

**DNSCRYPT**  
**BRIAN HARTVIGSEN**  
**CISCO / OPENDNS**

# DNSCURVE

JUNE 2009 BY DJB

**DNSCURVE USES HIGH-SPEED HIGH-  
SECURITY ELLIPTIC-CURVE  
CRYPTOGRAPHY TO DRASTICALLY  
IMPROVE EVERY DIMENSION OF DNS  
SECURITY...**

OPENDNS ADOPTS DNSCURVE

JULY 31, 2009

MATTHEW DEMPSKY AKA **MDEMPSKY**

E733205

**FOREVER ALONE**



**OPENDNS DISABLED DNSCURVE SUPPORT**

**JUNE 21, 2017**

**ONLY BEING USED BY CR.YP.TO AND NAMESERVERS STOPPED  
RESPONDING TO ENCRYPTED QUERIES**

# DNSCURVE FORWARDER

```
<dnscrypt-query> ::= <client-magic> <client-pk> <client-nonce> <encrypted-query>  
...  
<encrypted-query> ::= AE(<shared-key> <client-nonce> <client-nonce-pad>,  
<client-query> <client-query-pad>)
```

**X25519-XSALSA20POLY1305 OR X25519-XCHACHA20POLY1305**

FIRST CODE COMMIT

OCT 19, 2011

FRANK DENIS AKA **JEDISCT1**

17D8DD0



**FIRST PUBLIC RELEASE**

**DECEMBER 6, 2011**

**DNSCRYPT-PROXY BINARY ONLY  
UI FOR OSX, WINDOWS, LINUX COME LATER**

# FIRST ENCRYPTION IS NOT ENOUGH RESPONSE

DECEMBER 8, 2011

BEN APRIL, TREND MICRO

[HTTPS://BLOG.TRENDMICRO.COM/TRENDLABS-SECURITY-  
INTELLIGENCE/DNSCRYPT-NOT-FUNDAMENTAL-ENOUGH/](https://blog.trendmicro.com/trendlabs-security-intelligence/dnscrypt-not-fundamental-enough/)

**DNSCRYPT-WRAPPER**

**NOVEMBER 25, 2012**

**INTERMEDIARY BETWEEN CLIENT AND RESOLVER TO ADD  
DNSCRYPT CAPABILITIES**

**OPENDNS ROAMING CLIENT**

**DECEMBER 14, 2012**

**OFF-NETWORK PROTECTION FOR ROAMING/REMOTE USERS**

**OPENDNS VIRTUAL APPLIANCE**

**APRIL 22, 2015**

**ACTIVE DIRECTORY INTEGRATION**

# **DNSCRYPT SPECIFICATION VERSION 2**

**JULY 25, 2015**

**UPDATES INCLUDE**

**DNSDIST SUPPORTS DNSCRYPT**

**DECEMBER 21, 2015**

**V1.1.0**

**YANDEX SUPPORTS DNSCRYPT**

**MARCH 29, 2016**

**SUPPORTED IN THEIR BROWSER**



**INTEGRATED DNSCRYPT IN ANYCONNECT**

**JULY 8, 2016**

**REPLACING MUCH OF THE ROAMING CLIENT BASE, SAME USE CASE**

**UNBOUND SUPPORTS DNSCRYPT**

**MARCH 20, 2017**

**V1.9.1**

# CISCO SECURITY CONNECTOR

SEP 20, 2017

DNSCRYPT ON IOS

**QUAD9 SUPPORTS DNSCRYPT**

**DECEMBER 2018**

**LATEST BIG PROVIDER**

**WHERE ARE WE?**

**40 PROVIDERS**

- > YANDEX
- > OPENNIC
  - > QUAD9
- > SECUREDNS
  - > ADGUARD
- > CLEANBROWSING
  - > SCALEWAY
- > DNSCRYPT.(NLIEUIORGIUKIMEICA)

> 3M OPENDNS  
ENDPOINTS



~15% OPENDNS  
TRAFFIC

# WHAT ABOUT DOT/DOH?

COUGH**DNSSEC**COUGH

QUESTIONS?