



PRODUCT DATASHEET

Managed DNS

Enterprises are delivering sophisticated applications to more widely distributed users than ever before. To support this effort, network architects and traffic management teams must ensure that every user has the fastest path to an optimal application experience.

Traditional DNS platforms do very little to improve user experience or accelerate application delivery. Static geolocation approximations and fixed round robin load balancing are not flexible enough to support modern application architectures and millions of users.

NS1 Managed DNS combines a resilient network, near instant DNS propagation, and intelligent traffic steering to give enterprises modern controls over user experience of internet-facing applications.

By modernizing DNS services, NS1, an IBM company, helps enterprises to realize dramatic gains in user experience, IT efficiency, and application reliability.



Always available

A global, over-built, DDoS resilient Anycast network with a reliability history backed by 100% uptime SLA.



Optimal user experience

Low latency DNS that intelligently routes around disruptions and sends every user to the fastest CDN, cloud, and/or data center



Data-driven efficiency

Leverage your telemetry to build policies that meet your unique business use cases and the go-to-market needs of specific applications.



Application agility

Cloud-native, API-first architecture integrates with DevOps tools to increase development and deployment velocity.

About NS1, an IBM Company

NS1, an IBM Company, delivers premium DNS and traffic steering solutions that let enterprises do more with DNS by turning the workhorse of their network into an engine of innovation. Companies around the world depend on NS1 to help them keep their businesses online all the time, identify network performance anomalies, and lower the cost of delighting audiences. NS1 is headquartered in New York and has more than 850 customers across the globe.

Managed DNS benefits

Ensure availability of your internet services with highly available, DDoS resilient, low latency, global DNS infrastructure.

Optimize user experience and improve availability with intelligent traffic steering:

- Send DNS traffic to the locations which deliver the best possible online experience at the lowest cost.
- Route around infrastructure or capacity problems to increase application availability

Improve management efficiency and flexibility with the ability to create and maintain policies easily with Filter Chains.

Empower multiple teams to manage and automate DNS their way with API-first architecture that supports both a modern GUI and programmable workflows.

Integrate with infrastructure-as-code tools used by DevOps teams to ensure reliable, secure deployment changes without the delays and “friction” of traditional processes.

Protect against DNS hijacking, cache poisoning and man-in-the-middle attacks with DNSSEC support.

Optional additions



Traffic Steering automatically optimizes the user experience, controls back-end delivery costs, and routes around deprecated systems through easily configurable policies.



Dedicated DNS is a complete, turnkey solution to the challenge of redundant DNS.



DNS Insights simplifies troubleshooting and improves network observability with in-depth, real-time data about DNS traffic.



Managed DNS for China overcomes performance challenges caused by the Great Firewall with nameservers deployed in key Chinese markets.

Features

Global Anycast network

Primary and secondary DNS built with a fully redundant architecture at 26 locations to meet a 100% uptime SLA.

Traffic Steering

Routing ensures that users get to servers, data centers, CDNs, or cloud instances that deliver optimal performance.

Filter Chain

Code-free creation of sophisticated traffic management policies such as load balancing, load shedding, failover, latency routing, and geographic routing.

Query reporting

See real-time and historical query usage for each zone.

Monitoring

Built-in probes to test infrastructure health using PING, TCP, DNS, and HTTP(S).

Rapid DNS propagation

DNS updates are pushed to NS1's edge nodes in seconds.

Data driven DNS

Infrastructure metrics (system health, network latency, system load, geography, ASN, bandwidth commits, etc.) leveraged to route traffic intelligently.

EDNS client subnet

Geolocation routing based on end-user IP address enables more precise and accurate control over user routing.

DDoS defense

Combination of global locations, massively provisioned infrastructure, autoscaling, sophisticated detection, filtering capabilities, and operational readiness drills to protect against attack.

DNSSEC

The integrity of DNS responses is protected by DNSSEC signing without compromising traffic management or DNS redundancy.

Secure access

Single Sign On or Two Factor Authentication validates users, Role-Based Access Controls manage access, and actions are recorded with audit logs.

REST APIs, SDKs, and integrations

Automate tasks and orchestrate using Ansible, Terraform, and other popular tools.

NS1-specific record types

Alias Records simulate a CNAME record at the zone apex. Linked Records reuse advanced configurations from existing NS1 records. URL Forwarding redirects traffic to customer-designated site based on the full incoming URL.

Support & maintenance

24x7x365 support. Migration, training, and professional services available.