

A network diagram in the top left corner consisting of several grey nodes connected by thin grey lines, forming a web-like structure.

# NS1.

## TERIDIION

Using Intelligent DNS for  
Cloud-Optimized Global Routing

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Teridion is bridging high performance global connectivity over the public Internet between data centers and end users. With Teridion's Global Cloud Network, cloud providers and enterprises deliver applications and services up to 20 times faster, while benefiting from Internet cost efficiencies.

Unlike traditional content delivery networks, Teridion's solution is provisioned in a matter of minutes with no additional hardware or software. The platform scales on-demand, works for uploads as well as downloads, and is not limited by geography, cloud provider, or end-user devices.


The result: files upload faster, web conferences run smoother, videos stream quicker, applications achieve optimal performance, and users are more productive.

Because DNS is how every end user accesses their solution, Teridion chose NS1's intelligent DNS and traffic management platform to ensure the highest possible performance, scalability, and uptime -- all while creating the best end user experience possible.

USAGE Sep 24, 2015 - Sep 30, 2015

Resolution H D W M

Filters: VBN #1


**19.10 TB**  
Total Incoming


**0.29 TB**  
Total Outgoing

Hide Teridion Value

TERIDION VALUE 1 / 3

 Load time is **864.03% faster**

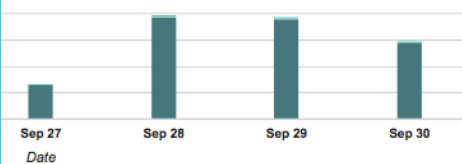
	Average (ms)
With Teridion	1,194.21
Without Teridion (Regular)	10,318.27
Acceleration factor	864.03%



“

NS1's capabilities are critical for us to be able to quickly onboard customers to our Global Cloud Network, and provides us with the ability to point our users to the best path in real-time, based on calculations made by our Teridion Management System. Because we've been so impressed with the results, we're now working on a tighter integration with NS1's eyeball telemetry engine, Pulsar, for even more granular routing.”

Doron Samelson,  
Co-founder & VP Operations  
Teridion



■ Incoming: 19.10 TB total  
■ Outgoing: 0.29 TB total



APAC-Japan

Incoming: **214.22 GB**  
Outgoing: **3.14 GB**

Teridion value in this region

Load time is **3181.75% faster**  
Response time is **728.24% faster**  
Throughput improved by **1274.10%**

## The Challenge

As with many Internet applications, the entry point to Teridion's services is DNS. To reinforce their core mission of consistently delivering high performance for their customers' services, Teridion needed an advanced DNS and traffic management solution to address several key challenges:

- › **Intelligence.** Teridion's global network sits on top of cloud operators such as AWS, Digital Ocean, Google, Softlayer, NTT Communications, and others. While this gives Teridion broad coverage, deciding which endpoint to route users using real-time infrastructure and network data is equally important.
- › **Precise routing.** Teridion's Global Cloud Network resides on public and private cloud environments, spanning multiple providers around the globe with a presence on every continent. To be able to route their users with the utmost precision, Teridion needed access to the latest traffic management capabilities such as edns-client-subnet and geofencing.
- › **Configurability.** To automate DNS record changes and deploy additional monitors, Teridion required an easy-to-use API which would give them complete control.
- › **Speed.** In order to deliver the kind of instant availability and scalability their customers expect, Teridion requires near-instant DNS change propagation time from the API to all the DNS edge nodes throughout the world.
- › **Uptime.** By building a global network with several providers, Teridion designed their architecture to be fault tolerant in the event that a server or datacenter goes offline. However they required a layer on top of their infrastructure to control their global traffic and automatically readjust traffic flow on the fly.

## The Solution

After significant testing and benchmarking, Teridion chose NS1 to address its routing and performance challenges.

