**Types of DNS (Domain Name System ) Records A computer server and a stack of data

Description automatically generated with medium confidence**

**DNS (Domain Name System) records are critical components that help direct internet traffic by mapping domain names to their corresponding IP addresses and other services. Here are the most common types of DNS records and their functions:**

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| Record Type | Full name | Function | Example |
| A Record | Address Record | Maps a domain name to its corresponding IPV4 address | Example.com A 192.163.84.22 |
| AAAA Record | IPV6 address Record | Maps a domain name to its corresponding IPV6 address | Example .com AAAA 2606:2800:220:1:248:1946 |
| CNAME Record | Canonical Name Record | Alias one domain name to another domain name | www.example .com CNAME example .com |
| MX Record | Mail Exchange Record | Directs email to mail servers for a domain | Example.com MX 10 mail.example.com |
| TXT Records | Text Record | Contains text information for various purposes such as SPF, domain ownership verification | Example.com TXT |
| NS Records | Name Server Records | Specifies the authoritative name servers for a domain | Google.com NS NS1.google .com |
| PTR Record | Pointer Records | Maps an IP address to its corresponding domain name (reverse DNS lookup) | 34.216.184.93 in ADDR.arpa PTR apple.com |

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| SRV Record | Service Record | Specifies the location of service,such as the port number and hostname for a specific service | Sip.tcp.example.com SRV 10 60 sipserver.example.com |
| SOA Record | Start of Authority Record | Provides authoritative information about the domain, such as the primary name server, email of the domain administrator, domain serial number, and timers for refreshing the zone | example.com SOA ns1.example.com. admin.example.com. 2021062501 7200 3600 1209600 3600 |
| CAA Record | Certification Authority Authorization | Specifies which certificate authorities are allowed to issue certificates for the domain. | example.com CAA 0 issue "letsencrypt.org |
| DNSKEY Record | DNSKEY Record | Contains the public key used to verify DNSSEC (DNS Security Extensions) signatures. | example.com DNSKEY 256 3 8 AwEAA... |
| DS Record | Delegation Signer Record | Used in DNSSEC to delegate trust to a child zone. | example.com DS 12345 8 2 AABBCCDDEEFF. |
| NAPTR Record | Name Authority Pointer | Used for dynamic DNS and other complex domain name redirection services. | example.com NAPTR 100 10 "U" "E2U+sip" "!^.\*$! sip:info@example.com!" |
| TLSA Record | Transport Layer Security Authentication | Associates a TLS server certificate or public key with the domain name to improve security | -443.\_tcp.example.com TLSA 3 1 1 aabbccddeeff. |