



Telecom DNS Solution

Unified DNS Service for Operators for Optimal TCO and Enhanced QoE

The effectiveness of the DNS service greatly influences how users experience the internet. Any irregularities or delays, in DNS performance are seen as signs of internet service quality to a network losing data packets. Internet providers that deliver steady DNS performance can leave an impression, on customers leading to higher satisfaction levels and loyalty.

Nameto provides Telecom DNS Solutions for organizations providing Internet access services, typically service providers, that aspire to industry leadership.

Built on Nameto CNS, our solution is designed to reliably serve large subscriber bases, enhancing QoE. Nameto offers both the product and the service, taking full responsibility for the DNS service for end-users and optimizing service TCO for operators.

We collaborate with national mobile service operators, leading broadband providers, and other service-focused companies. Using our services, they have cut costs and are continuously enhancing their DNS quality. We're proud to note that many of these partnerships have been lasting for over a decade.

This solution brief provides a summary of the benefits of Nameto DNS Solution for our Clients.

Challenge

Even for major operators, establishing a high-quality DNS service might be a hard road because of scalability, diagnostic, security, and “day 2 operations” complexities. These technical and security concerns demand significant investments and expert knowledge. As these complexities mount and the need for a flawless initial setup becomes clear, many companies find themselves at a crossroads as they consider the most effective path forward.

Solution

At Nameto we understand the challenges that come with establishing and managing a DNS service. This is why we have created DNS software designed for performance and scalability to address these challenges. Leveraging our expertise and all, in one solution we effectively handle any DNS issues faced by telecommunication providers.

Benefits

When partnering with Nameto, clients receive more than just a service; they gain a Telecom DNS Solution. Essentially, with Nameto clients obtain dedicated partners committed to their success.

Challenge: Establishing a high-quality DNS service Build in-house or partner with an expert?

When a company decides to handle specialized tasks like DNS services completely in-house, it might encounter a multitude of challenges. These include a knowledge gap, a lack of deep understanding of the common threats and vulnerabilities associated with DNS, unexpected cost overruns, and integration challenges.

As the user base or demand grows, the DNS system must scale appropriately, and an in-house design must account for this. Setting up and maintaining a DNS system requires dedicated hardware, software, and human resources. Properly allocating and managing these resources can be taxing, leading to maintenance overhead.

Contemporary open-source DNS software is often designed to cater to the needs of average users or to serve as a standard implementation for various RFC specifications, rather than meeting real commercial network demands and carrier diagnostic capability requirements. Network performance might suffer due to the added latency of non-carrier-grade DNS software.

After an in-house deployment, the most common issues are a lack of continuous improvement and, without specialized expertise, extended downtimes or service disruptions can occur.

Nameto DNS Service

Market-proven, high-performance Telecom DNS Solution

To retain control of DNS Service Quality and to prevent accidental service disruption, operators, ISPs, and other service providers can add the Nameto DNS Service to their DNS infrastructure with a large operator's proven solution from Nameto.

Customers of the Nameto Telecom DNS solution benefit from completely outsourcing all specialized DNS service tasks to us. The Telecom DNS solution is based on Carrier-Grade Caching DNS, the CNS, and is deployed in worldwide service providers in both physical and virtual networks. We assert full responsibility for CNS's performance in real-world operational environments of our customers.

By choosing a partnership with Nameto, operators can expedite DNS troubleshooting, release engineering resources, increase the QoE for their subscribers, achieve optimal TCO, and contribute to a greener future.

Additionally, a robust DNS infrastructure enhances security, mitigating risks like phishing attacks, and further bolstering trust in the provider.

Features and Benefits

Predictable and optimal TCO: In the ever-evolving landscape of business operations, predictability is a prized asset, especially when it comes to costs. A predictable and optimal Total Cost of Ownership (TCO) ensures that businesses can forecast their financial commitments accurately, allowing for better budgeting and resource allocation.

Unified service for Fixed and Mobile customers: A unified DNS service for both fixed and mobile subscribers is a strategic move toward optimal resource utilization. By unifying this service with Nameto, organizations can consolidate their resources and ensure more efficient operations. Instead of navigating the bureaucratic maze of multiple internal departments, businesses interact directly with us, a single dedicated partner.

