



How Open Caching works

Without Open Caching, video viewers in a typical network architecture must wait for video data to be delivered from the Content Owner's origin server, passed through a public CDN, and finally transited across their Service Provider's networks into their homes. All that data transiting invites congestion, cost, latency, and the dreaded rebuffering of video for viewers.

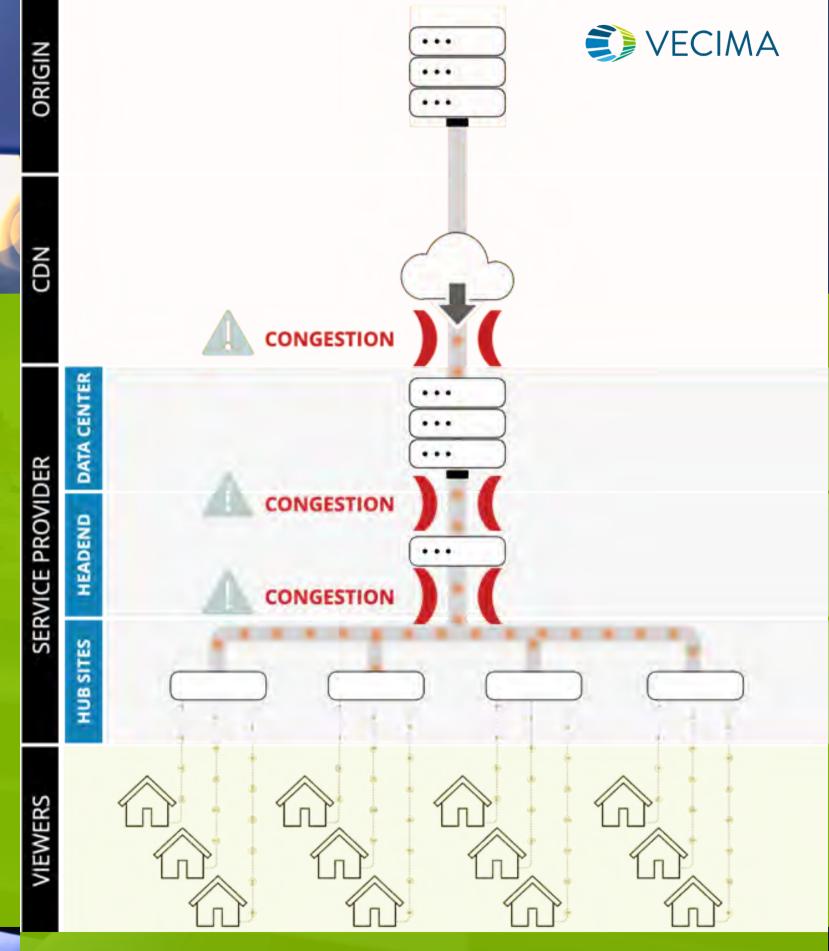


Figure 1 – Typical congestion when transiting third-party video content through a Service Provider's network.

Instead, by deploying Vecima's Open CDN within a Service Provider's network and making that resource available to Content Owners, Service Providers and Content Owners can both avoid most of those overhead costs.

- The Open CDN Edge Cache and Open CDN Manager are installed in Service Providers' hub sites and data centers.
- Unlike the process today, with Open CDN, the Content Owner only terminates into the Service Provider's network once.
- That content is cataloged and cached, reducing the CDN traffic on the network backbone, and therefore, reduces congestion.
- Content cached at the edge of the network is then delivered at measurably higher quality, improving the viewer experience and customer loyalty.

