

# DNS Privacy Test Servers

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## Public resolvers



**Public Resolvers:** Several large organisations have announce DNS Privacy Servers - see [DNS Privacy Public Resolvers](#)

- [Quad9 \(9.9.9.9\)](#) and [Cloudflare \(1.1.1.1\)](#) offer **DNS-over-TLS on port 853**
- **DOH servers** are also currently listed on that page

## Experimental DNS Privacy Recursive Servers

[Live Monitoring Dashboard](#)

[Live Traffic Graphs](#)

[Map of server locations](#)

## DoH servers

These are currently listed on the [DNS Privacy Public Resolvers](#) page and also the list maintained [on the curl wiki](#). For any servers below with the note 'also does DoH' check these pages or the website of the service for the DoH endpoint.

## DoT servers

The following servers are experimental DNS-over-TLS servers.



Note that they are experimental offerings (mainly by individuals/small organisations) with **no guarantees** on the lifetime of the service, service level provided. The level of logging may also vary (see the individual websites where available) - the information here about logging has not been verified. Also note that the single SPKI pins published here for many of these servers are subject to change (e.g on Certificate renewal) and should be used with care!!

**Oct 2020: The list below has been updated to retain only those servers that appear to still be actively maintained**

## Stubby

A YAML configuration file for Stubby containing a the details of these servers is provided with Stubby and [can be found here](#). This file enables only the subset of servers operated by the stubby/getdns developers by default, users can choose to enable any of the other servers by uncommenting the relevant section (occasionally the file lags this page).

## Servers run by the Stubby developers

Hosted by	IP addresses	TLS Ports	Hostname for TLS authentication	Base 64 encoded form of SPKI pin (s) for TLS authentication (RFC7858)	TLSA record published	Logging	Software	Notes
<b>1) The following are currently enabled in the <a href="#">default Stubby config file</a> because they are run by the stubby/getdns developers and have no known issues.</b>								
Surfnet	145.100.185.15 2001:610:1:40ba:145:100:185:15	853 443	dnsovertls.sinodun.com	62IKu9HsDVbyiPenApnc4sfrmSYTHOVfFg L3pyB+cBL4=	Y	Traffic volume only	HAProxy + BIND 9.12	
Surfnet	145.100.185.16 2001:610:1:40ba:145:100:185:16	853 443	dnsovertls1.sinodun.com	cE2ecAlE5B+urJhDrJIVFmf38cJLAvqek ONvjvpqUA=	Y	Traffic volume only	Nginx + BIND 9.12	
<a href="#">getdnsapi.net</a>	185.49.141.37 2a04:b900:0:100::37	853	getdnsapi.net	foxZRnlh9gZpWnl+zEiKa0EJ2rdCGroMW m02gaxSc9Q=	Y	Traffic volume only	Unbound	

## Other servers with a 'no logging' policy

Hosted by	IP addresses	TLS Ports	Host name for TLS authentication	Base 64 encoded form of SPKI pin(s) for TLS authentication (RFC7858)	TLSA record published	Logging	Software	Notes
UncensoredDNS	89.233.43.71 2a01:3a0:53:53::0	853	unicast.censurfridns.dk	wikE3jYAA6jQmXYTr/rbHeEPmC78dQwZbQp6WdrseEs= (also see <a href="#">this file</a> for a full set of pins)	Y	Traffic volume only		See <a href="https://blog.uncensoreddns.org/">https://blog.uncensoreddns.org/</a>
Fondation RESTENA (NREN for Luxembourg)	158.64.1.29 2001:a18:1::29	853	kaitain.restenalu	7ftvIkA+UeN/ktVkovd/7rPz6mbkhV17/8HnFJiLa4=		Traffic volume only	Unbound	Configured with qname-minimisation, use-caps-for-id, aggressive-nsec, prefetch, harden-below-nxdomain and the newest auth-zone for local root zone caching.
Surfnets	145.100.185.18 2001:610:1:40ba:145:100:185:18	853	dnsovertls3.sinodun.com	5SpFz7JEPzF71hditH1v2dBhSErPUMcLPJx1uk2svT8=	Y	Traffic volume only	HAProxy + BIND 9.12	Supports TLS 1.3 and TLS 1.2. Our initial stability problems are solved... see <a href="#">here for details</a> .
Surfnets	145.100.185.17 2001:610:1:40ba:145:100:185:17	853	dnsovertls2.sinodun.com	NAXBESvpjZMnPWQcra2KFKiHV/pDEIjRkA3hLWogSg=	Y	Traffic volume only	Knot Resolver	
dkg	199.58.81.218 2001:470:1c:76d::53	85343	dns.cmrg.net	3IOHSS48KOc/zlkKgtl46a9TY9PPKDVGH3W2ZS4JZ0=5zFN3smRPuHillM/8L+hANt99LW26T97RFHqHv90awj0=		None	Knot Resolver	See <a href="https://dns.cmrg.net/">https://dns.cmrg.net/</a> Note that on port 443 this server can serve both HTTP 1.1 traffic (to securely access the nameserver credentials) on TLS connections <b>and</b> DNS-over-TLS on separate TLS connections due to some <a href="#">nifty, experimental demultiplexing of traffic, described here</a> . Has some issues with DNSSEC responses - this is under investigation.
Lorraine Data Network	80.67.188.188 2001:913::8	85343		WaG0kHUS5N/ny0labz85HZg+v+I0b/UQ73IzJFep0nM=		Traffic volume only	stunnel 4 + BIND	See <a href="https://ldn-fai.net/serveur-dns-recursif-ouvert/">https://ldn-fai.net/serveur-dns-recursif-ouvert/</a> (note, logging of IP address at stunnel no longer performed). <b>A self-signed certificate is used, so SPKI pinning is must be used.</b>
dns.neutopia.org	89.234.186.112 2a00:5884:8209::2	85343	dns.neutopia.org	wTeXHM8aczhRSi0cv2qOXkXInoDU+2C+M8MpRyT3OI=		No logging	Knot resolver	
BlahDNS	108.61.201.119 2001:19f0:7001:1ded:5400:01ff:fe90:945b	85343	dot-jp.blahdns.com			No logging		<a href="https://blahdns.com/">https://blahdns.com/</a>  NOTE1: Located in Japan. <a href="#">Also does DoH</a> . NOTE2: Note that port 443 REQUIRES an authentication name  <b>UPDATED 22nd JAN 2018: note the authentication name has changed</b>
BlahDNS	159.69.198.101 2a01:4f8:1c1c:6b4b::1	85343	dot-de.blahdns.com			No logging		<a href="https://blahdns.com/">https://blahdns.com/</a>  NOTE1: Located in Frankfurt. <a href="#">Also does DoH</a> . NOTE2: Note that port 443 REQUIRES an authentication name
Go6Lab	2001:67c:27e4::35	853	privacydns.go6lab.si	g5lqtwhia/pkKqWU/Fe2Woh4+7MO3d0JYqYJpj/iYAw=		No logging	Unbound	
Secure DNS Project by PumpleX	51.38.83.141 2001:41d0:801:2000::d64	853	dns.osz.co	P/Auj1pm8MiUpelxGcrEuMJQOV+pgPY0MR4awpcIvT4=		No logging		<a href="https://dns.osz.co">https://dns.osz.co</a> NOTE1: Also does DoH and dnscrypt NOTE2: Performs ad blocking
Foundation for Applied Privacy	146.255.56.98 2a01:4f8:c0c:83ed::1	85343	dot1.applied-privacy.net		Y	Only aggregated logging, no PII	unbound	<b>DETAILS UPDATED 14th Sep 2020</b>  <a href="https://appliedprivacy.net/services/dns/">https://appliedprivacy.net/services/dns/</a>  NOTE: Also does DoH and has an .onion endpoint
ibksturm.synology.me	178.82.102.190	853	ibksturm.synology.me			No logging	nginx + unbound	<a href="https://github.com/ibksturm/dnscrypt-switzerland">https://github.com/ibksturm/dnscrypt-switzerland</a>  NOTE: Also does DoH and dnscrypt no filters, opennic root copy

dismail.de	159.69.114.157 2a01:4f8:c17:739a::2	853	fdns2.dismail.de	yJYDim2Wb6tbxUB3yA5EIU/FsRZZhyMXye8sXhKEd1w=	No logging	<a href="https://dismail.de/info.html#dns">https://dismail.de/info.html#dns</a>
dismail.de	80.241.218.68 2a02:c205:3001:4558::1	853	fdns1.dismail.de	MMi3E2HZr5A5GL+badqe3tzEP CB00+OmApZqJakbqUU=	No logging	<a href="https://dismail.de/info.html#dns">https://dismail.de/info.html#dns</a>

## Servers with minimal logging/limitations

These servers use **some logging**, self-signed certs or no support for Strict mode.

Hosted by	IP addresses	TLS Ports	Hostname for TLS authentication	Base 64 encoded form of SPKI pin(s) for TLS authentication (RFC7858)	TLSA record published	Logging	Software	Notes
NIC Chile	200.1.123.46 2001:1398:1:0:200:1:123:46	853	dnsotls.lab.nic.cl	pUd9cZpbm9H8ws0tB55m9BXW4TrD4GZfBAB0ppCziBg=	Y	Yes, for research purposes	Unbound	<b>Details updated 18th Sept - now uses Let's encrypt cert</b>