

# *DNS Overview and Hierarchy*

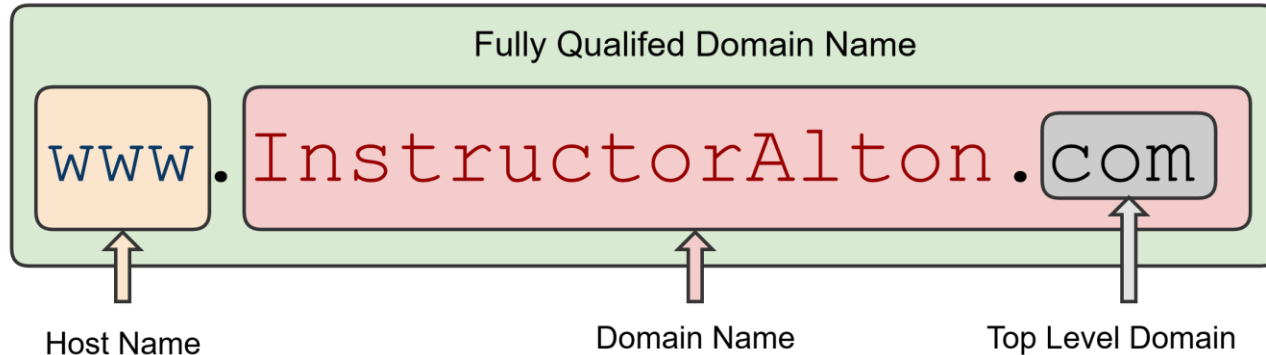
# Domain Name System (DNS) Overview

- DNS provides TCP/IP name resolution services, which is the process of translating host and domain names into their corresponding IP address (and vice versa).



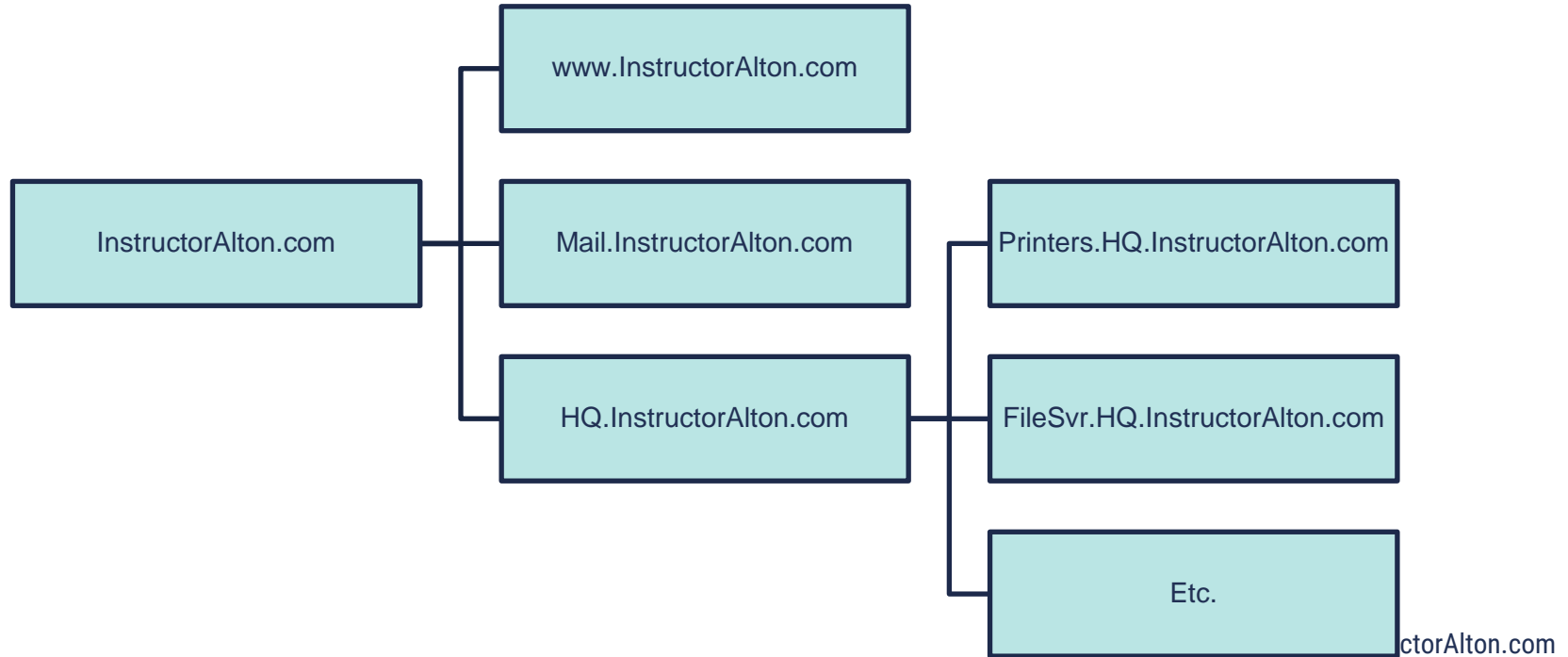
# Fully Qualified Domain Names (FQDN)

- An FQDN is used to uniquely identify a host on the Internet, such as my website, `www.InstructorAlton.com`
- Composed of three components:
  - **Host Name:** `www`
  - **Domain Name:** `InstructorAlton.com`
  - **Top-Level Domain:** `.com`