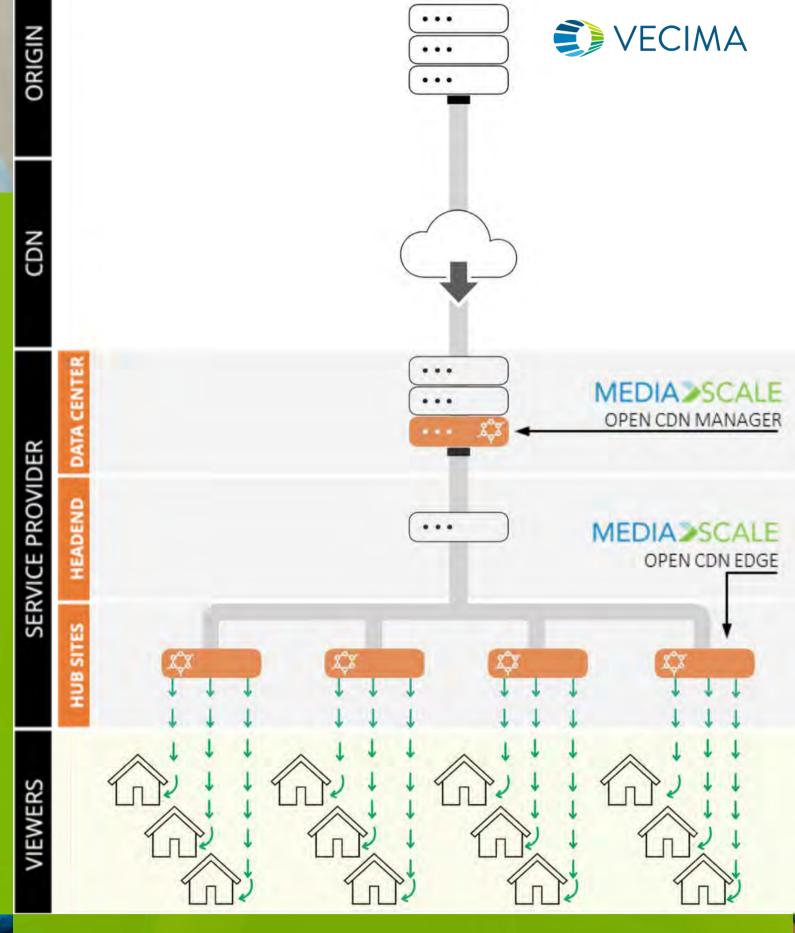


Figure 2 – Congestion avoided when Open Caching is used to cache video content within a Service Provider's network.



Top 6 benefits for Content Owners

Content Owners, ranging from emerging streaming platforms to established broadcasters, are continuously seeking ways to enhance content delivery to exceed viewer expectations. With Open Caching, Content Owners take advantage of caches placed deep in Service Providers' networks, close to subscribers, benefiting from costefficiency, scalability, and, most importantly, a high-quality viewer experience.

MEDIA SCALE

1 Reduced buffering/start-up times

Open Caching systems minimize the network distance between the content and the viewer, which can eliminate rebuffering rates. This seamless streaming experience is critical for maintaining viewer engagement, especially during live events or premieres of highly anticipated content.

2 Higher streaming quality

By facilitating content delivery from closer network nodes, Open Caching enables optimal streaming quality. Viewers can enjoy content in higher resolutions with better consistency, even during peak traffic periods.

3 Optimized delivery paths

Open Caching routes content through the most efficient paths within the network, reducing the load on origin servers and cutting down on cross-network traffic. Optimization translates to lower operational costs and higher scalability as viewer demand grows.

4 Reduced reliance on traditional CDNs

While public CDNs play a vital role in content distribution, they can be costly and less efficient for certain types of content or in specific geographic regions. Open Caching provides a complementary solution that can reduce dependence on these third-party services while delivering cost savings and improved control of content distribution.

5 Support for higher resolutions

As the world moves toward higher-resolution content, including 4K and 8K, the bandwidth and performance requirements for streaming services increase. Open Caching, with its proximity-based caching, is inherently designed to support these demanding content types without compromising viewer experience.

6 Scalability for growing audiences

The scalable nature of Open Caching gives Content Owners a means to efficiently expand their reach and accommodate growing viewer bases without having to overlap infrastructure investments.

