



IXP Support Initiatives & DNS Programmes at AfriNIC

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Internet Exchange Point (IXP) Support Initiatives

Internet Exchange Points are treated
as **Critical Internet Infrastructure.**

Through our policy process, IP
Number resources are available to
these at no-cost.

An Internet Exchange Point is more than a simple Layer 2 switch.

Growth and sustainability are key success elements.

We don't do "box-drops"

Offer technical and policy assistance,
along with ISOC, **as part of the AXIS
Project.**

Supported and facilitated workshops
in 5 countries since Oct 2012
(ongoing)

Offer free **expert technical assistance** with sustainability rebuilds.

Currently working with an IXP in SADC to re-architect their environment to support this.

DNS Programmes at AfrINIC

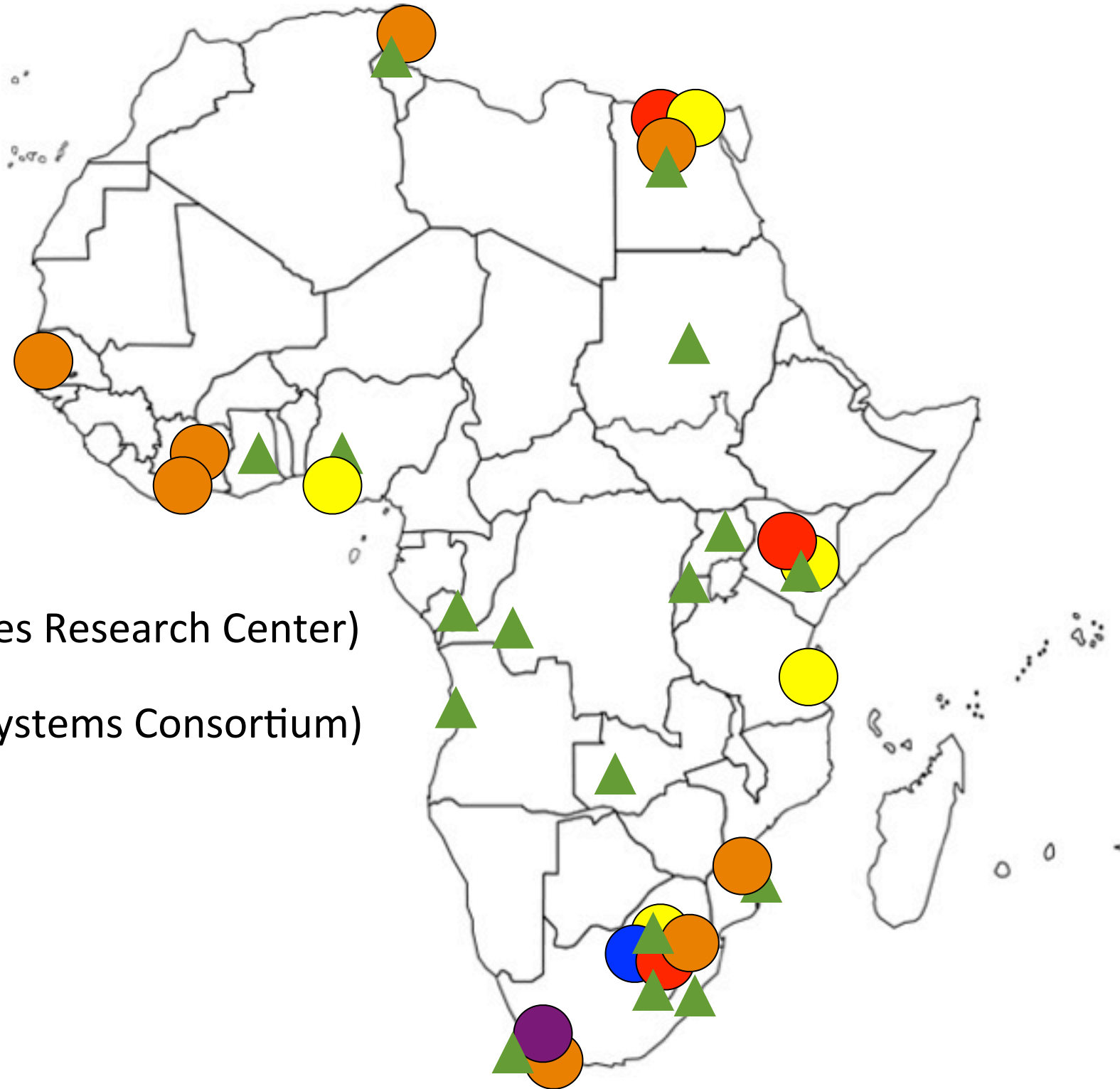
As part of our mission to **support Internet technology usage and development**, AfriNIC operates three distinct and separate DNS programmes.

