NS1 Private DNS

Enterprise networks, infrastructure and application delivery have radically changed. Hybrid infrastructure, containerization and DevOps are now commonplace in enterprise IT architectures, and underscore the need for IT agility and velocity. DNS plays a vital role in modernizing the application delivery stack, yet there has been a glaring lack of DNS solutions designed to meet the needs of modern IT. The traditional DNS appliance vendors have done little more than offer their old hardware platforms in virtual machine packaging. Open source DNS projects are typically disjointed, designed for specific cloud environments and have very uncertain roadmaps. NS1 offers the only DNS solution for modern distributed, hybrid enterprise environments and agile teams.

API First
NS1’s next-generation Private DNS automatically propagates DNS changes in seconds to eliminate the risk of broken applications and user experiences. NS1’s API-first architecture empowers DevOps teams to automatically integrate DNS changes into their deployment processes, dramatically improving speed and mitigating downtime.

Fast DNS Service Discovery
Private DNS achieves DNS Service Discovery with the speed and immense capacity needed to keep up with rapid change in modern infrastructure.

Seamless Deployment in a Containerized Solution
Private DNS software is container ready, allowing for seamless deployment into your containerized environment.

Proven Technology
Private DNS is built on the same DNS software that powers NS1 Managed DNS. The scale, performance and reliability of this platform has been thoroughly proven by the most demanding customers and applications on the internet today.
NS1 Private DNS is a software-only DNS platform designed for modern enterprise networks. It is powered by the same DNS software that runs NS1’s global managed DNS service – delivering the next-generation capabilities of NS1’s Managed DNS to the enterprise.

- **DevOps ready.** The days of sending change request tickets to DNS administrators are over. Private DNS has an “API first” architecture and has integrations with the tools and CI/CD processes DevOps teams use to deploy into cloud and traditional data center environments.

- **DNS Traffic Management.** A static, phone book DNS no longer meets the needs of large enterprise networks. Private DNS uses real-time intelligence to optimally route end user and application traffic.

- **Rapid propagation.** Traditional DNS platforms were not designed to keep pace with dynamically changing infrastructure. Private DNS delivers a 10X improvement in API capacity and reduces propagation times from hours to seconds.

**Problems: Solved**

- **Unified DNS.** Your teams can work with one platform to deploy into different cloud platforms, corporate offices and data centers.

- **Disaster recovery and failover.** Built-in monitoring and failover support makes it easy to use DNS to detect problems and automatically shift traffic to backup facilities.

- **Load balancing.** No need to deploy vendor specific GSLB solutions. Private DNS has vendor agnostic GSLB allowing you to balance workloads across a multivendor, distributed environment.

- **Service Discovery.** Private DNS is designed to support microservices architectures.

**Features**

- **Advanced Traffic Management**
  Make real-time traffic management decisions using availability and performance metrics critical to your application’s performance.

- **Full-Featured REST API and CLI**
  Easily control all aspects of the platform. Automate service discovery and the commissioning and decommissioning of assets.

- **Filter Chain technology**
  Simple point-and-click customization of metric-based routing algorithms that go beyond simple rules like availability or location.

- **Performance**
  API capacity and fast propagation of DNS updates enable timely and effective response to infrastructure changes.

- **DevOps Integrations and SDKs**
  Manage DNS using data center orchestration and infrastructure as code tools such as OctoDNS, Ansible, Terraform, Mesos, Go, PHP, Python.

- **Deployment**
  Docker containers.

- **DNS Services**
  Authoritative and Recursive DNS.

- **Licensing**
  Subscription and Perpetual options.

- **Support**
  24x7 available. Migration and professional services available.

**Advanced Traffic Management**

Make real-time traffic management decisions using availability and performance metrics critical to your application’s performance.

Brandon Butler, Senior Research Analyst IDC

NS1’s Private DNS is a welcome addition to the enterprise DNS landscape. DNS is a critical foundational element to not just the Internet, but any connected enterprise application or service. Modernizing DNS to deliver an API-first platform for automation and advanced traffic management capabilities boosts performance and reliability. It also lays the groundwork for leaps in enterprise digital transformation.