

# DNS Configuration for Proxying IP in HTTP

`draft-ietf-masque-connect-ip-dns-02`

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# Quick recap...

- This is NOT a new way to transport DNS
- This is about signaling DNS resolver configuration over capsules to get on par with traditional VPNs

# Capsules

```
DNS_REQUEST Capsule {  
  Type (i) = DNS_REQUEST,  
  Length (i),  
  DNS Configuration (...),  
}
```

```
DNS_ASSIGN Capsule {  
  Type (i) = DNS_ASSIGN,  
  Length (i),  
  DNS Configuration (...),  
}
```

```
DNS Configuration {  
  Request ID (i),  
  Nameserver Count (i),  
  Nameserver (...) ...,  
  Internal Domain Count (i),  
  Internal Domain (...) ...,  
  Search Domain Count (i),  
  Search Domain (...) ...,  
}
```

```
Nameserver {  
  Service Priority (16),  
  IPv4 Address Count (i),  
  IPv4 Address (32) ...,  
  IPv6 Address Count (i),  
  IPv6 Address (128) ...,  
  Authentication Domain Name (...),  
  Service Parameters Length (i),  
  Service Parameters (...),  
}
```

# (minor) changes from -01

- Mention both Remote Access and Site-to-Site use cases
- Clarify that cleartext DNS may use TCP in addition to UDP
- Nameserver Domain -> Authentication Domain Name

# Open questions

- Is there value in asking for specific DNS servers in `DNS_REQUEST`? Should we instead limit it by:
  - List of SVCBs that client supports/prefers
  - Internal Domains that client is interested in
- Any other use cases or features we are missing?

# Next steps

- Documenting site-to-site / extranet example
- Plan on implementing