

3 Keys to Creating a Successful Multi-CDN Strategy



Enterprises often have trouble delivering consistently high-quality experiences to global end-users with a single content delivery network (CDN). This issue is even more critical as recent events force organizations to evaluate how they deliver online content, particularly when streaming it.

The problem lies with relying on just one CDN to get the job done. Because each CDN provider offers different pros and cons for online content delivery, a more effective strategy is to leverage a combination of CDN providers. This integrated multi-CDN strategy can help you improve the quality of your customers' experience, as well as help your organization gain more revenue, lower end-user complaints, and reduce CDN costs.



Two factors drive the need for better performance and consistency in how you deliver online services:

1. End users are intolerant of delays or issues that negatively affect their experience.
2. There's an economic need to improve service levels as the number of users increases. A service level drop of just 1% could translate into tens of thousands of dissatisfied customers.

What an effective multi-CDN strategy incorporates



1. It considers geography.

CDNs typically perform differently in different regions. For example, one CDN may perform better in North America while another performs better in Europe. Consequently, it's smart to use distinct CDNs in different geographic regions. Geofencing, which routes end users to specific CDNs based on the users' location, makes this possible.

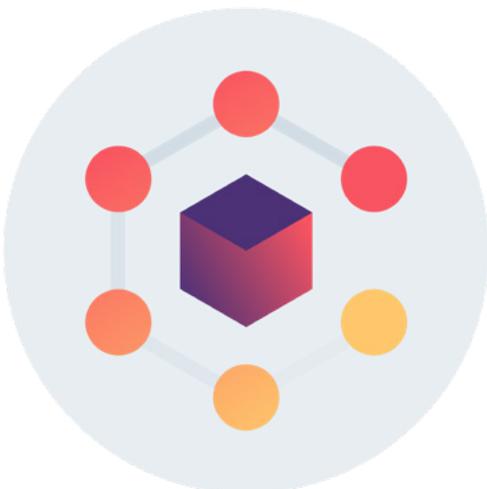
2. It continuously monitors.

No matter where users are located, connectivity conditions can vary greatly, and there are times when users are better served by a different CDN than their network typically uses. By monitoring and taking action on CDN availability, throughput, and performance data in real time, you can send users to the optimal CDN.



3. It has business logic.

Being able to incorporate key business metrics and contractual obligations into your traffic routing and CDN selection logic can help you lower costs below what you might achieve by simply negotiating better rates from your CDN suppliers. For instance, by feeding minimum or maximum usage commitments into your metadata, the right platform can steer traffic to or from a particular CDN to fully optimize your multi-CDN strategy.



Why an integrated approach works best

A successful multi-CDN strategy involves more than simply purchasing services from different vendors — you need to set up an automated system that makes real-time decisions on which CDN to send each user to. The decision-making logic can't be a single hard-coded “if-then” statement because:

- Business requirements can change. This necessitates a system that can adapt via configuration changes rather than through a developer sprint to code something new. **You can think of filter chain as “automation Legos” — you use the pieces you need, configure them how you want, and change the configurations as needed.**
- Businesses need different approaches for different types of business application content. Each content type, such as static files for gaming downloads, streaming for live events, or video-on-demand streaming, creates a different type of pressure on a CDN. Rather than starting from scratch and writing new automations for each type of content delivery, you can implement a single global system that adapts to your specific activity.
- The decision-making process itself needs to be extremely efficient to provide the optimal user experience. The process of doing recursive DNS lookups, pulling in live data, running through the logic, and sending the answer has to take place quickly. By bringing all pieces together, you can create one streamlined system that's also more efficient to configure and change.

An integrated approach can help you better manage these complexities and risks and have a positive impact on your system's performance, cost, and manageability.



Take the next step to multi-CDN

NS1 helps organizations achieve this integration as they create successful multi-CDN strategies. NS1 is the only authoritative DNS service that offers fully integrated performance and business logic-based traffic management.

To learn more about multi-CDN strategies, **download this guide** about how to stream large events successfully when you don't know what the capacity will be.

When you're ready to start or improve your multi-CDN strategy, **contact us.**

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