Discovery of Oblivious Services via Service Binding Records

draft-ietf-ohai-svcb-config-01

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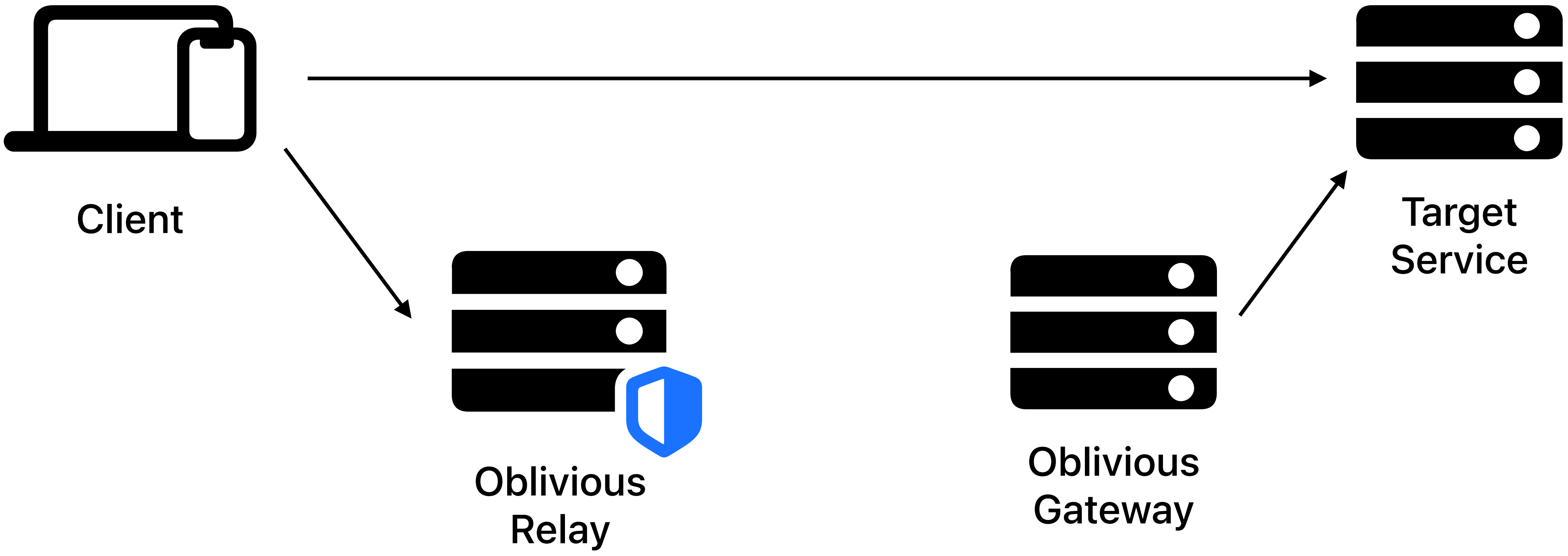
Recap

Target service works with an Oblivious Gateway for OHTTP access (generally co-located)



Updates in -01

Rename SVCB parameter to "ohttp"

Rename well-known URI to be "ohttp-gateway"

Clarify DoH / DDR behavior

Examples

DNS response (SVCB/HTTPS)

```
svc.example.com. 7200  IN HTTPS 1 . ( alpn=h2 ohttp )

_dns.resolver.arpa  7200  IN SVCB 1 doh.example.net (alpn=h2
dohpath=/dns-query{?dns} ohttp )
```

Oblivious gateway location

```
https://svc.example.com/.well-known/ohttp-gateway
```

Key configuration query

```
GET /.well-known/ohttp-gateway HTTP/1.1
Host: svc.example.com
Accept: application/ohttp-keys
```

DoH / DDR behavior

- OHTTP simply wraps DoH ***(DoOH?)***
  - OHTTP messages sent to gateway uses binary HTTP
  - Binary HTTP contains "application/dns-message" messages for DoH
- If the DoOH server is discovered using _dns.resolver.arpa (DDR), the server cert needs to be validated
  - Easiest way is to check the cert when fetching the key configuration on the well-known location
  - This check likely needs to be proxied

Next steps: consistency

- Key consistency
  - Key is looked up using well-known URI
  - Double-check approach (GET proxy & CONNECT proxy)
  - Check-with-relay approach
- "dohpath" consistency
  - Can limit to the "default" URI of "/dns-query"
  - Double-check approach (resolve via two methods)
  - Check-with-relay approach

Next steps

Any other issues beyond consistency?