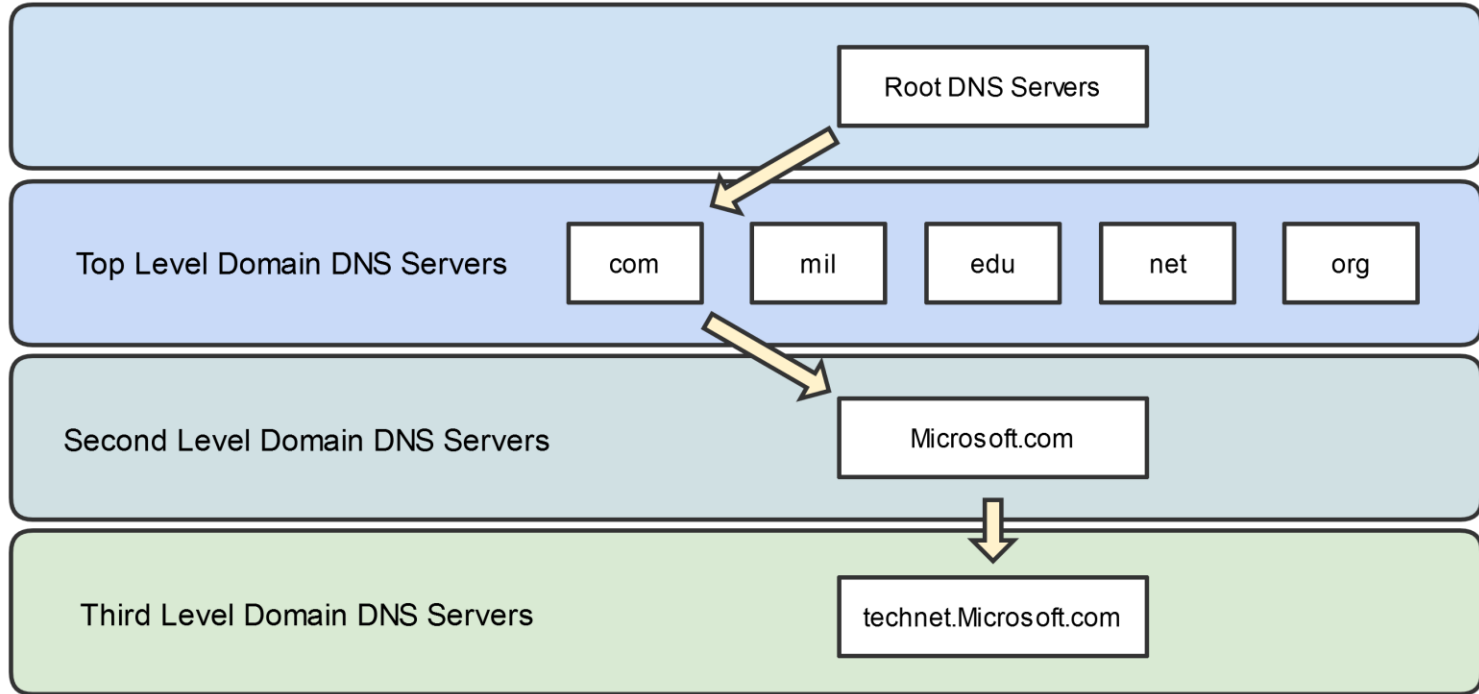


# Fully Qualified Domain Names (FQDN)

You can have multiple levels of domain names:



# DNS Hierarchy



# *Common DNS Record Types*

# Common DNS Record Types

Record Type	Description
<b>A (IPv4 Host)</b>	Resolves a domain name to an IPv4 address.
<b>AAAA (IPv6 Host)</b>	Resolves a domain name to an IPv6 address.
<b>PTR (Pointer)</b>	Resolves an IP address to a domain name.
<b>CNAME (Alias)</b>	Resolves one domain name to another domain name, allowing multiple domain names to be resolved to the same IP address.
<b>MX (Mail Exchange)</b>	Used for mail exchange servers (email servers).
<b>NS (Name Server)</b>	Identifies DNS name servers.

# DNS Records Example: InstructorAlton.com

**cPanel**

**DNS Zone Editor**  
Domains / Manage Zone

**Warning:** Please keep in mind that the changes to DNS records will require some time to propagate throughout the network. It usually takes about 30 minutes. Do not hesitate to contact us via [LiveChat](#) or [Ticket](#) if you have any questions.

DNS converts domain names into computer-readable IP addresses. Use this feature to manage DNS zones. For more information, read the [documentation](#).

## Zone Records for "instructoralton.com"

Filter by name

Filter: **All** A CNAME MX SRV TXT

Displaying 1 to 26 out of

[+ Add Record](#)

Name	TTL	Class	Type	Record	Actions
instructoralton.com.	1200	IN	A	162.0.232.236	<a href="#">Edit</a>
instructoralton.com.	1200	IN	MX	Priority: 0 Destination: mail.instructoralton.com	<a href="#">Edit</a>
mail.instructoralton.com.	1200	IN	A	162.0.232.236	<a href="#">Edit</a>
www.instructoralton.com.	1200	IN	CNAME	instructoralton.com	<a href="#">Edit</a> <a href="#">Delete</a>
ftp.instructoralton.com.	1200	IN	A	162.0.232.236	<a href="#">Edit</a> <a href="#">Delete</a>

- Add "A" Record
- Add "AAAA" Record
- Add "CAA" Record
- Add "CNAME" Record
- Add "DMARC" Record
- Add "MX" Record
- Add "SRV" Record
- Add "TXT" Record