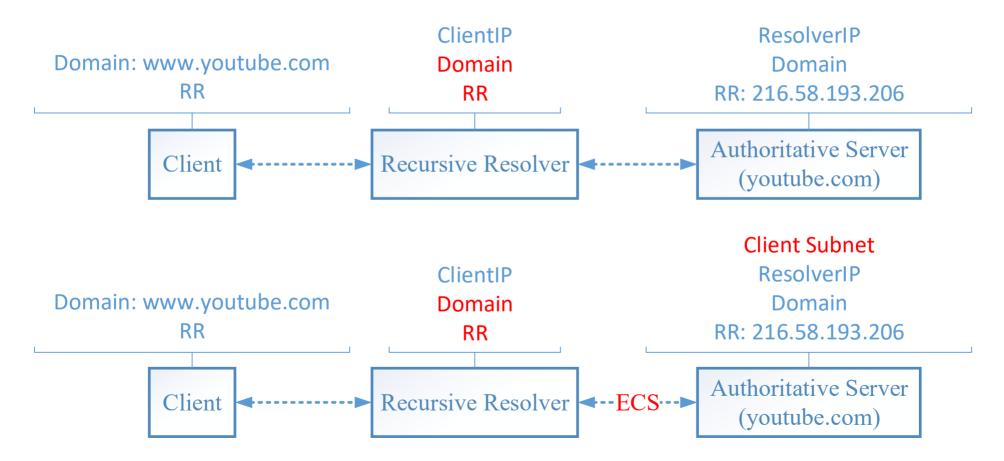
## A Public Key based EDNS Privacy Tunnel for DNS

Lanlan Pan, Xuebiao Yuchi, Jian Wang and Anlei Hu

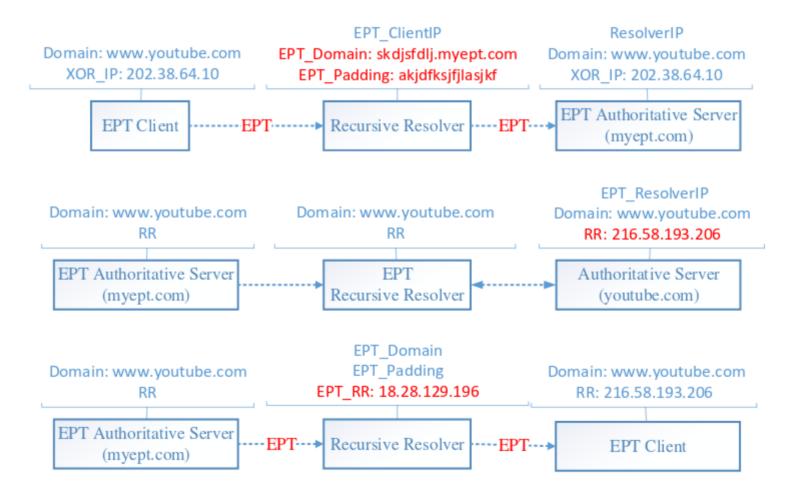
https://github.com/abbypan/dns\_test\_ept abbypan@gmail.com

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Room A

## DNS Leakage, ECS(client subnet)



## EPT: privacy tunnel extension for DNS



## Privacy Elements on DNS Server

- hide the query domain from recursive resolvers
- reduce the client IP leakage to authoritative server
- defense against censorship and lying recursive resolvers.

Resolution	Recursive Resolver	Authoritative Server
Not-ECS Query	ClientIP Domain RR	ResolverIP Domain
ECS Query	ClientIP Domain RR	Client Subnet ResolverIP Domain
EPT Query	EPT_ClientIP EPT_Domain EPT_RR EPT_Padding	EPT_ResolverIP Domain