These are all for the benefit of the Internet community and are made available at zero cost.

- **African Root Server Copy (AfRSCP)**
- AfriNIC supported RFC5855 servers
- African DNS Support Programme (AfDSP)

The AfRSCP aims to support local Internet communities by **facilitating Root Server Copies** within local communities.

Historically limited to areas that had active IXPs





October 2012 -
agreement
signed with
ICANN to help
expand L-root
into Africa

- L-Root installed in Cote d' Ivoire
- Installations in progress (ie. *hardware on the ground* in 3 more countries)
- Advanced stages of completion in another 3.
- Accepting new applicants ;-)

email: **root-project (at) afrinic.net**

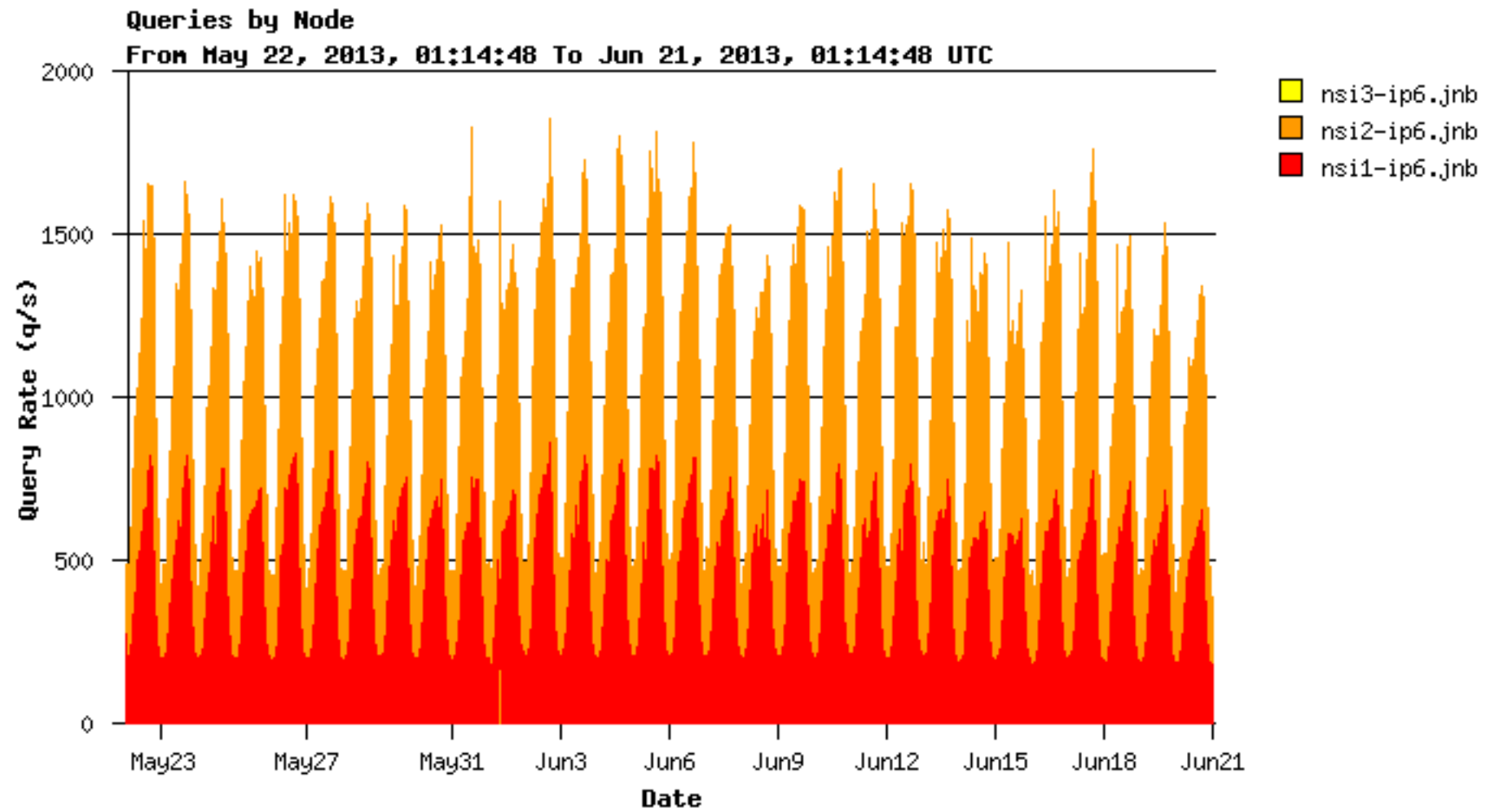
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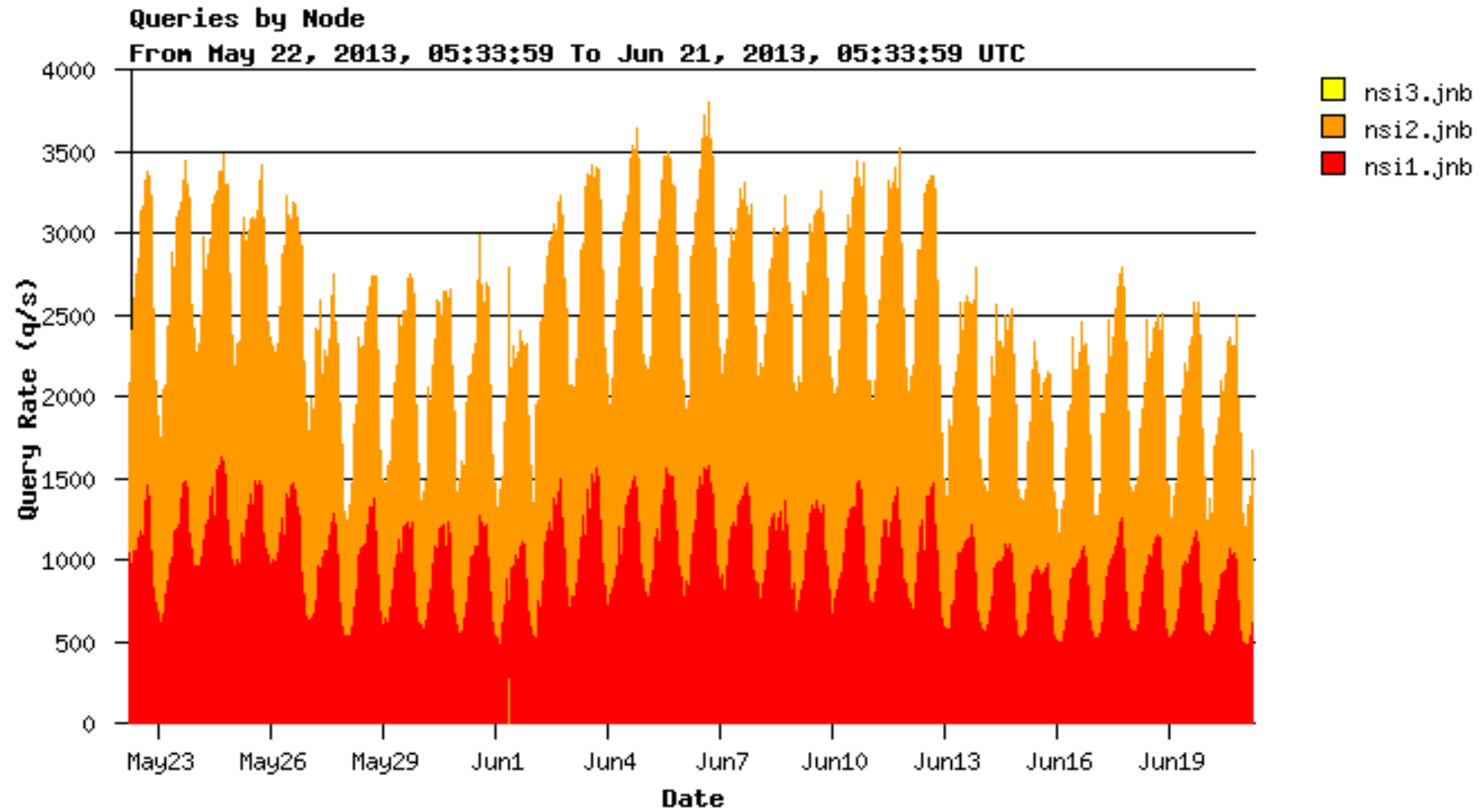
RFC5855 describes stable naming scheme for the nameservers that serve the IN-ADDR.ARPA and IP6.ARPA zones.

AfriNIC supports the Internet community by managing the “c” servers for

ip6.arpa - Dec 1, 2010

in-addr.arpa - Feb 17, 2011





Through **localised anycast** programmes, we're now able to distribute this service into the African region.