Reduced cost of DNS system maintenance: Maintaining a DNS system is often accompanied by hidden costs, from specialized manpower requirements to periodic hardware and software updates. Such costs can escalate quickly, especially when unforeseen issues arise. By entrusting the maintenance to us, as a specialized DNS vendor, businesses benefit from our process optimizations, cutting-edge technology, and vast expertise. As a result, businesses can redirect saved resources toward growth initiatives, ensuring that their operations remain both efficient and cost-effective.

Release of engineering resources: Allocating engineering resources to specialized tasks like DNS management can tie up valuable talent that could be focused on core business innovations. This not only ensures that DNS operations are handled by dedicated experts but also optimizes workforce productivity.

Reliability: Reliability is at the core of our commitment, and we proudly uphold our record to demonstrate this. Nameto has consistently offered uninterrupted service for our customers, thus no financial losses recorded.

Rapid problem diagnostics: In the realm of DNS operations, swift and accurate problem diagnostics are paramount. Our specialized software stands out in this domain, designed meticulously to detect and diagnose issues promptly. Businesses leveraging our services can have confidence in the resilience and responsiveness of their DNS infrastructure, knowing that swift and precise diagnostics are always at play.

QoE enhancing: In an era where even a split-second delay can lead to a user switching to a competitor, optimizing latency characteristics is not just an enhancement, but a necessity. Ensuring a top-tier Quality of Experience (QoE) is more than just meeting technical benchmarks, it translates into higher user satisfaction. Our service has a proven track in enhancing QoE in real-world operational environments of our customers.

Subscriber Security: One of the features of our service is the subscriber security add-value service. Our platform makes it straightforward for providers to implement powerful filtering mechanisms that actively screen out Internet threats. Our software has production support for DoH and DoT. When customers know that their provider goes the extra mile to protect them from potential online hazards, it fosters a stronger, more confident relationship.

Contribute to a greener future: In the telecom arena, efficiency and sustainability go hand in hand. The enhanced performance of our software eliminates the need for excessive hardware, resulting in lowered energy demands and reduced carbon emissions. As businesses scale, the impact of these savings becomes even more significant. By integrating our solution, operators are taking a decisive step towards a greener telecom ecosystem.

Our Core Software

Low latency

Better than **99,9999%**
Real production availability

Up to **2 Millions QPS**
On commodity X64 hardware

AV vendor partnership
Malware protection
Filter virus C&C and other threads

DoS Protection
Attack resistance

Advanced diagnostics and
Full Visibility
Short troubleshooting times

Nameto CNS
Carrier-Grade Caching DNS

Production ready
DoH
DNS over HTTPS

Production ready
DoT
DNS over TLS

SNMP
Prometheus
Monitoring

API
Java & Python

Fishing domain protection
Filter fishing domains

Advanced policy engine
Rich request policies for DNS processing modification

Solution Components

- Production-proven technology
- Currently deployed in operator networks, supporting millions of customers
- Supports all DNS types
- DNSSEC
- IPv6 production support
- VRF support
- DNS64
- EDNS Client Subnet
- Extended DNS errors (RFC8914)
- DNS Query Name Minimisation (RFC 7816)
- Query Prefetching
- DoT and DoH production support
- Unlimited views and policies
- Low latency
- Java and Python API
- SNMP

Next Steps

For more information, please visit nameto.io

About Nameto

Nameto is a technology solutions provider with a special emphasis on addressing digital challenges. With a solid background in delivering consistent and adaptable DNS services, we assist telecom operators in enhancing their performance and security. Our team actively engages with clients, delivering solutions that promote efficiency and a better user experience. At Nameto, we aim to be more than just a service provider; we're your dedicated partner in the digital realm.

Learn More
About Nameto

Contact Us
nameto.io

@ 2023 Nameto Oy. All rights reserved. Nameto Oy, the Nameto logo and Nameto CNS are trademarks or registered trademarks of Nameto Oy in the Finland and other countries. All other trademarks are property of their respective owners. Nameto assumes no responsibility for any inaccuracies in this document. Nameto reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

NAMETO-SB-EN-18 SEP 2023