



DNS on FreeBSD

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Danmarks plads på Internettet

FreeBSD 10.0

- unbound
- Idns
- host-wrapper, drill
- Simple setup
 - For complicated setup, install package
- Local caching recursor daemon only
 - Any resolver supported as 3rd party package
 - Any authoritative server supported as 3rd party package
- Forwarder
- DNSSEC validating
- SSHFP
- DANE

FreeBSD 10.1

- minor issues resolved
- local unbound as install time option
 - default off

FreeBSD 11.0

- local unbound as install time option
 - default on

Experience

- NTP
- “Starbucks effect”
 - extra records in root
 - EDNS0
 - fragmentation
 - TCP
- Protocol is right, it’s broken.
- User is unhappy
- permissive mode? dnssec-trigger? prompt user?

Future

- getdns-api
- Capsicum / Casper
 - compartmentalised service
 - applications don't need to know
 - DNS
 - crypto
 - DNSSEC
 - TLS
 - certificates
 - DANE
 - ...
 - “Give me an encrypted socket to www.facebook.com”
 - OS does the rest
 - show proof
 - OS-wide policy

Questions?

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Wiki:

<https://wiki.freebsd.org/DNSBase>

Slides:

<http://people.freebsd.org/~erwin/presentations/20141015-ICANN-FreeBSD-DNS.pdf>