(a) SAFEDNS

Whitepaper

SafeDNS solutions for ISP providers





The need for Filtering Solution

Telecom providers, both fixed and mobile, need to meet their regulatory compliance obligations with solutions that can be deployed easily and with minimal on-premise equipment. SafeDNS cloud filtering solution for ISPs is just such a solution. It takes the burden of costly infrastructure purchases and core network changes off the operator, while still providing industry leading content filtering solutions.

Our advantages

Compliance Made Simple

Ensures adherence to government legal requirements by filtering CSAM, illegal content, and other restricted categories.

Advanced Threat Prevention

Proactively blocks phishing, malware, and botnets, ensuring a secure browsing experience for all subscribers.

Scalable Performance

Designed for ISP-grade infrastructure, supporting millions of queries per second with one click scalability.

Reports & Analytics

Detailed insights into network activity, including comprehensive trends, query logs, and stats on threats prevented.

Premium Security Services

Enables ISPs to provide value-added cybersecurity solutions, increasing ARPU and customer retention.

Anycast network

Our Anycast network, featuring TIER IV nodes, ensures ultra-fast responses worldwide with 20 ms avg latency.

No technical headache

Easily deployable with existing infrastructure, ensuring no disruptions and fast implementation.

Bandwidth Management

Blocks bandwidth-draining domains, improving network efficiency and reducing unnecessary traffic loads.

"SafeDNS blocked 99.8% of requests to adult content and 97.3% of other harmful content. It did not have false positives."

AV-Comparatives, an independent test lab



ISP Use Cases

UK ISP Ensures Compliance with IWF Using SafeDNS Cloud Deployment

A UK-based internet service provider needed a robust solution to comply with the Internet Watch Foundation (IWF). The ISP faced challenges in implementing an efficient, scalable, and easily manageable filtering system without deploying costly hardware solutions.

Solution: SafeDNS provided a cloud-based Protective DNS solution, enabling the ISP to instantly enforce IWF filtering policies without infrastructure modifications. By routing DNS queries through SafeDNS cloud servers, the ISP achieved:

- Automatic Compliance with IWF The filtering system updated dynamically with IWF's database to block illegal content in real time.
- Seamless Cloud Deployment No need for additional hardware or network restructuring, ensuring quick implementation.
- **High-Performance DNS Resolution** The ISP maintained fast and secure internet access for customers without latency degradation.
- Customizable Filtering Policies Allowed the ISP to extend filtering options beyond IWF compliance, enhancing customer security.

With SafeDNS, the ISP achieved full regulatory compliance, minimized legal risks, and enhanced user protection—all while ensuring seamless internet performance.

American ISP Implements SafeDNS Shield for On-Premise CSAM & Phishing Protection

An American ISP sought a highly secure, on-premise solution to address two critical cybersecurity challenges: CSAM filtering compliance and phishing protection for its customers. The company required a self-hosted system that ensured full data privacy while offering real-time threat mitigation.

Solution: SafeDNS deployed SafeDNS Shield, an on-premise DNS filtering and security solution that enabled the ISP to process DNS queries locally while enforcing advanced filtering policies. Key benefits included:

- **CSAM Blocking & Compliance** The ISP met all regulatory obligations by blocking access to illegal content with continuously updated filtering.
- Enterprise-Grade Phishing Protection SafeDNS Shield proactively identified and blocked malicious domains to prevent credential theft and fraud.
- Full Data Control & Privacy The on-premise deployment ensured that all DNS query data remained within the ISP's infrastructure, complying with strict data sovereignty policies.
- High-Speed, Low-Latency DNS Filtering The ISP maintained optimal performance without external dependencies on third-party cloud services.

By implementing SafeDNS Shield, the ISP successfully enhanced cybersecurity for its customers, reduced regulatory risks, and ensured complete control over filtering policies—all while maintaining high-performance and scalable DNS security within its own infrastructure.



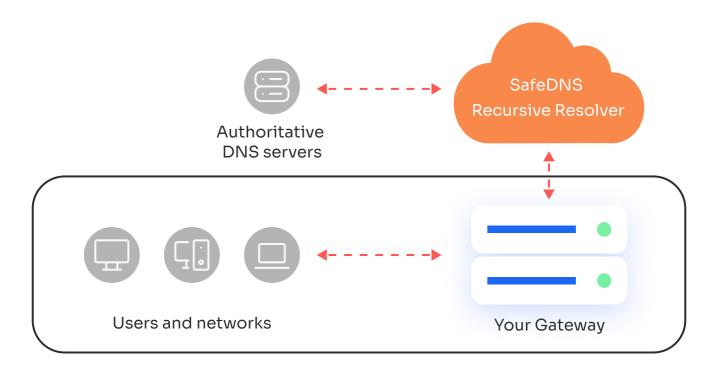
Content filtering solutions

	Cloud Filtering Solution	On-Premise Solution
Threat Detection & Protection	\odot	\odot
Content filtering	\odot	\odot
OSS/ BSS integration	\odot	\odot
Protection of users behind NAT	\odot	\odot
Regulation compliance	\odot	\odot
Internal IP addresses visibility	\otimes	\odot
User dashboards	\odot	\otimes
Full IPv6 support	\odot	\odot
The fastest to deploy	\odot	\otimes
Multiple customization opportunities	\odot	\odot
White labeling	\odot	\odot
Detailed reports and stats	\odot	\odot
Scalability	\odot	\odot