- African Root Server Copy (AfRSCP)
- AfriNIC supported RFC5855 servers
- **African DNS Support Programme (AfDSP)**

To support the ongoing projects that we're running, AfriNIC is building its **own mini-cloud environment.**

As a natural architectural and design consequence, we have “spare capacity” available in this infrastructure...

The DNS Support program (AfDSP) is available to **holders of Critical Internet Resources, and African ccTLDs**, to help bolster their infrastructure.

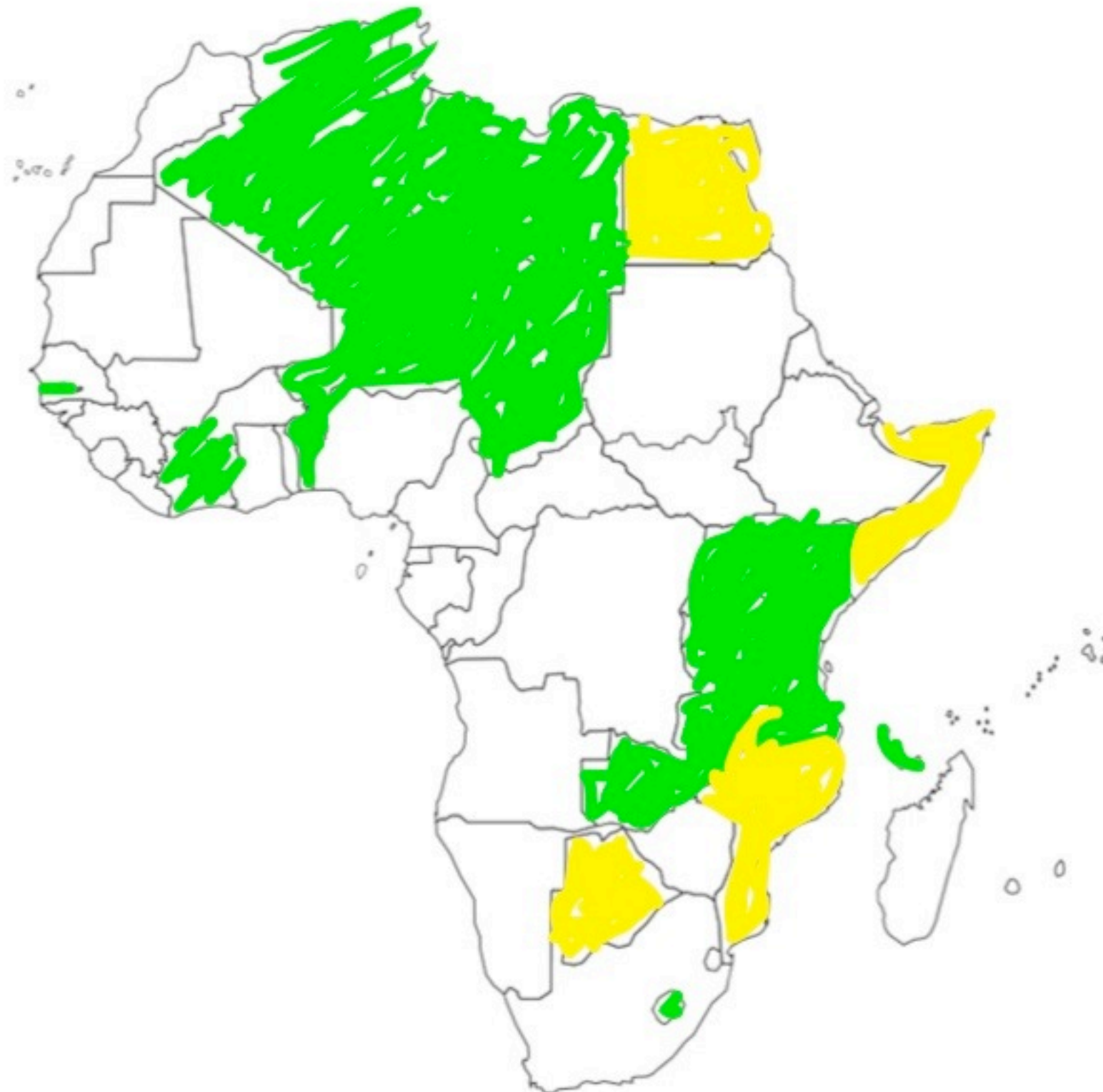
We provide **free** secondary/slave DNS services across our infrastructure (or, if requested a subset of it)

This is an African solution - AfriNIC's cloud is built by, lives, and is managed and maintained in Africa.

Currently supporting **17 African ccTLDs**, and are in advanced stages of setup with another 4.

