DNS Privacy Test Servers

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!!

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
1) The following are currently enabled in the default Stubby config file because they are run by the stubby/getdns developers and have no known issues.								
Surfnet	145.100.185.15 2001:610:1:40ba:145:100:185:15	853 443	dnsovertls.sinodun.com	62lKu9HsDVbyiPenApnc4sfmSYTHOVfFgL3pyB+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	cE2ecALeE5B+urJhDrJlVFmf38cJLAvqekONvjvpqUA=	Y	Traffic volume only	Nginx + BIND 9.12	
getdnsapi.net	185.49.141.37 2a04:b900:0:100::37	853	getdnsapi.net	foxZRnIh9gZpWnl+zEiKa0EJ2rdCGroMWm02gaxSc9Q=	Y	Traffic volume only	Unbound	

Other servers with a 'no logging' policy

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
Uncensored DNS	89.233.43.71 2a01:3a0:53:53::0	853	unicast.censurfridns.dk	wikE3jYAA6jQmXYTr/rbHeEPmC78dQwZbQp6WdrseEs=	Y	Traffic volume only		See https://blog.uncensoreddns.org/
Fondation RESTENA (NREN for Luxemburg)	158.64.1.29 2001:a18:1::29	853	kaitain.restena.lu	7ftvIkA+UeN/ktVkovd/7rPZ6mbkhVI7/8HnFJIiLa4=		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.
Surfnet	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 here for details.
Surfnet	145.100.185.17 2001:610:1:40ba:145:100:185:17	853	dnsovertls2.sinodun.com	NAXBESvpjZMnPWQcrxa2KFlkHV/pDEljRkA3hLWogSg=	Y	Traffic volume only	Knot Resolver	
dkg	199.58.81.218 2001:470:1c:76d::53	853 443	dns.cmrg.net	3lOHSS48KOc/zlkKGtI46a9TY9PPKDVGhE3W2ZS4JZo= 5zFN3smRPuHIlM/8L+hANt99LW26T97RFHqHv90awjo=		None	Knot Resolver	See https://dns.cmrg.net/ Note that on port 443 this server can serve both HTTP 1.1 traffic (to securely access the nameserver credentials) on TLS connections ***and*** DNS-over-TLS on separate TLS connections due to some nifty, experimental demultiplexing of traffic, described here.Has some issues with DNSSEC responses - this is under investigation.
dns.larsdebruin.net (Previously dns1.darkmoon.is)	51.15.70.167	853	**UPDATED on 30 Jan 2018** dns.larsdebruin.net	**UPDATED on 30 Jan 2018** AAT+rHoKx5wQkWhxlfrIybFocBu3RBrPD2/ySwIwmvA=		Traffic volume only	Unbound	
securedns.eu	146.185.167.43 2a03:b0c0:0:1010::e9a:3001	853	dot.securedns.eu	h3mufC43MEqRD6uE4lz6gAgULZ5/riqH/E+U+jE3H8g=		None	HaProxy + Bind	NOTE 1: SecureDNS has support for additional TLDs of OpenNIC, Emercoin, and NamecoinNOTE 2: While both secure.eu and dot.secure.eu are running pin only validation for dot.secure.eu will not work!
dns-tls.bitwiseshift.net	81.187.221.24 2001:8b0:24:24::24	853	dns-tls.bitwiseshift.net	YmcYWZU5dd2EoblZHNf1jTUPVS+uK3280YYCdz4l4wo=		None	Unbound	
ns1.dnsprivacy.at	94.130.110.185 2a01:4f8:c0c:3c03::2	853	ns1.dnsprivacy.at	vqVQ9TcoR9RDY3TpO0MTXw1YQLjF44zdN3/4PkLwtEY=		None	Unbound	See https://dnsprivacy.at/
ns2.dnsprivacy.at	94.130.110.178 2a01:4f8:c0c:3bfc::2	853	ns2.dnsprivacy.at	s5Em89o0kigwfBF1gcXWd8zlATSWVXsJ6ecZfmBDTKg=		None	Unbound	
dns.bitgeek.in (India)	139.59.51.46	853	dns.bitgeek.in	FndaG4ezEBQs4k0Ya3xt3z4BjFEyQHd7B75nRyP1nTs=		Traffic volume only	Nginx + BIND	
Lorraine Data Network	80.67.188.188 2001:913::8	853 443		WaG0kHUS5N/ny0labz85HZg+v+f0b/UQ73IZjFep0nM=		Traffic volume only	stunnel 4 + BIND	See https://ldn-fai.net/serveur-dns-recursif-ouvert/ (note, logging of IP address at stunnel no longer performed). A self-signed certificate is used, so SPKI pinning is must be used.
dns.neutopia.org	89.234.186.112 2a00:5884:8209::2	853 443	dns.neutopia.org	wTeXHM8aczvhRSi0cv2qOXkXlnoDU+2C+M8MpRyT3OI=		No logging	Knot resolver	
BlahDNS	108.61.201.119 2001:19f0:7001:1ded:5400:01ff:fe90:945b	853 443	dot-jp.blahdns.com			No logging		https://blahdns.com/ NOTE1: Located in Japan. Also does DoH. NOTE2: Note that port 443 REQUIRES an authentication name **UPDATED 22nd JAN 2018: note the authentication name has changed**

