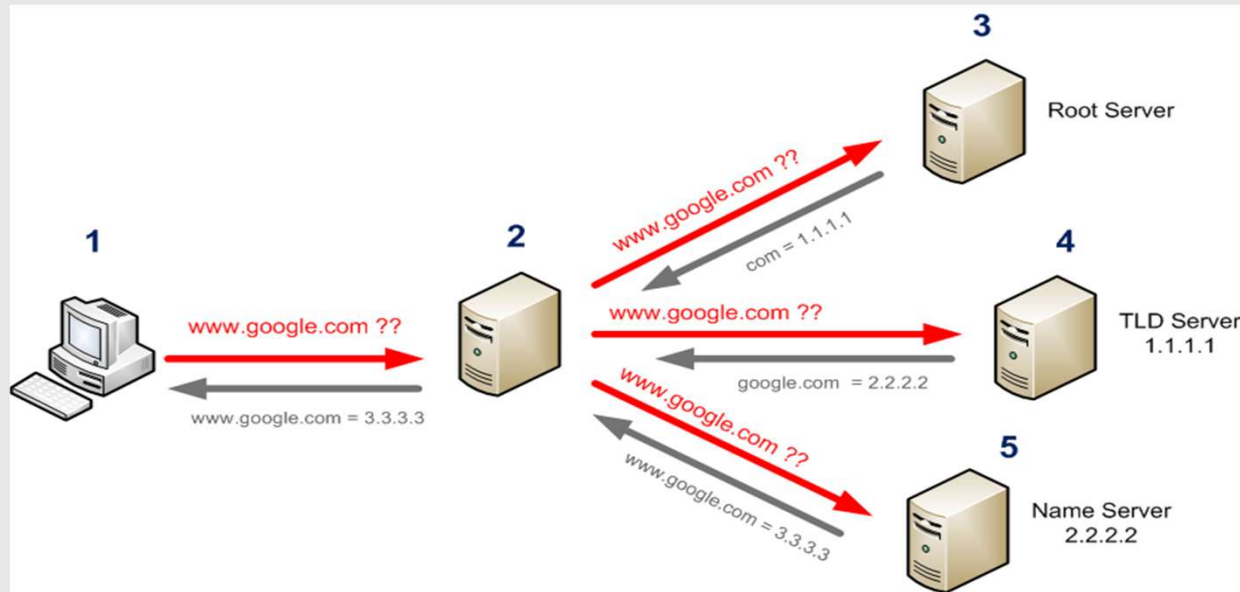# DNSSEC

Raising Awareness

Overview

- Significance of DNS to the everyday internet user

- Technical brief about DNSSEC

- Threats to DNS

- Do people know about DNSSEC ?

- Raising awareness in Egypt

DNS Significance

- You don't need to memorize IP addresses
- An automated phonebook for the internet
- Websites have meaningful names
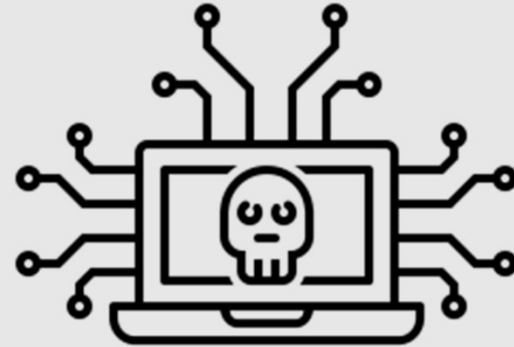- Used in everyday applications

