

CDN Load Balancer Use Case Scenario

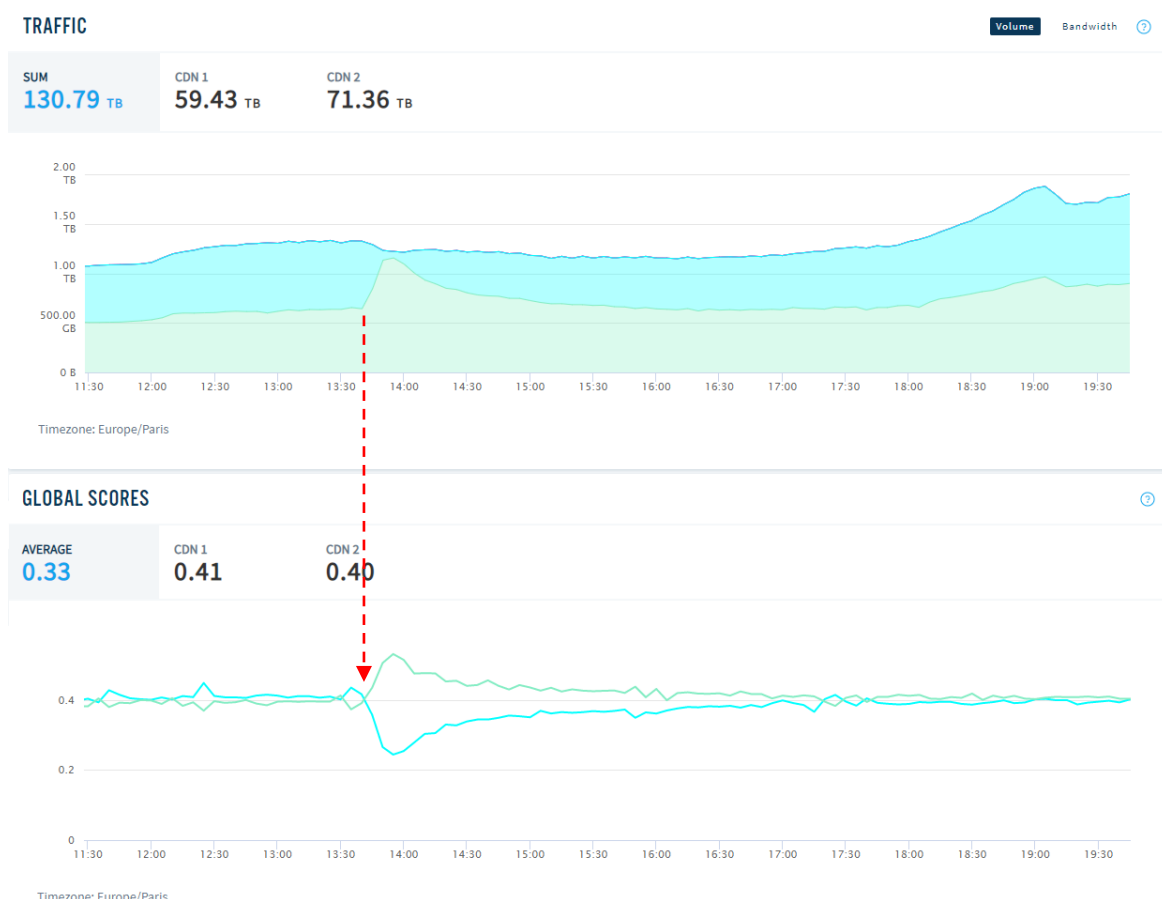
Performance degradation and traffic redistribution

During a live broadcast event in the Summer of 2021, a popular streaming provider in Western Europe experienced a significant performance degradation from the primary CDN in its delivery stack.

This CDN (CDN 1 in the graphic below) was handling roughly two-thirds of the overall traffic at the time that the event occurred. A DDoS attack on that provider's network caused a drop in performance that lasted 15-20 minutes. This degradation, while brief, still threatened to affect the end-user experience for thousands of viewers watching the stream at the time.

