

Automate Network Services with NS1

The Drive Towards Network Agility



SOLUTION BRIEF

NS1.

In a digitally transformed enterprise, IT organizations must be able to make frequent changes to the infrastructure that supports the critical business operations that drive revenue, productivity and innovation, and deliver exceptional customer experiences. This requires speed and agility, as IT organizations are constantly:

- Deploying and scaling applications to keep pace with the business's needs.
- Regularly updating the underlying network infrastructure (i.e., moving towards the cloud and the distributed edge)
- Frequent tuning and management to improve the reliability and performance of network applications

Yet, too often, network infrastructure management activities are done manually - increasing the risk of delays and costly errors that impact the business bottom line. Provisioning network resources becomes untenable as the network scales and diversifies, leading to more complexity, cost, and overhead. To gain the speed and agility required to keep pace with fast-changing business needs, IT and networking organizations must focus on enabling network services automation.

Automation: The Future of Network Management

To speed up network provisioning and management, network engineers have begun to embrace automation. By adopting automation practices such as infrastructure as code (IaC) using APIs, network engineers are able to rapidly provision new networks, balance traffic, and scale according to the needs of the applications and users they support. Automation drives efficiency and accelerates release and deployment velocity by eliminating manual errors and enabling seamless integration with CI/CD frameworks.

Yet, enabling network services automation throughout the enterprise network is not a simple flip of a switch. It requires accurate and always-up-to-date information about the current state of network resources. Traditional solutions can't keep up with the dynamism of today's highly distributed network environments. This can create blindspots and stifle automation efforts.



NS1: Network Services at the Speed of Automation

Our unified, cloud-native solutions for DNS, DHCP, IP address management, and application traffic steering enable modern network teams to build, automate, and scale global enterprise networks and applications at the speed of business while eliminating the cost, time, and complexity associated with legacy on-premises and hardware-centric solutions.

API-first architecture

We built our technology stack on an API-first architecture. This provides the dual benefit of modern, fast user interfaces combined with high-performance automation. With NS1, you can configure once and automate everywhere.

Toolkit integrations

Our extensive toolkit integrations with essential DevOps automation tools like Terraform, Ansible, and Jenkins allow DevOps teams to build, test, and deploy applications in an agile and programmatic manner by integrating network services into CI/CD workflows.

Other NS1 integrations enable the platform to leverage and be leveraged for performance monitoring, log visualization and analysis, deployment management and orchestration, alerting, and much more.

Application traffic policy management

Our patented NS1 Filter Chain™ technology enables you to ensure reliability and performance in today's dynamic and unpredictable network environments. Our powerful policy engine with its point-and-click interface makes it simple to build complex and dynamic traffic steering policies using a plethora of telemetry and real-time data about your users, infrastructure, load and capacity, and other network and internet conditions.

Unified Visibility

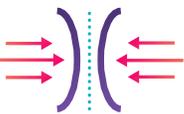
NS1 provides unified visibility across the IP address space and services that span multiple providers. With a single tool to manage a variety of services across diverse and geographically distributed application infrastructures, network engineers can reduce complexity and identify potential issues sooner.

Benefits



Improve operational efficiency

Many organizations have embraced a hybrid-cloud environment. Yet cloud providers' services are fundamentally designed to work in that provider's environment. Replicating services manually across multiple clouds adds substantial costs as well as management overhead. As a cloud-native solution, NS1 significantly reduces complexity by enabling the deployment and automation of network services, such as DNS, across multiple cloud service providers while enabling network engineers to centrally manage all environments.



Enable elasticity

Utilization is one of the main issues with manually provisioning network services as individual appliances or servers. In dynamic, elastic environments, it is common for infrastructure to live for very short periods, sometimes for just minutes to support testing or sandbox environments or for days to handle a surge in application traffic. With NS1, network teams can provision resources programmatically based on what's needed at the moment. Automatic scaling abilities reduce costs and create a modern on-demand environment, while teams can rely on accurate and always-up-to-date resource records.

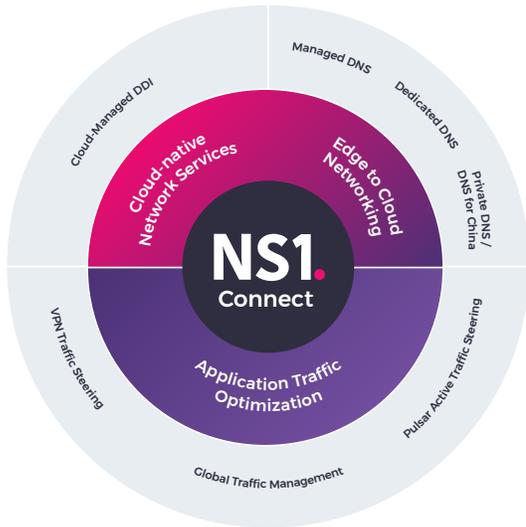


Achieve agility

The role of DevOps has become increasingly important. It is critical for network infrastructure teams to meet the demands of DevOps-driven applications by empowering DevOps teams and making sure that networks underpinning applications are optimized. Application deployment processes are dependent on DNS, DHCP and IP Address Management because every application deployment requires a DNS update and IP address, and if they aren't provided and discovered quickly, application services break. Having to manually provision network services DNS can impact time-to-market, and revenue. NS1 empowers network engineers to spin-up required services quickly and automatically as part of their CI/CD processes.

Drive network agility with NS1

Automation is critical to achieving agility in modern, digitally transformed enterprises. Provisioning network services with legacy DNS, DHCP, and IP address management hardware or virtual appliances slows application and network deployment velocity and makes it harder to scale network services to meet the organization's network access and application performance needs. NS1 empowers network engineers to adopt and scale new network architectures, automate repetitive tasks, manage traffic across hybrid and multi-cloud environments, reduce costs, and quickly deploy network services with automation workflows and IaC tools.



One platform, many possibilities

Through our portfolio of application traffic automation and intelligence solutions, NS1 can help you to connect applications and audiences everywhere you operate, from within the enterprise network and across the world. All NS1 solutions are delivered through our unified cloud-based delivery platform, NS1 Connect, giving you streamlined operations, centralized control, and global visibility of your application and network footprint. Unite and empower your application delivery and networking teams with a modern, scalable, and secure infrastructure stack.



About NS1

The internet and applications powering our world depend on NS1. Billions of people connect to work, school, entertainment, healthcare and stay informed because of the company's innovative technology. As an ally for innovators, NS1 helps our customers turbocharge their ideas in pursuit of building the better future through connecting applications and audiences at the distributed edge. NS1's application traffic intelligence and automation portfolio makes applications faster, reliable and secure everywhere. With technologies for cloud-native network services, edge to cloud networking, and application traffic optimization, NS1 helps eliminate the barriers between applications, users, infrastructure and data. NS1 has more than 725 customers across the globe such as Dropbox, Fox, Salesforce.com, LinkedIn, and Ebay.