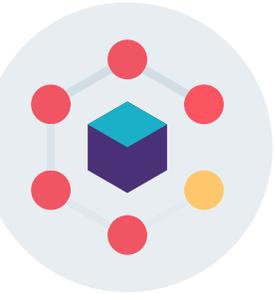


NS1 Solution for Implementing a Multi-CDN Strategy



Many enterprises are finding it increasingly difficult to deliver a consistently high-quality end user experience to a global online audience using a single Content Delivery Network (CDN). CDN providers have different strengths and weaknesses so it is unsurprising when a single provider does not adequately address the needs of a global online organization.

The good news is there are plenty of CDN providers to choose from, and by leveraging the right combination of providers, enterprises can simultaneously improve end user quality of experience while lowering costs. The means to achieve this goal is based on the ability to intelligently steer traffic to the right CDN at the right time. NS1 makes it easy for online organizations to reap the benefits of a multi-CDN strategy.

Online Performance is Business Critical

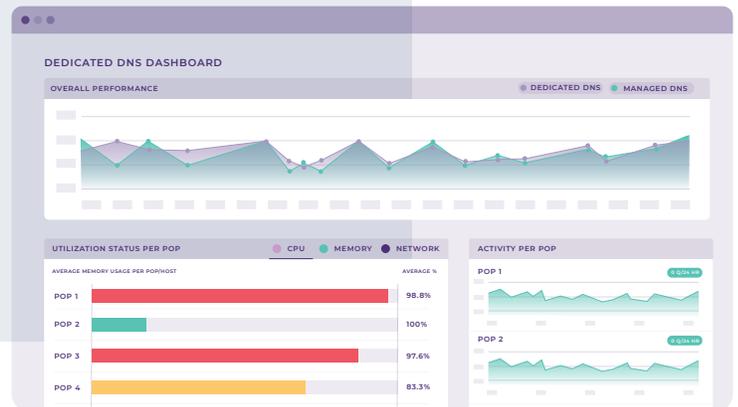
User expectations

page load <= 2 seconds

100ms decrease in page load time = 1% revenue increase

79% users won't return to a poor performing website

Source: insights.wired.com



“ NS1 offers a great approach to implement a multi-CDN strategy. Their solution is both integrated and easy to use. In addition, their support is second to none. ”

- Tech Ops Manager, Major Online Gaming Provider



User Experience & Implementation

Deliver Consistent User Experience

Your business demands you deliver consistently high quality of experience for all users, all the time. CDNs help, but performance is inconsistent. Some CDNs are better than others in certain countries, on certain networks or with certain content. And all CDNs experience periods of performance degradation. The fundamental challenge is how to deliver consistently high performance using an inconsistent service delivery infrastructure.

Benefits of MultiCDN

- ▶ **Improve performance in specific regions.** Your current CDN provider performs well in most of the places but poorly in specific countries or regions. You need a better CDN provider for those regions.
- ▶ **Reliability.** A dual or multiCDN strategy prevents slowdowns or outages in one provider from impacting your business.
- ▶ **Cost control.** Your power to negotiate rates and terms is enhanced by having providers compete for your traffic.

CDN Selection

- ▶ **Decide what you want to optimize:** Global delivery, performance in key markets, reliability against localized network issues, cost.
- ▶ **Select CDNs best suited for your content.**
- ▶ **Look for CDNs with some network independence.** Avoid CDNs with the same upstream networks, same datacenters, etc.

MultiCDN Strategies

- ▶ **Static Strategy:** Predefined rules for CDN selection. The most common static strategy is geographic. User traffic is directed to a specific CDN based on where the user is located geographically.
- ▶ **Dynamic Strategy:** Traffic is directed based on real time conditions. CDN selection is based on the best performing CDN at the time.

- ▶ **Hybrid Strategy:** Use a combination of static, dynamic and business logic to achieve optimal balance between performance and cost.

Implementing a MultiCDN Strategy with NS1

DNS is critical to your multiCDN strategy because it is DNS that decides which CDN gets selected for each incoming user. NS1 is the ideal DNS platform for implementing multiCDN:

Comprehensive

- ▶ **Geographic routing:** Assign users to CDNs based on region, country or state.
- ▶ **Real time performance:** Users are directed to the CDN performing best in their region at the time they are connecting.
- ▶ **Cost:** Feed real time cost metrics into NS1 to avoid CDN overages and/or meet contract commitments.
- ▶ **Hybrid:** Use combination of static, real time performance and cost strategies to implement a business rules based strategy.

Performance and Simplicity

- ▶ It takes minutes to set up the rules and data feeds for your multiCDN zones and records.
- ▶ Integrated platform. Other solutions require coordinating zones, records and traffic routing across multiple DNS providers. NS1 offers the industry's only single provider, integrated solution.
- ▶ Our integrated architecture reduces the number of DNS queries needed to get the user connected to the CDN, reducing overall latency and improving quality of experience.

For more information on how NS1 can help you design and deploy a multiCDN strategy, contact sales@ns1.com