

DNA Authentication Alternatives

IETF 81

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Problem Statement(per Richard Barnes)

- *XMPP outsourcing providers don't want to have to hold certificates with their clients' domain names in them.*
 - *Risk of key compromise, hijacking other services, masquerading, etc.*
- Note: this is absolutely standard practice for Web hosting
... but let's assume it's bad for XMPP

How To Provide a certificate that can only be used for XMPP

- Threat then limited to XMPP service
- Options:
 - XMPP URI in SAN
 - Certificate with special name in the SAN or CN
 - * E.g., `__xmpp__.example.com`
 - * Unlikely this will be confused with any other kind of cert
 - May need to modify XMPP clients to detect this kind of cert
 - * But modification needed for DNSSEC in any case

Putting it Together

- Hosting provider server has multiple certs
 - His own cert, which he uses for most connections
 - One cert for each customer, which he used to validate the binding to his cert
- Certificate selection is by SNI