DNS Basics

A primer on DNS fundamentals.

DNS – Basics

DNS fundamentally is used to convert human-friendly domain names to IP addresses. For example www.xyz.com gets translated into http://18.125.38.x

Domain Registrars

As all domains in a top-level domain (i.e. com, .uk, .gov) need to be unique, there need to be a central authority that owns the assignment and management of domains, this is done by domain registrars.

They essentially register the domain in the central database known as the *Who Is database*.

NS Record: stands for Name Server records, they are used by top Level Domain servers to direct traffic to the content DNS Server which holds the authoritative DNS record.

If you register a domain on AWS or Godaddy.com you would take your NZ records and give it to GoDaddy that way traffic will be directed to your name server address

A – Record: an 'A-record' is the fundamental type of DNS record and the "A" in the record stands for Address. The record is used by a computer to translate the name of the domain to the IP address.

TTL is the length that a DNS record is cached on either the Resolving Server or the users own local PC is equal to the value of the "Time to Live" TTL in seconds. The lower the TTL the faster the changes to the DNS records to propagate throughout the internet.

C-Name or Canonical Name is used to resolve one domain name to another. Eg: Resolving http://m.google.com to http://google.com.

Alias Records, are used to map resource record sets in your hosted zone to elastics load balancers that are configured to your web-instances.