# DNS Extensions for Proxying IP in HTTP

<u>draft-schinazi-masque-connect-ip-dns</u>

IETF 119 – Brisbane – 2024-03-19

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### Most VPN protocols allow exchanging DNS info

IKEv2 has INTERNAL\_IP4\_DNS / INTERNAL\_IP6\_DNS

OpenVPN can also send DNS in-band

### **CONNECT-IP Capsules**

ADDRESS\_ASSIGN / ADDRESS\_REQUEST

ROUTE\_ADVERTISEMENT

Intentionally punted DNS from RFC 9484 to a future extension

### Having to exchange DNS out of band makes us sad



# Solution: put DNS in a capsule



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## Rough idea: DNS\_ASSIGN / DNS\_REQUEST

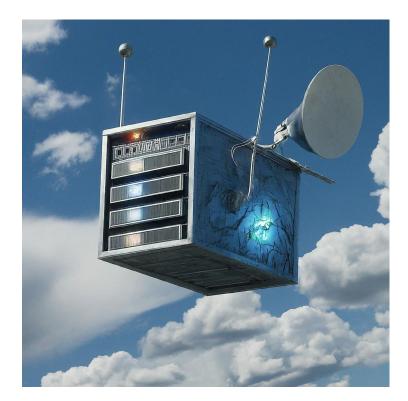
Each DNS name server has an IP address and a list of internal domains

Also exchange DNS search domains

Also carries request IDs similar to ADDRESS\_ASSIGN / ADDRESS\_REQUEST

Inspired by IKEv2 (RFC 7296 & RFC 8598)

## Is this interesting / reasonable?





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