Thanks to the problem being immediately detected by Lumen® CDN Load Balancer, the affected users were switched in real-time to the secondary CDN (CDN 2), which typically handles the other third of the broadcaster's traffic. Following the switch, the traffic was redistributed to a nearly 50-50 split between the two CDNs.

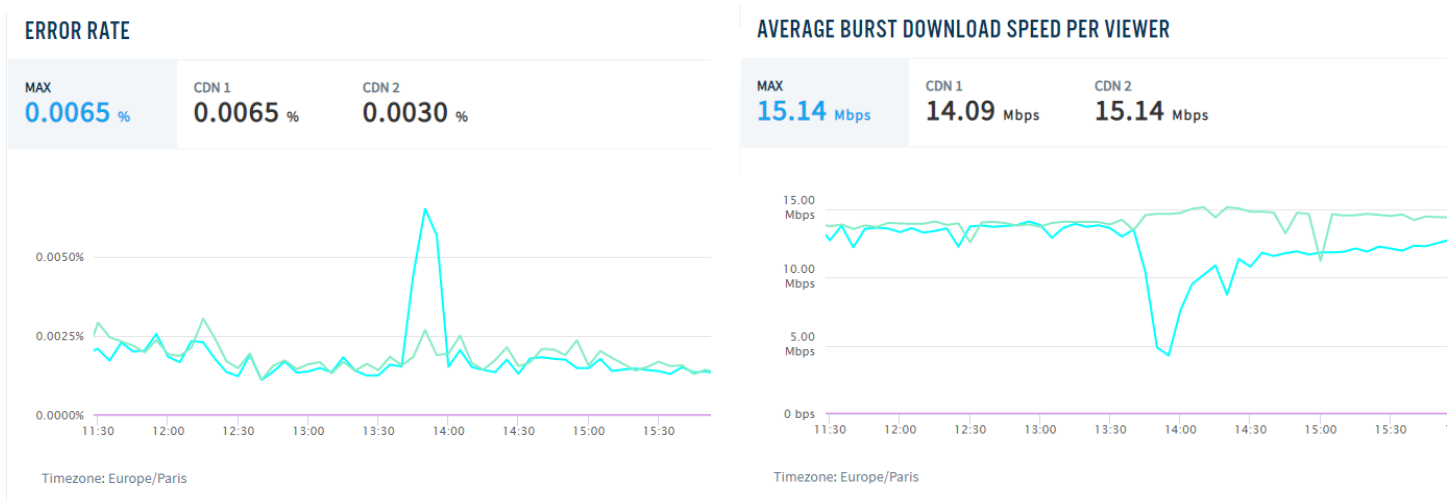
After successfully preserving the viewer experience without the broadcaster's operations team having to get involved, CDN Load Balancer continued to monitor the two providers' performance and gradually moved traffic back to its normal distribution as the primary CDN's issues were resolved.



Source: Lumen CDN Load Balancer customer data, August 2021

Drilling further into the data, we see that CDN 1's error rate spiked dramatically when the incident occurred, which in turn led to a drop in the burst download speed of users watching the live stream. This caused a drop in that provider's QoS Score and Global Score, which is what triggered the switch made by CDN Load Balancer. Once the errors were resolved, the traffic began to be redistributed back to the primary provider.

For more information about CDN Load Balancer and how switching decisions are made, consult our product data sheet or contact application.delivery@lumen.com.



Source: Lumen CDN Load Balancer customer data, August 2021

Why Lumen?

From content acquisition to encoding, distribution and security, Lumen's end-to-end solutions for media companies can help you deliver secure, lightning-fast experiences to your audiences. Benefiting from more than 30 years of experience building technology for some of the largest global enterprises, Lumen today serves nine of the world's ten largest media companies. The company was named a leader in the IDC MarketScope Worldwide Commercial CDN 2019 Vendor Assessment for both the scope and scale of its deeply peered global network, but also for its technology innovation.