DNSCurve: Usable security for DNS

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How do mail programs find microsoft.com?

They ask the Domain Name System.

How do web browsers find http://certicom.com or http://brightsight.com?

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They ask the Domain Name System. DNS has no security whatsoever.

Cryptography is used for private tunnels and for a small fraction of web pages but everybody knows that it's too slow to protect *all* communication.

DNSSEC tries to minimize server costs by *precomputing* signatures.

DNSSEC tries to minimize client costs by using 1024-bit RSA.

"Fifteen years.

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"Fifteen years. Ten million dollars of grants. More than 100 users."

- Actually, crypto isn't so slow! New project, DNSCurve:
- 1. Use state-of-the-art ECDH.
- 2. Reuse secret for subsequent packets exchanged between same parties.
- 3. Integrate carefully with DNS to avoid other usability problems.