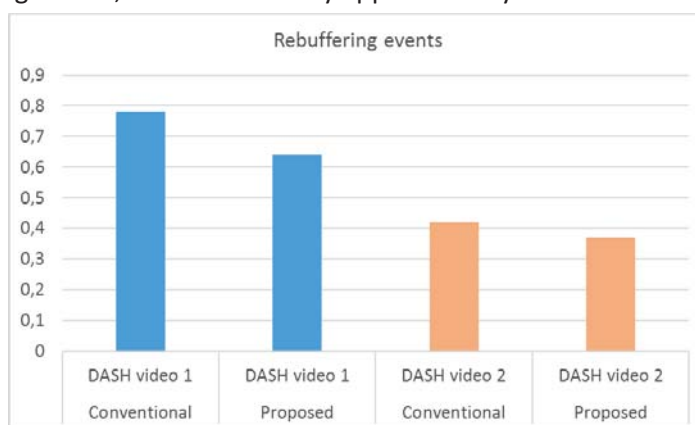QUEST

StreamOwl

The goal of the experiment is to develop a QoE-aware video streaming platform that adapts the content delivery to the network conditions of the video clients, considering their individual network conditions and the overall topology and resources of the network.

The main challenge is to configure routing based on the constant monitoring of the network status to identify bottlenecks and congested links.

In the experiment, a video client is scheduled to stream video from YouTube or another media server and the UPIs are configured to optimize video QoE by controlling the network protocol stack.

The results indicate a substantial improvement of the video-related Key Quality Indicators, such as the number of rebuffering events, which reduces by approximately 12%.

Thanks to the software tools and hardware provided by WiSHFUL, StreamOwl was able to validate its solutions for QoE-aware video streaming services. For a startup company, like StreamOwl, it has been very important to be able to access the resources of WiSHFUL and receive funding to experiment on new technologies which will affect the product development process of the company.