Introduction to the DNS Protocol

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WHAT IS DNS?

- DNS is the acronym for Domain Name System.

- It maps domain names to IP addresses.

- It is one of the most important protocols on the Internet.

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WHY ARE WE INTERESTED IN DNS?

- Obtain public information about a domain or an organization

- Discover relationships between domains and hosts

- Specific exploitation techniques to gain access (e.g., DNS Spoofing)

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¿HOW DNS WORKS?

- DNS Zone: Grouping of DNS records (data)

- DNS Zones contain different types of records:

Type	Meaning	Value
SOA	Start of Authority	Parameters for this zone
A	Dirección IP de un host	32 bits
MX	Mail Exchange	Domain for email
NS	Name Server	Name of a server for this domain
Cname	Canonical Name	Domain name
PTR	Pointer	Alias for an IP address
HINFO	Host Description	CPU and OS in ASCII
TXT	Texto	Text information

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¿HOW DNS WORKS?
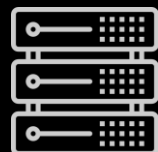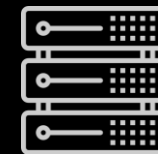
DNS root name server
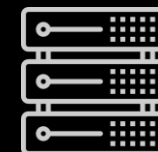
Top-Level DNS Servers

Local DNS Resolver

User
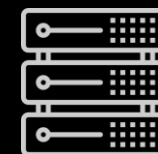
Authoritative DNS Servers

Web Server

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