



# Encrypted DNS Deployment Initiative

EDDI London meetup hosted by CloudFlare

## **EDDI 1.30.20**

## Legal Notices



### Anti-Trust Guidelines for the Encrypted DNS Deployment Initiative

As with other initiatives to implement protocols across the Internet, the Encrypted DNS Deployment Initiative (“EDDI”) seeks to ensure the smooth global deployment and reliable operation at scale of DNS encryption technology in an open and transparent way across the Internet. This effort necessarily involves global coordination across a wide range of technical actors, from protocol designers to software developers, network operators, DNS operators, content delivery networks, cloud providers, application providers, and many others. In order to advance the pro-competitive and pro-consumer objectives of EDDI, it is imperative that all participants in EDDI abide by the antitrust laws. While not exhaustive, the following guidelines are intended to aid in your compliance with the antitrust laws.

Participants in EDDI should consult with their own legal counsel on participation in the initiative and complying with all applicable laws.

1. Don’t discuss competitively sensitive information, such as pricing, competitive strategy, and future product roadmaps. EDDI participants should not discuss with each other pricing, competitive strategy, future product roadmaps or other similar information that could be considered competitively sensitive.
2. Don’t discuss with other participants in EDDI any joint action directed against another company, such as jointly refusing to deal with that other company.
3. Don’t discuss with other participants in EDDI your confidential dealings with business partners, suppliers or vendors.
4. Don’t discuss limiting competition or excluding competitors.
5. Don’t use exaggerated language. EDDI is a forum to share best practices, information on deployment and technical trials, lessons learned, and efforts to measure, test, and implement DNS encryption at scale across the Internet ecosystem. All communications in any form should be focused on those efforts. EDDI participants should avoid the use of exaggerated language. You should assume that communications made through EDDI are not confidential and will be shared outside of EDDI.

These guidelines are not intended to be exhaustive of the types of activities that are and are not appropriate for EDDI participants. If you have any questions about the application of these guidelines to particular facts and circumstances or questions regarding complying with the antitrust laws, please consult your own legal counsel.

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# EDDI Objective:

- The goal of the Encrypted DNS Deployment Initiative is to ensure the smooth global adoption and reliable operation at scale of DNS encryption technology. This effort involves global coordination across a wide range of technical professionals, from protocol designers to software developers, network operators of all types, DNS operators, content delivery networks, cloud providers, application providers, and many others.





EDDI will...

- *Strive to define and adopt DNS encryption technologies in a manner that ensures the continued high performance, resiliency, stability and security of the Internet's critical namespace and name resolution services, as well as ensuring the continued unimpaired functionality of security protections, parental controls, and other services that depend upon the DNS.*
- *Seek to enhance the privacy and security of users, devices and services through the encryption of DNS query and response traffic and other techniques for reducing the disclosure of potentially sensitive information in DNS traffic.*
- *Develop best practices, such as in areas that may explore the collection and use of data contained in DNS queries, resolver discovery and selection, and how end user configuration options may be presented.*





# Approach...

Bring together key players in the implementation ecosystem

Provide a forum for discussing, sharing, and developing as necessary:

- Measurement data
- Design, deployment, and operations experience (e.g. lessons learned)
- Technical methods to address the needs of specific types of networks and service dependencies, including enterprise, government, and school networks, as well as ISP networks.
- Cyber-security and malware protections
- Parental content controls

# How to Participate...



WWW.ENCYPED-DNS.ORG



[EDDI MAILING LIST](#)  
&  
[PUBLIC ARCHIVES](#)



EDDI WORK STREAMS IN  
[EDDI GITHUB](#)  
REPOSITORIES



ATTEND EDDI MEETUPS

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)



## Adaptive DNS Discovery (ADD) Draft Charter

Proposed Working Group Charter Sending DNS messages over encrypted transports, as defined in DNS over TLS (DoT) [RFC 7858] and DNS over HTTPS (DoH) [RFC 8484], provides benefits to the security and privacy of DNS data.

Clients, such as applications and host operating systems, have started adopting these protocols to provide these user benefits. This working group will focus on discovery and selection of DNS resolvers by DNS clients in a variety of networking environments, including public networks, private networks, and VPNs; supporting both encrypted and unencrypted resolvers.

Clients adopting encrypted DNS protocols need to determine which DNS servers support encrypted transports, and which server to use for specific queries if multiple servers are available. These decisions can vary based on the network environment, and also based on the content and purpose of the client queries.

Network operators that start offering DNS encryption on their servers also need a way to indicate this support to clients.

Communicating information about resolver configuration and behavior allows clients to make more informed decisions about which DNS servers to use. For example, a resolver may be able to resolve private or local names as a split DNS server.



## Adaptive DNS Discovery (ADD) Draft Charter

The Adaptive DNS Discovery (ADD) working group will work on the following deliverables:

- **define a mechanism that allows clients to discover DNS resolvers, including encrypted DNS servers, that are available to the client either on the public Internet or on private or local networks;**
- **define a mechanism that allows communication of DNS resolver information to clients for use in selection decisions;**
- **develop an informational document that describes how client applications and systems can manage selection of DNS resolvers in various network environments and use cases.**

This working group will coordinate with dnsop, doh, and dprive for any changes required in DNS protocols and will make sure that those groups are included in major document reviews at appropriate times. It will also work with capport to ensure that solutions are applicable to captive networks.

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)



# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)

# Agenda

9:30 Start :: 12:30 Finish

- Agenda Bash
- EDDI Introduction (5m)
- Introductions (10m)
- IETF activity (60m)

Break (15min)

- Deployments
  - Andy Fiddler BT (25m)
- Use-Cases & Taxonomy (20m)
- Next steps & future meetups (10m)
- AOB (15)



## Meetups

- San Francisco 2/9 In partnership with DNS OARC
- London March 2
- IETF 107 Vancouver side meeting March 22-26

Past meetings & materials:

<https://github.com/Encrypted-DNS-Deployment-Initiative/Reference>



## Links

### EDDI

<https://www.encrypted-dns.org/>

### Archive

<http://lists.encrypted-dns.org/>

### GitHub

<https://github.com/Encrypted-DNS-Deployment-Initiative>