

# Pulsar for Video Streaming

Whether you're delivering over-the-top (OTT) video applications or live streaming, high-quality video experiences are critical to attracting, engaging, and retaining viewers. Adopting multiple content delivery networks (CDNs) brings content closer to viewers, but avoiding outages or bottlenecks that cause slow video start up times and buffering events requires a smarter approach to traffic routing. Pulsar helps you optimize quality of experience for all viewers and get the most from your infrastructure investment by simplifying multi-CDN orchestration.

The growing number of video players and streaming devices, CDN contract commitments, regional licensing policies, and other business variables introduce new complexities to your video ecosystem, making it even more important you intelligently steer traffic across it. Pulsar optimizes performance, reliability, and resource costs — leveraging key CDN performance metrics like availability, latency, and throughput — to go beyond basic load balancing and ensure each viewer is matched with the best possible endpoint in real time. Additionally, these optimizations occur at the network level which ensures compatibility with all players and platforms. Pulsar automatically detects changing conditions and adjusts routing decisions to shield viewers from CDN outages or localized network events.

Powered by Pulsar, NS1's video streaming solution features:



### Performance-based CDN routing

Optimize CDN selection at the DNS level which is external to manifest generation (prevents a single point of failure).



### Easy, point-and-click configuration

Pulsar is fully-integrated with the NS1 Filter Chain traffic steering engine for powerful, simple, and code-free configuration.



### Detailed insight into CDN performance & routing behavior

Full visibility into CDN performance, routing decisioning and traffic distribution.



### Automatic response to network disruptions

As internet conditions change, automatic detection and correction shields your viewers from outages and localized network events.



### Decisions over HTTP

Compatible with CDN token authentication and mid-stream switching to release viewers from poor performing CDNs after stream start.



### Geo-IP content restriction

Ability to restrict content to certain regions based on content licensing.

## HOW IT WORKS

### CONFIGURE

Easily implement custom routing policies with the fully-integrated NS1 filter chain for powerful, simple and code-free configuration. Giving you ultimate control over how your users are routed, helping you minimize costs, meet usage commits, and deploy real-time load balancing—all without sacrificing performance.

### MEASURE

Customizable ingestion of real end user performance and QoE metrics provides you with insight into how your CDNs are performing and impacting viewer experience. Pulsar ingests this telemetry to build a real-time map of internet conditions to use for active traffic steering.

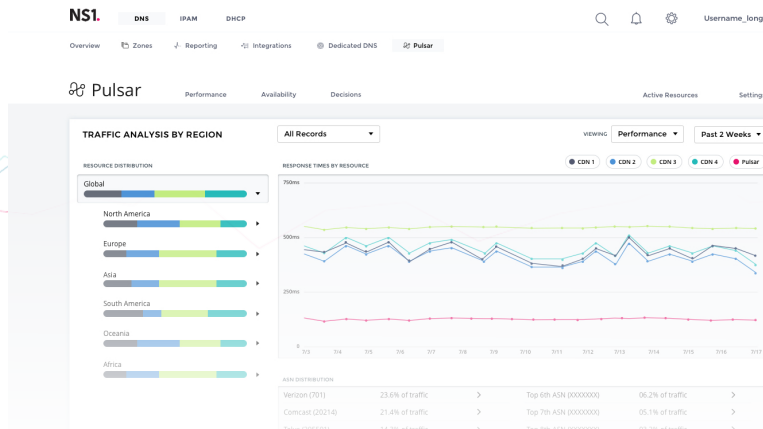
### ROUTE

Pulsar intelligently routes every user to the optimal CDN based on user experience and your configured business priorities. As internet conditions change, automatic detection, and correction shields your viewers from outages and localized network events.

Full visibility into decisions provides insights into how traffic was distributed across your CDNs.

## CONCLUSION

For businesses looking to deliver an exceptional streaming experience to a globally expanding viewer base while also actively managing service delivery costs and contractual commits, Pulsar unifies and automates video traffic operations and optimization. Regardless of the combination of CDNs used or telemetry needed to make real-time video delivery decisions, Pulsar's advanced traffic steering gives you more direct control over user experience, delivery resilience and business outcomes.



## ABOUT NS1

NS1 optimizes delivery of the world's most critical internet and enterprise applications. Only NS1's platform is built on a modern API-first architecture that acts on real-time data and grows more powerful in complex environments, transforming DNS, DHCP, and IP Address Management (IPAM) into an intelligent, efficient, and automated system. NS1's technology drives dramatic gains in IT efficiency and application performance, reliability, and security for the largest global enterprises, including Salesforce, LinkedIn, Dropbox, Nielsen, Pitney Bowes, Squarespace, Pandora and The Guardian.