Signup page on website.

Why are there so many blanks ?



Too many
blanks spots !

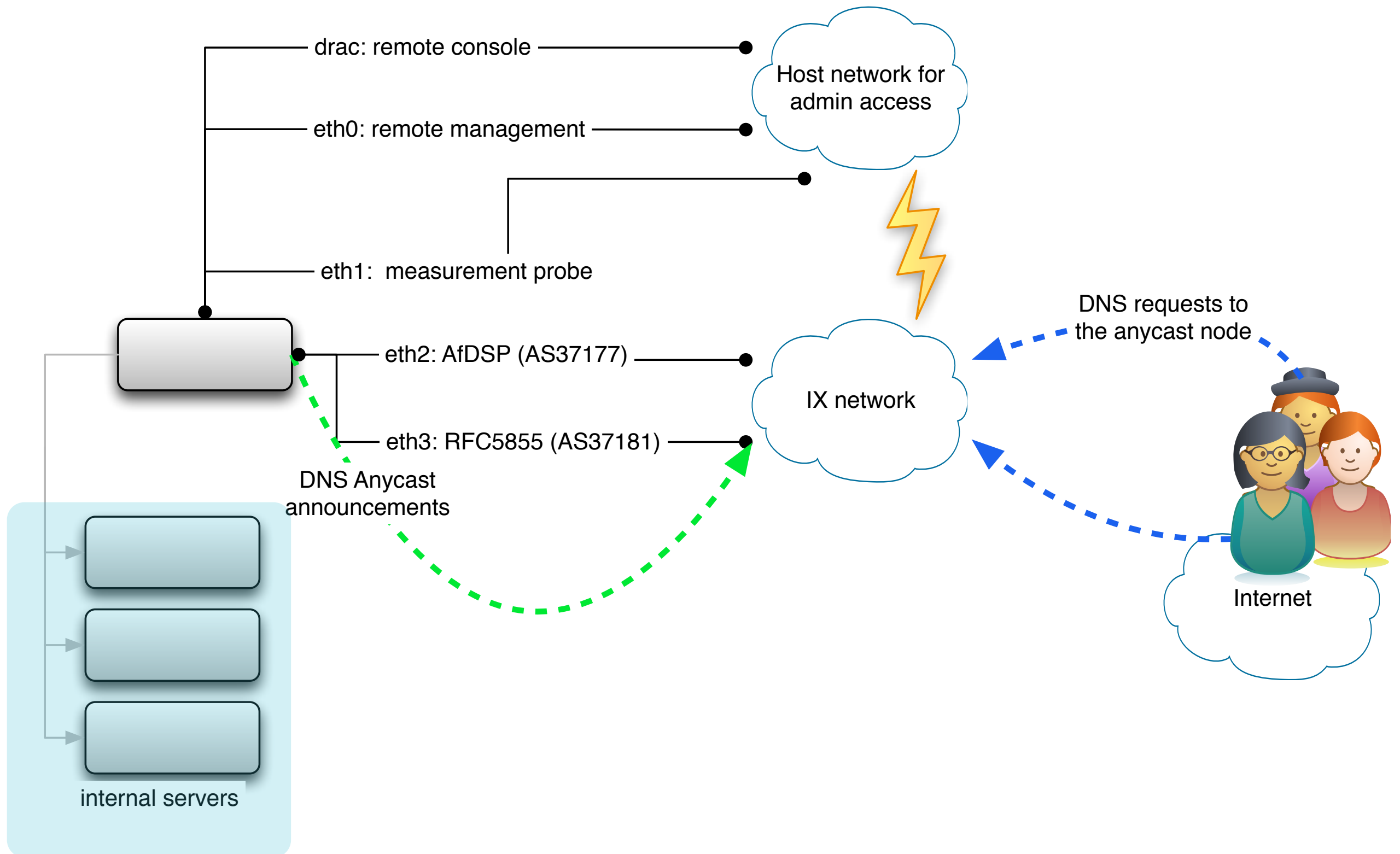
Supported
In progress

Diverse, redundant nodes in JNB and CPT.

Upcoming installations in 3 more regions

Hybrid OS and Application Software.

Actively soliciting partners !



Puppet & VMware

Nagios & DSC

FreeBSD+NSD; Linux+BIND

Guided by **RFC2870**

- **#1 Collect interested participants**
 - Build critical mass of interested supporters
- **#2 Deploy additional infrastructure**
 - Working with existing local programme partners
- **#3 DNS Portal**
 - Automated interaction with participants (Q42013)

contact (at) afrinic.net