About

The DNS is one of the main components of AFRINIC services, specifically reverse DNS services for IP adresses as defined in RFC 1033 and RFC 3152.
Recent development has lead all RIR to host servers for the IN-ADDR.ARPA and IP6.ARPA zones, according to RFC 5855."

To support this increased responsibility, AFRINIC is building a scalable, robust and resilient DNS infrastructure and service to serve the region. This consists of redundant interlinked stand-alone and Anycast network infrastructure distributed across the African continent. The distributed nature of AFRINIC's DNS infrastructure will enhance DNS reachability and resolution process due to its close proximity to end users, therefore enhancing the users' Internet experience.

AFRINIC has launched its African DNS support programme. The service is available immediately to ccTLD, and Critical Internet Infrastructure(1) operators in the African region. AFRINIC will provide slave/secondary DNS services on its infrastructure, at no cost to the operator, as a part of this project.

AFRINIC will not manage zones, nor be responsible for their content but will merely act as a slave/secondary service provider, and only serve zone data replicated from, and published by the zone's master/primary server.

Plans

The current implementation of the AfDSP allows for simple DNS resiliency; plans include:

- the provision of a protected "operator's portal" that will show statistics relevant to the operator's zone(s). Sample stats might include:
  - DNS queries to the zone (positive and negative),
  -

Source networks of queries,
  - Networks/Source ranking of those that query the zone the most,
  - Zones/Domains that are queried the most ;
- the ability to add/change information relevant to the zone(s) that the operator is responsible for;
- support for DNSSEC signed zones;
- support for changing the secure transfer of zone information between the Master/Primary and Slave/Secondary using TSIG.

Participation to this project is free. Click here to contact us if you are interested with this project or email us at dns-admin[at]AFRINIC.net to request more information. Take special care to mention the ccTLD, or portion of Critical Internet Infrastructure in Africa that you represent, and would want to see included in the project. The AfDSP is a complementary project to the African Root Server Copy Project (AfRSCP), also run by AFRINIC.

(1) For the purposes of this document, Critical Internet Infrastructure is as defined in the "Policy for End User Assignments in AFRINIC service region - AFPUB-2006-GEN-001 "