BlahDNS	159.69.198.101 2a01:4f8:1c1c:6b4b::1	853 443	dot-de.blahdns.com			No logging		https://blahdns.com/ NOTE1: Located in Frankfurt. Also does DoH. NOTE2: Note that port 443 REQUIRES an authentication name
Go6Lab	2001:67c:27e4::35	853	privacydns.go6lab.si	g5lqtwHia/plKqWU/Fe2Woh4+7MO3d0JYqYJpj/iYAw=		No logging	Unbound	
Tenta	99.192.182.200, 66.244.159.200	853	iana.tenta.io			Traffic volume only	Tenta	https://tenta.com/privacy-policy
Tenta	99.192.182.100, 66.244.159.100	853	opennic.tenta.io			Traffic volume only	Tenta	**NOTE**: Uses OpenNIC Root!
dns.233py.com	Various, see notes	853	dns.233py.com			No logging	Unbound + DOH C/S	https://dns.233py.com (Chinese language version) Shanghai (Eastern China): 47.101.136.37/edns.233py.com Chongqing (Western China): 118.24.208.197/wdns.233py.com Beijing (North China): 114.115.240.175/ndns.233py.com Guangzhou (Southern China): 119.29.107.85/sdns.233py.com NOTE: Blocks ads and trackers. Also support DoH (see website)
Secure DNS Project by PumpleX	51.38.83.141 2001:41d0:801:2000::d64	853	dns.oszx.co	P/Auj1pm8MiUpeIxGcrEuMJOQV+pgPY0MR4awpclvT4=		No logging		https://dns.oszx.co NOTE1: Also does DoH and dnscrypt NOTE2: Performs ad blocking
Foundation for Applied Privacy	37.252.185.232 2a00:63c1:a:229::3	853 443	dot1.appliedprivacy.net		Y	Only aggregated logging, no PII	unbound	https://appliedprivacy.net/services/dns/ NOTE: Also does DoH and has an .onion endpoint
ibksturm.synology.me	178.82.102.190	853	ibksturm.synology.me			No logging	nginx + unbound	https://github.com/ibksturm/dnscrypt-switzerland NOTE: Also does DoH and dnscrypt no filters, opennic root copy
DNS Warden	116.203.70.156 2a01:4f8:1c1c:75b4::1	853	dot1.dnswarden.com			No logging	dnsdist	**DETAILS UPDATED 18th Mar 2019** Website is a work in progress: dnswarden.com NOTE1: These servers have ad and tracker blocking with return of NXDOMAIN for bad domains. NOTE2: Also supports OpenNIC TLDs. Also does DoH.
DNS Warden	116.203.35.255 2a01:4f8:1c1c:5e77::1	853	dot2.dnswarden.com			No logging	dnsdist	

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	**Details updated 18th Sept - now uses Let's encrypt cert**
OARC	184.105.193.78 2620:ff:c000:0:1::64:25	853	tls-dns-u.odvr.dns-oarc.net	pOXrpUt9kgPgbWxBFFcBTbRH2heo2wHwXp1fd4AEVXI=		Yes, see OARC website	Unbound	**See OARC website NOTE: As of June 2017 this server does not support Strict Mode because it does not offer the correct cipher suites to match RFC7525 recommendations.**
Rubyfish Internet Tech	115.159.154.226 47.99.165.31	853	dns.rubyfish.cn	DBDigty3zDS7TN/zbQOmnjZ0qW+qbRVzlsDKSsTwSxo=		Yes, see rubyfish website(only chinese version now)	Unbound	115.159.154.226/ea-dns.rubyfish.cn use upstream located in Hongkong/Janpan to resolve domains poisoned by the China-GFW47.99.165.31/uw-dns.rubyfish.cn use upstream located in US-West.