

At a Glance

Company: Unified Streaming B.V

Founded: 2012

Headquarters: Amsterdam, NL

Industry: Media Technology

Key Results

Reduced 50% of the Cloud Egress

Reduced 50% of the CDN Storage footprint

Background

Founded in 2012, Unified Streaming is a technology provider for streaming services across the globe fuelling large scale streaming video platforms. With more and more content being delivered online, Unified Streaming provides technology for packaging, origin servers, content stitching that is key to many large broadcasters and telecommunications companies. Most notably, Unified Streaming provides plugin modules for Apache and Nginx that can turn an ordinary origin server into a streaming server. These capabilities can be used to build video streaming platforms for monetizing content using multiple origin servers, live encoders and so on.

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The Challenge

Video streaming often results in large CDN and cloud storage costs. For large scale distribution this becomes a bit of a bottleneck as CDN and cloud storage costs rapidly increase with more formats becoming available. Further, by not being able to deploy Unified Streaming at edge locations, flexibility is lost for tailoring content for best user experiences and device capabilities. Broadcasters and streaming platforms suffer from this set back. One idea developed at Unified Streaming was using Unified Origin in an edge computing platform. This set up enables tailored content for best user experiences and device capabilities at the edge. In addition, with this set up, CDN caching and cloud storage can be significantly reduced.

Rufael Mekuria, Head of Research and Standardisation, explained: "Customers of Unified Streaming often monetize large content repository with petabytes of content. In traditional streaming architectures, content is ingested to CDN from the central cloud in final streaming formats. Considering that for different videos, typically different protocol versions and several different encryption schemes are used, a duplication of content in the CDN and in the cloud egress is becoming more and more of a burden in terms of cost overhead. Further, in case personalization is applied using the architecture of delivering content from a cloud to a CDN without any edge based processing becomes even more unbearable in terms of CDN overhead."

The Solution

After reviewing a number of solutions, CDNetworks Edge Computing Platform (ECP) was chosen, which provides a Kubernetes based engine to deploy software at the CDN level. In two demos Unified Origin is deployed in a container for live streaming and for VoD streaming. By choosing the Common media application format for ingest from the cloud to ECP, a single ingest format was used. The Unified Origin node running on ECP can then generate the different alternative formats and encodings for streaming on-the-fly.

“We have been using the ECP from CDNetworks with success deploying our solutions for streaming as prototypes. We were impressed with the ease of use of the ECP and the consistent performance results.” said Rufael Mekuria. As a result, Unified Streaming has achieved a reduction of up to 50% of the cloud egress and CDN caching footprint for simple use cases of streaming with different protocols. “ I’m pleased that our ECP can help Unified Streaming dramatically reduce their cache storage cost and provide exceptional performance to their end users. We look forward to working with Unified Streaming team to further address other pain points in video streaming industry.” Kenneth Chiu, Director of Product Management at CDNetworks.

About CDNetworks

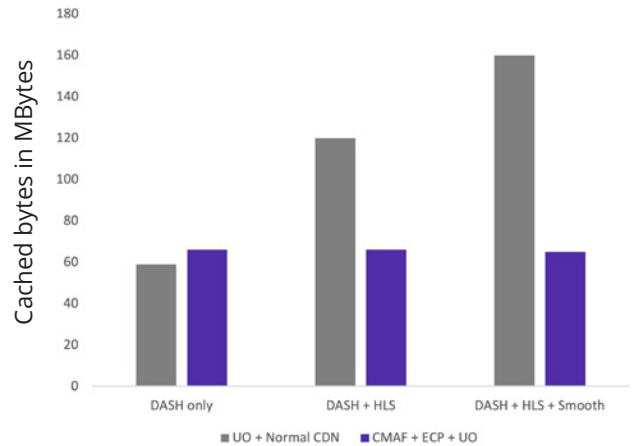
CDNetworks is a leading global Content Delivery Network with a fully integrated cloud solution offering unparalleled speed, security, and reliability for the prompt delivery of web and application content. The company offers users a fast and safe web experience – whether serving B2B or B2C customers, mobile employees or remote offices with content optimized for any device, browser and network.

About Unified Streaming

Unified Streaming is a forerunner in the creation of smart video streaming technologies for multiple platforms and devices. Founded in 2012 and headquartered in Amsterdam, the Netherlands, our company helps stream and protect content all over the world, every second of the day.

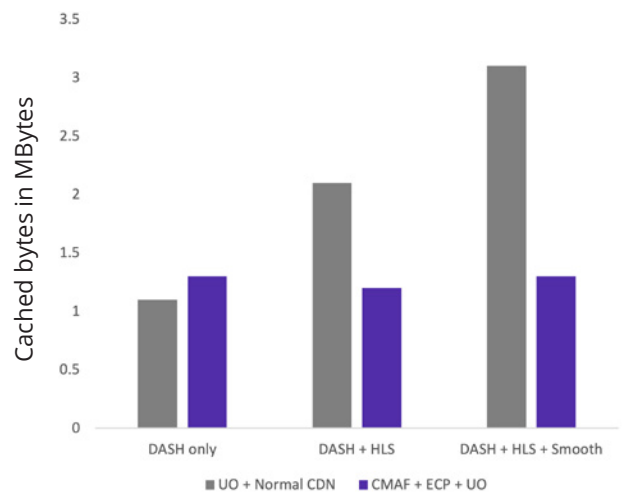
Once upon a time, that trusty old TV set at home was the only way to watch video. In the decades since, digital content has streamed into every dimension of our lives – we carry screens in our pockets and wear them on our wrists. Because today’s viewing options are boundless not just in terms of what we watch, but how we watch it, streaming technology must be as dynamic as it is reliable. At Unified Streaming, our software and services are engineered for stability, performance, and flexibility in user experience, time after time. See for yourself.

Average Cache Size (MB)



Lower cache footprint reduces cache storage costs

Average cloud to edge egress (Mbps)



Lower cloud egress reduces cloud costs