Teridion leveraged NS1's Filter Chain technology to easily build complex traffic management algorithms, which selects the optimal Global Cloud Network POP according to Teridion's specific performance and business logic - leveraging real-time data from both the network and infrastructure layers to inform traffic management decisions.

Next, Teridion leveraged NS1's edns-client-subnet support to dramatically improve routing precision. The edns-client-subnet DNS extension allows Teridion to take advantage of additional user metadata that Google Public DNS, OpenDNS, and other resolvers send to NS1, enabling significantly more accurate traffic management decisions. Teridion also incorporated NS1's custom geotargeting and geofencing filters into their Filter Chain to further hone routing precision.

Teridion defined and implemented routing logic using NS1's streamlined API-first approach. Very quickly they were able to deploy and control active TCP and DNS monitors from independent monitoring regions to keep an eye on their infrastructure. Teridion also automated record creation for new POPs being added to their Global Cloud Network.

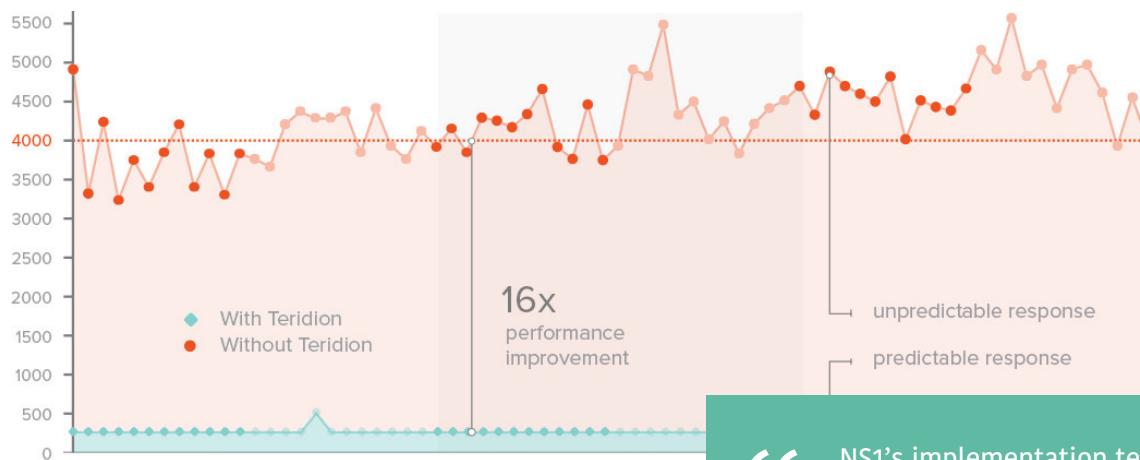
Within Teridion's Filter Chain configuration, NS1 helped implement rules to prevent poor performance or downtime. Built-in disaster recovery, failover and load shedding filters protect Teridion's service from unexpected network and infrastructure events.

## Results

NS1's global Managed DNS network substantially improved Teridion's network performance, resulting in a better, more responsive user experience. Implementing edns-client-subnet and other advanced traffic filters was easy and intuitive; And in conjunction with NS1's Filter Chain gave Teridion the flexibility to adjust their routing parameters with ease.

Furthermore, by routing around network and infrastructure issues, Teridion is able to shield its customers from outages and performance degradation - delivering a consistent level of performance.

Ultimately, Teridion is able to save time, lower operational costs, and improve user experience by leveraging NS1's next-gen DNS and traffic management solution.



“

NS1's implementation team went above and beyond to make sure everything was set up to exactly meet our requirements. The support we received has been crucial to us being able to manage our global customer base.”

Elad Welner,  
Director of Customer Success  
Teridion

## About NS1

NS1's intelligent DNS + traffic management platform converges public DNS, private DNS and traffic management into a single, next-generation solution that delivers unprecedented performance, visibility and control over Internet traffic.

NS1 is backed by leading venture capital firms including Flybridge Capital Partners, Sigma Prime Ventures, Founder Collective and Center Electric.

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