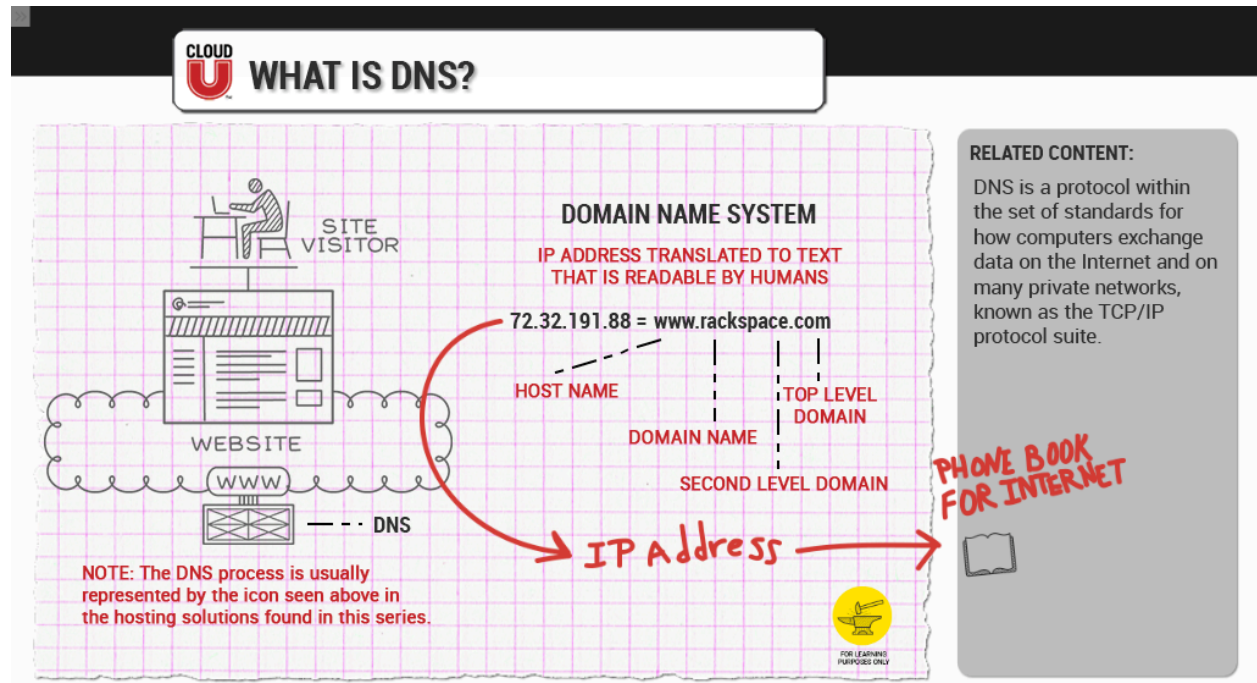# Evolution of a Solution Week 01
-Rackspace CloudU

DNS (Domain Name System) is a hierarchical system that translates user-friendly domain names (www.example.com) into IP addresses (93.184.216.34). It consists of two parts: Resolvers on the client side that create queries and Name Servers on the server side that answer those queries. Name servers cache queries to the record's TTL (Time To Live) and use that cached data to respond to queries before sending them to the appropriate server up the line. The Name Server first sends the request to the Root Name Server (containing all the Top Level Domains), then to the Top-Level Domain Name Server, then to the Second-Level Domain Name Server, i.e.: