The Guardian Never Sleeps with NS1’s Dedicated and Managed DNS.

**Challenge**

News never sleeps. Ensuring redundancy and resiliency in their network is essential to supporting the goals of The Guardian, and its parent company Guardian News & Media (GNM). GNM had a managed DNS provider, but they wanted a solution to make their network more resilient. They were open to a solution using multiple DNS providers for redundancy, or a single provider able to meet their redundancy and resiliency needs. The project called for a solution with no single points of failure for their DNS network while providing rapid DNS resolution for a world-wide workforce.

GNM’s network is a fully cloud based infrastructure using AWS cloud services, and the Fastly CDN network. The bulk of their employees work in the London, UK headquarters and they have two branch offices; one in the US and another in Australia. Additionally, they have a cohort of correspondents and reporters around the globe.

**Solution**

GNM did an extensive review of 5 DNS provider companies, including NS1. A major concern surfaced while researching redundant DNS solutions - most DNS providers are not designed to work well with other DNS providers to form a single cohesive, redundant, solution. In order to implement a redundant solution using two different DNS providers, the team at GNM would need to build and manage an orchestration layer between the networks in order to keep both systems aligned and up to date. Additionally, to fully replace their prior managed DNS solution and meet their user’s expectations, GNM needed to include advanced geolocation-based routing to steer global users to the closest endpoint.

They ultimately decided to go with NS1’s combined solution of both Managed DNS and Dedicated DNS.
In NS1’s Dedicated DNS setup, a second DNS provider network is established creating an entirely separate DNS instance from NS1’s Managed DNS network. The combined solution is under unified management, thus removing the need for GNM to create an orchestration layer between the two networks. The Dedicated DNS solution gave GNM the redundancy they needed to avoid a single point of failure, while the seamless coordination between the two NS1 products allowed them to manage both networks from a single pane of glass. NS1’s Filter Chain™ technology was another piece of the solution. It identifies information about the user requesting DNS routing and, using predetermined rules in the Filter Chain, provides the correct endpoint solution to the user based on their geolocation, ASN, or IP prefix.

Results
During the implementation, an engineer was made available to GNM to assist with the entire migration. NS1 walked GNM through each step of the project to insure a smooth transition.

With NS1’s full-feature API, GNM was able to quickly and easily verify that the configuration details of NS1’s Managed DNS mirrored the results from their legacy DNS provider. GNM’s team found that the API was easy to use, particularly in the way it handled authentication. In fact, a single API call could gather all the information they required. As a result, GNM was able to verify the DNS results quickly and painlessly.

GNM accomplished its business objectives for DNS traffic management, resilience, and fault tolerance. NS1’s white-glove support, ensured their DNS configuration was up and running in record time. With the addition of Dedicated DNS, GNM maintains dual-network redundancy with peace-of-mind and zero management headaches.

About The Guardian
The Guardian, and its parent company Guardian News & Media, are a London, UK based newsbrand with branches in the US and Australia. GNM has a mission to promote and sustain liberal journalism. GNM is a globally influential and independent voice with international, agenda-setting news at its core.

NS1’s customer support is excellent. When we had questions, we fired off an email to the support team and they were right back with the answers we needed. It helped us complete the migration quite quickly.

- Simon Hildrew
Lead Software Developer,
Guardian News & Media

About NS1
NS1 is the leader in next generation DNS solutions that orchestrate the delivery of the world’s most critical internet and enterprise applications. Only NS1’s purpose-built platform, which is built on a modern API-first architecture, transforms DNS into an intelligent, efficient and automated system, driving dramatic gains in reliability, resiliency, security and performance of application delivery infrastructure. Many of the highest-trafficked sites and largest global enterprises trust NS1, including Salesforce, LinkedIn, Dropbox, Nielsen, Squarespace, Pandora and The Guardian.