Technical brief about DNSSEC

- Extension protocol adding cryptographic protection to DNS records
- RRset (Resource Record Set)
- KSK (Key Signing Key)
- ZSK (Zone Signing Key)
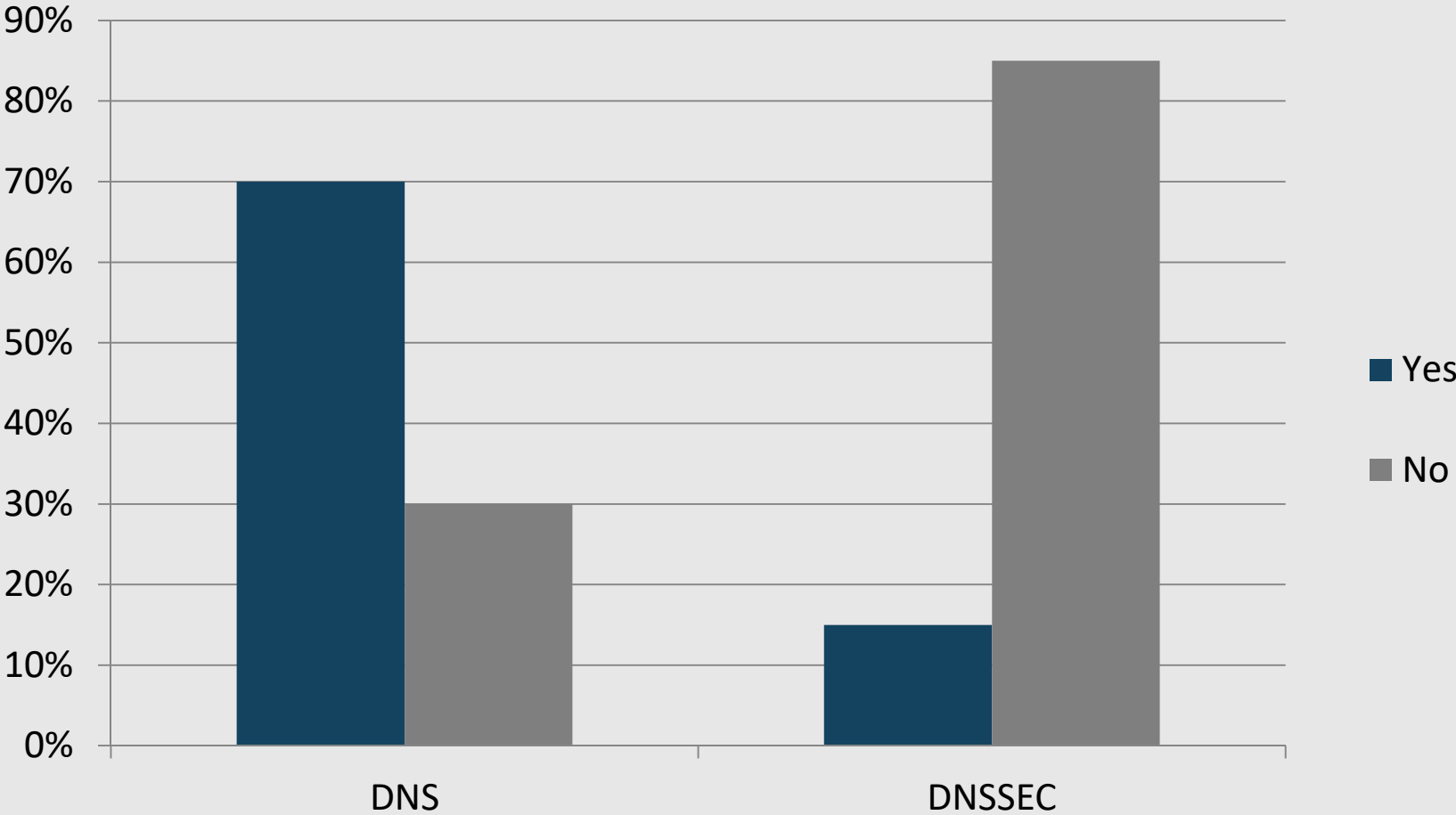- DNSKEY
- DS (Delegation Signer)

Threats to DNS

- DNS spoofing*
- DDoS attacks
- DNS hijacking*
- Pharming*
- DNS rebinding

* Mitigated by DNSSEC

Awareness Survey

Raising Awareness in Egypt

Methods:

- Emphasizing on the role of DNS in the internet
- Highlighting threats that internet users are subjected to
- Tying DNS to popular aspects of technology

Consequences:

- Prospering of domain name industry in Egypt
  - Starting Egyptian registrars
  - Offering job opportunities
- New minds available for development of DNSSEC
  - Deployment of DNSSEC on a greater scale
  - Creating new security measures

7

References

- http://dyn.com/blog/dns-why-its-important-how-it-works/
- https://www.cloudflare.com/dns/dnssec/how-dnssec-works/
- http://www.internetsociety.org/articles/dnssec-doesn%E2%80%99t-mitigate-all-dns-threats
- https://www.slideshare.net/apnic/dnssec-final-1425360815
- http://whatismyipaddress.com/dnssec
- http://ccnso.icann.org/files/22955/presentation-dnssec-beginners-14mar11-en.pdf

Contact details

- Seifeldin Ahmed Elsehely
- seif.elsehely@gmail.com
- +201223344079

8