# NS1 Pulsar

### **Active Traffic Steering**



More enterprises are moving their content and applications to the edge. An edge delivery model reduces network delays and can be far more resilient than a centralized delivery model. Edge can take different forms - from CDN to cloud to colocation as well as hybrid models that use all in combination. Whatever model you choose a key to your success is bringing users into your edge infrastructure as effectively as possible. The NS1 DNS platform with Pulsar Active Traffic Steering boosts the performance and reliability of your edge hosted applications and content. NS1 customers report dramatic improvements in application performance and cost savings by making Pulsar a part of their edge delivery strategy.

#### **Optimal End-User Experience**

Pulsar goes beyond geo-proximity, using last-mile performance data to reduce page load times, eliminate video buffering and increase download speeds—improving the application experience for each and every user.

#### **Automate Intelligent Traffic Steering**

Your traffic steering needs to be infrastructure-aware in order to get the most out of your investments. Pulsar makes it easy to orchestrate traffic across datacenters, clouds, and CDNs.

#### **Customized for Your Business**

**NS1**.

Pulsar gives 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.



## Pulsar Active Traffic Steering

#### **Overview**

There is a direct and inverse relationship between the latency of online services and the revenue they generate. Put simply, less latency means more revenue. Shaving just 80ms off your latency can significantly speed page load times and drive 7% more online revenue. Larger latency reductions can have even more dramatic impact. To minimize latency enterprises need to move online content close to their customers but the reality is:

- No single CDN provider delivers consistently good performance on a global basis.
- Even the largest cloud providers lack coverage in certain regions.
- Enterprises often lack visibility into when, where and how frequently performance problems are affecting their bottom line.

More enterprises are adopting multi-CDN, distributed cloud and edge network architectures to gain the performance they need. The NS1 platform with Pulsar provides the controls and visibility that enable enterprises to implement content delivery strategies that are optimized for their audience, content and business needs. In addition to traffic management techniques such as georouting and load balancing, Pulsar provides real time latency based traffic routing to optimize user experience and business results.

#### **The Solution**

The NSI platform incorporates static and real time data that enables engineers to control which CDN or cloud instance users are directed to when they request online content or application services. Pulsar uses real time performance and availability telemetry based on real user measurements (RUM) to dozens of CDNs and public clouds. With this capability, engineers can ensure end customers are unaffected by localized slowdowns and outages. Pulsar tracks real time availability and performance of CDNs and major cloud services in individual countries and regions, ensuring users get their content and services from the best CDN or public cloud available at the time. By improving application availability and performance, Pulsar reduces site abandonment and increases website conversions.

#### Why NS1

- The DNS services offered by the CDN and Cloud providers themselves do not have the ability to intelligently route users to alternative CDNs/Clouds.
- Other managed DNS providers have very limited capabilities, typically static geo fencing which confines users to specific CDNs based on user location.
- No more "all or nothing". If your CDN is having problems in Brazil, do you really want to switch your users in the US to another CDN?
- Multi-CDN "brokers" that support real time, rules based CDN selection are complex to set up, difficult to manage and add extra DNS lookups to the connection process.
- NSI is the only provider that has integrated real time multi-CDN, multi-Cloud and self hosted POP optimization into a managed DNS service. It gives enterprises the ability to route traffic to multiple CDNs/Clouds/POPs based on performance and business logic.



#### **CDN and Cloud Monitoring and Failover**

Traditional monitoring techniques are unable to detect when a CDN service has a localized outage. Pulsar detects and responds to localized problems.

#### **Latency Based Routing**

Minimize application latency by directing users to the best performing point of presence across any cloud provider or CDN based on real user data.

#### **Bring Your Own Data**

Pulsar makes it easy to use your own RUM data measurements gathered from your users.

#### Usage and traffic management

Use usage and transit cost criteria to control and optimize content delivery costs.

#### Load shedding

Load balance to prevent bottlenecks at specific points of presence.

#### **Sticky routing**

Send users to the CDN or cloud where their content is most likely in cache.

#### **Pulsar Stabilize**

Set your performance and cost thresholds to control traffic distribution across your providers.

#### Visibility

Track the performance of your content delivery infrastructure. Know the performance of your providers.

#### DNS performance and reliability

Sub 50ms response on a global basis is best in class. Comes with a 100% uptime SLA.

#### Management

Easy, intuitive set up.

#### **High Availability**

Redundancy available with other providers or with Dedicated DNS.