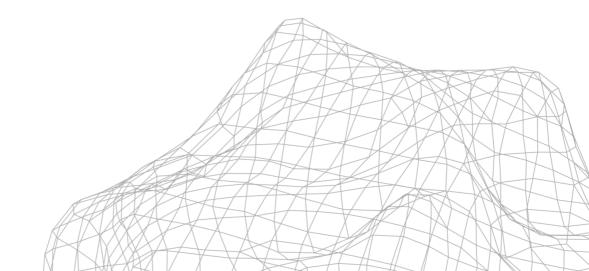
We guarantee at least 99.95% uptime

(a) SAFEDNS

SafeDNS Cloud



This is the most common cloud filtering setup

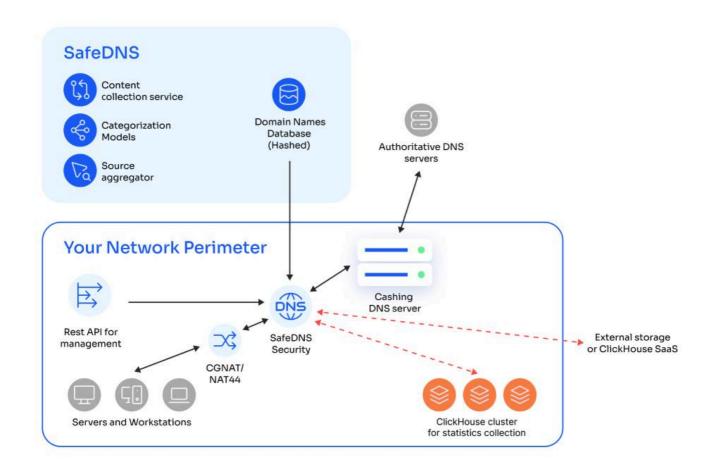




2 "SafeDNS Shield" On-premise solution

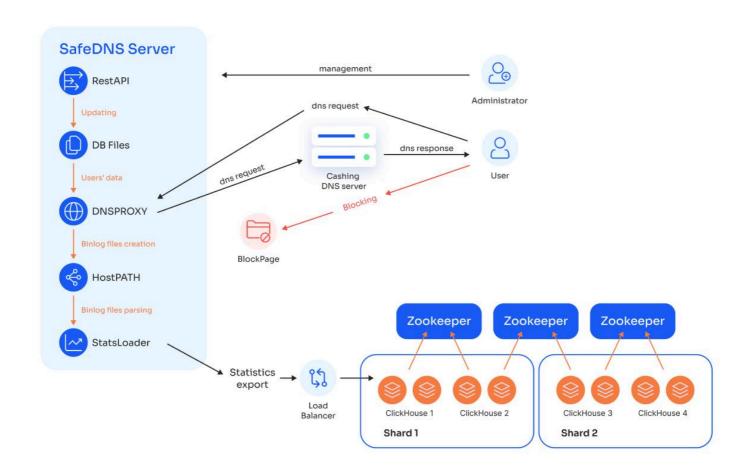
If cloud infrastructure isn't an option for the ISP, SafeDNS Shield provides a fully onpremise solution that delivers comprehensive filtering and security by default, covering all essential protection mechanisms.

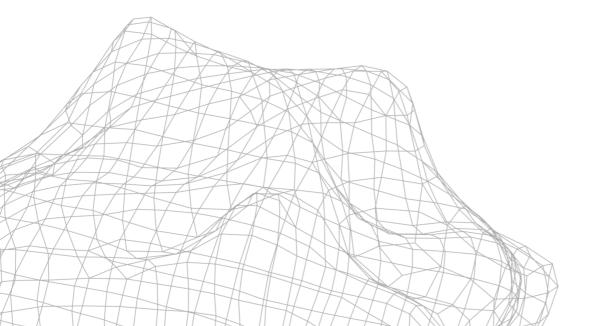
However, SafeDNS strongly recommends prioritizing the cloud solution due to its faster deployment, lower resource requirements, and reduced maintenance overhead, as SafeDNS handles all updates and infrastructure management. For more details, please refer to "Scheme 2" and "Scheme 3".



(a) SAFEDNS

3 "SafeDNS Shield" Components

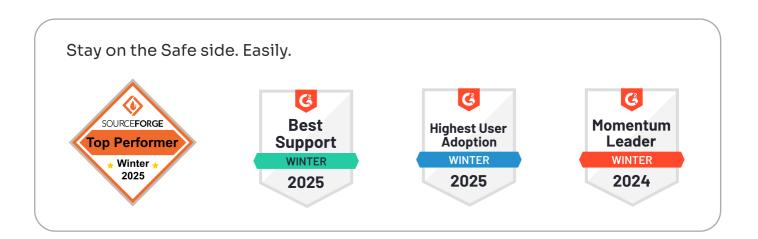






SafeDNS is a company founded in 2010 for developing web filtering solutions for different markets and customers. Since 2013 SafeDNS has been providing products for home and corporate users including businesses, educational institutions, telecom operators, MSPs and VARs.

Now SafeDNS products and cloud service are used by more than 4000 organizations and tens of thousands of home users worldwide.



Contacts



www.safedns.com



USA +1 (800) 820-2530

All +1 (571) 421-2990



sales@safedns.com