# IKEv2 Configuration for Encrypted DNS

**draft-btw-add-ipsecme-ike-01**

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# Status

- Presented at IETF#108
- Comments raised so far:
  - Complexity induced by muxing the attributes (mask bit)
  - Check if there are DoQ specifics
  - Supply DoH URI Template
- Fixed in 01: See next slide
- There are trade-offs

# Changes from -00

- New Attribute format for Encrypted DNS
  - separate attribute types for each Encrypted DNS type (DoT, DoH, DoQ) and for IP version
    - `ENCDNS_IP4_DOT, ENCDNS_IP6_DOT`
    - `ENCDNS_IP4_DOH, ENCDNS_IP6_DOH`
    - `ENCDNS_IP4_DOQ, ENCDNS_IP6_DOQ`
  - port number is added
    - Triggered by a check with the authors of DoQ to assess if they have specific configuration data to be returned to DoQ clients
  - “scope” bit is removed

# Separate Attribute Types

- We assume all types of Encrypted DNS are equivalent, so the client can be configured with any of them
  - with this approach the client includes all attributes for Encrypted DNS types it supports and the server returns back one (or few) of them with the DNS server(s) details
  - each attribute can contain several IP addresses of resolvers

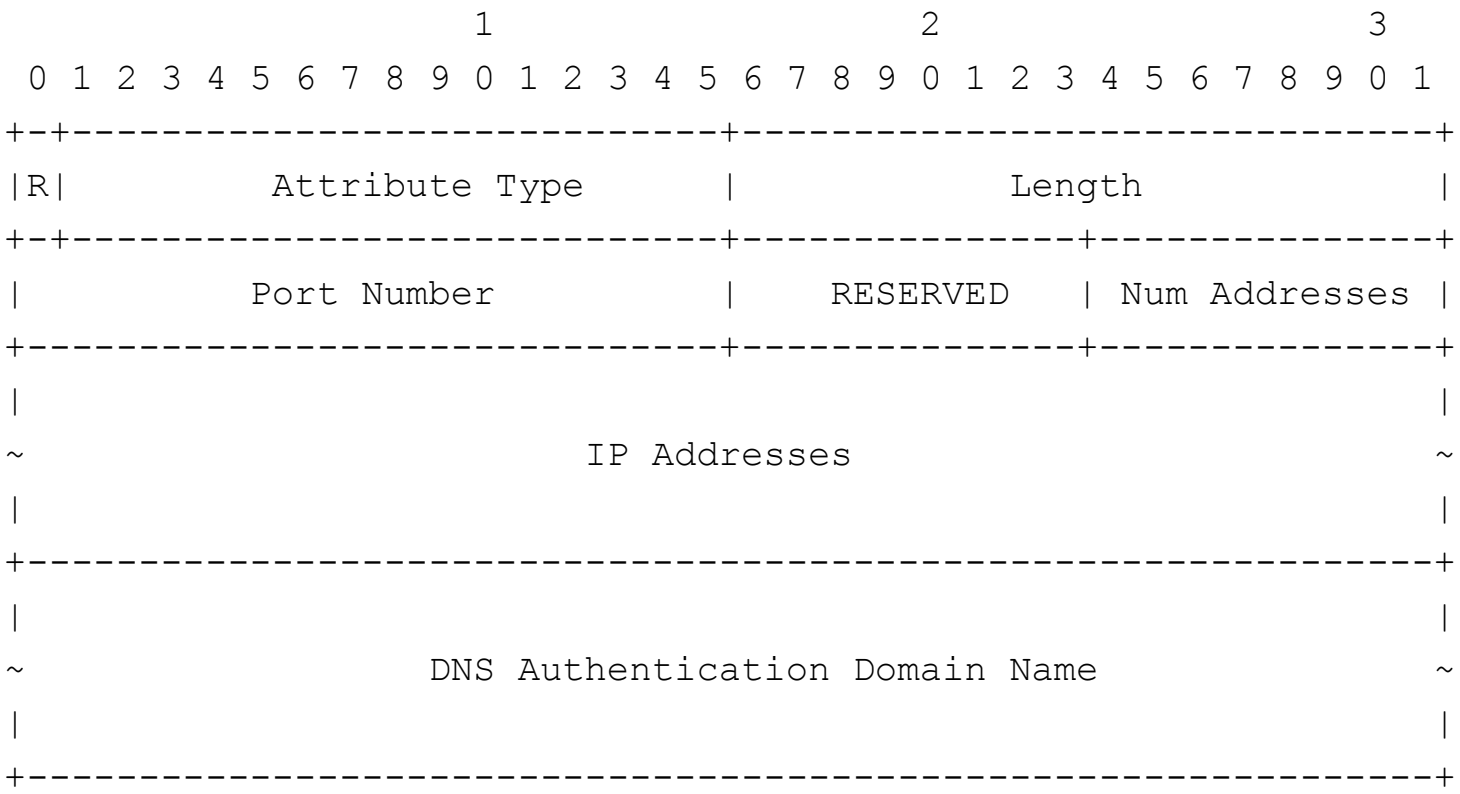
# Port Number

- Support for customizing port number for DNS servers is added
  - Port number is the same for all IP-addresses in a single attribute
  - if DNS servers have different port numbers, then separate attributes of the same type should be returned

# Scope

- “Scope” bit is removed
  - DNS server selected by the client outside of the VPN tunnel is out of scope of this draft

# Attribute Format



# DoH Specifics

- DoH servers may support more than one URI Template
- The DoH server may also host several DoH services (e.g., no-filtering, blocking adult content)
  - These services can be discovered as templates
- The client uses a well-known URI "resinfo" to discover these templates:

  https://doh.example.com/.well-known/resinfo

  Authentication Domain Name  To be assigned by IANA
- Discovering the well-known URI is out of scope of this draft and is discussed in Section 5 of  draft-btw-add-home
- Draft will use whatever mechanism(s) are finalized by the ADD WG for URI template discovery

# Next Steps

- Comments?
- Questions?
- Consider WG adoption

# Thank you