

IPv4 exhaustion The Situation in Africa

AfrinIC-9

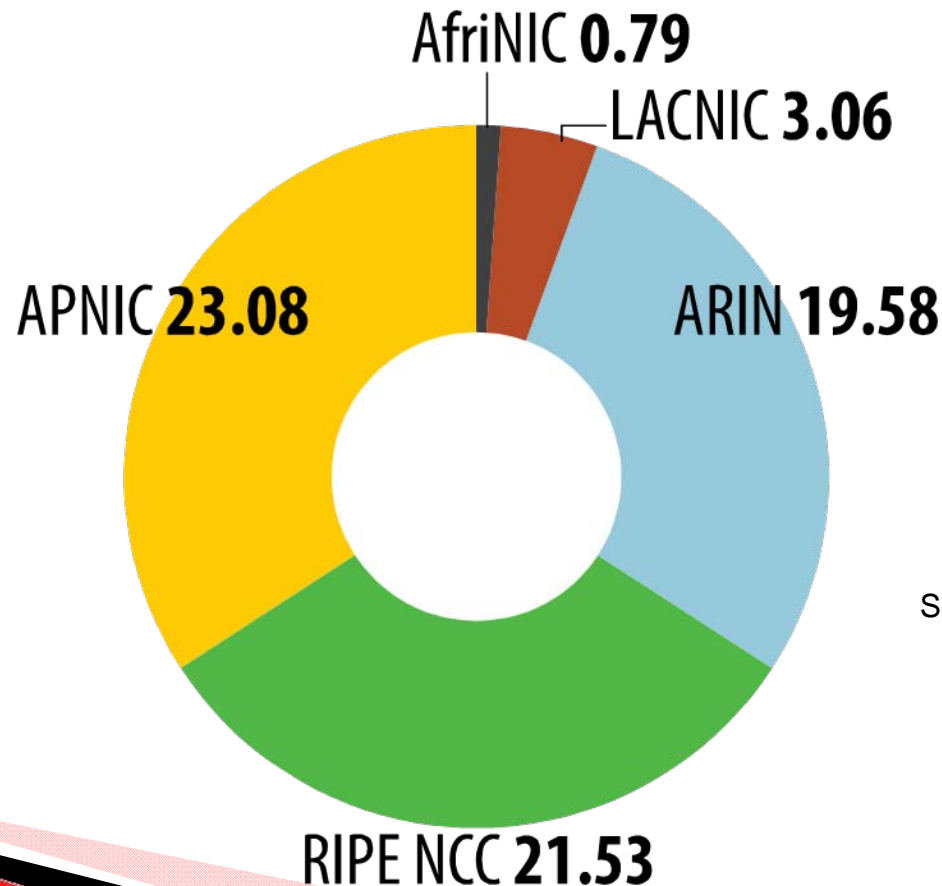
Mauritius, 27th November 2008

Alain Patrick AINA
aalain@afriNIC.net

Spearheading Internet technology and policy development in the

Where do we stand in the global

In terms of /8s, how much total space has each RIR allocated?



Source: NRO stats 01/99 - 06/08



AfrinIC IPv4 pool

- 41/8
 - Minimum allocation /22
- ▶ 196/8
 - - Legacy space
 - - Not actively used
 - - Minimum assignment /24

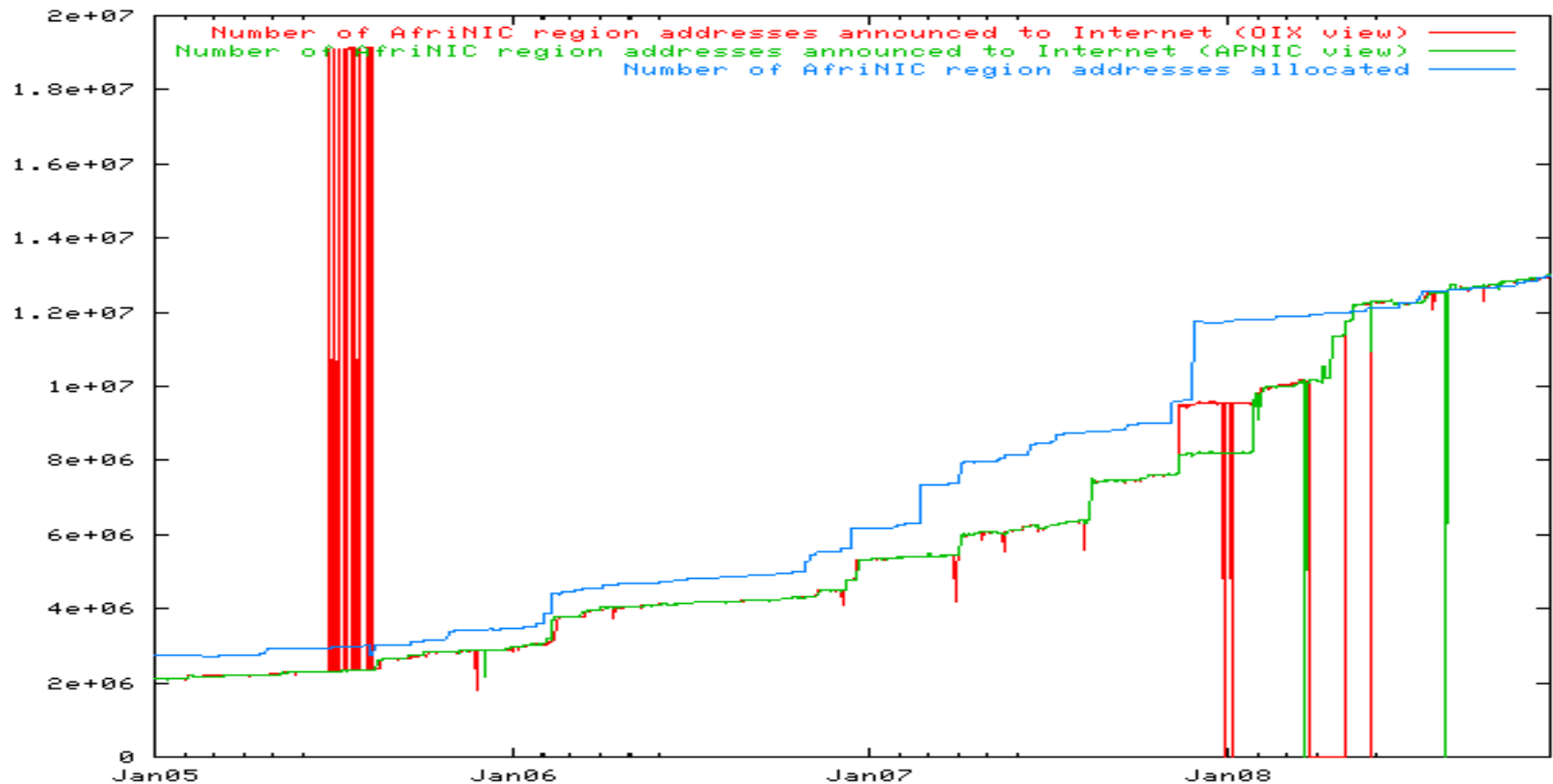
197/8

- - Allocated by IANA 2008-10

- <http://www.afrinic.net/Registration/resources.htm>
- <http://www.afrinic.net/statistics/index.htm>



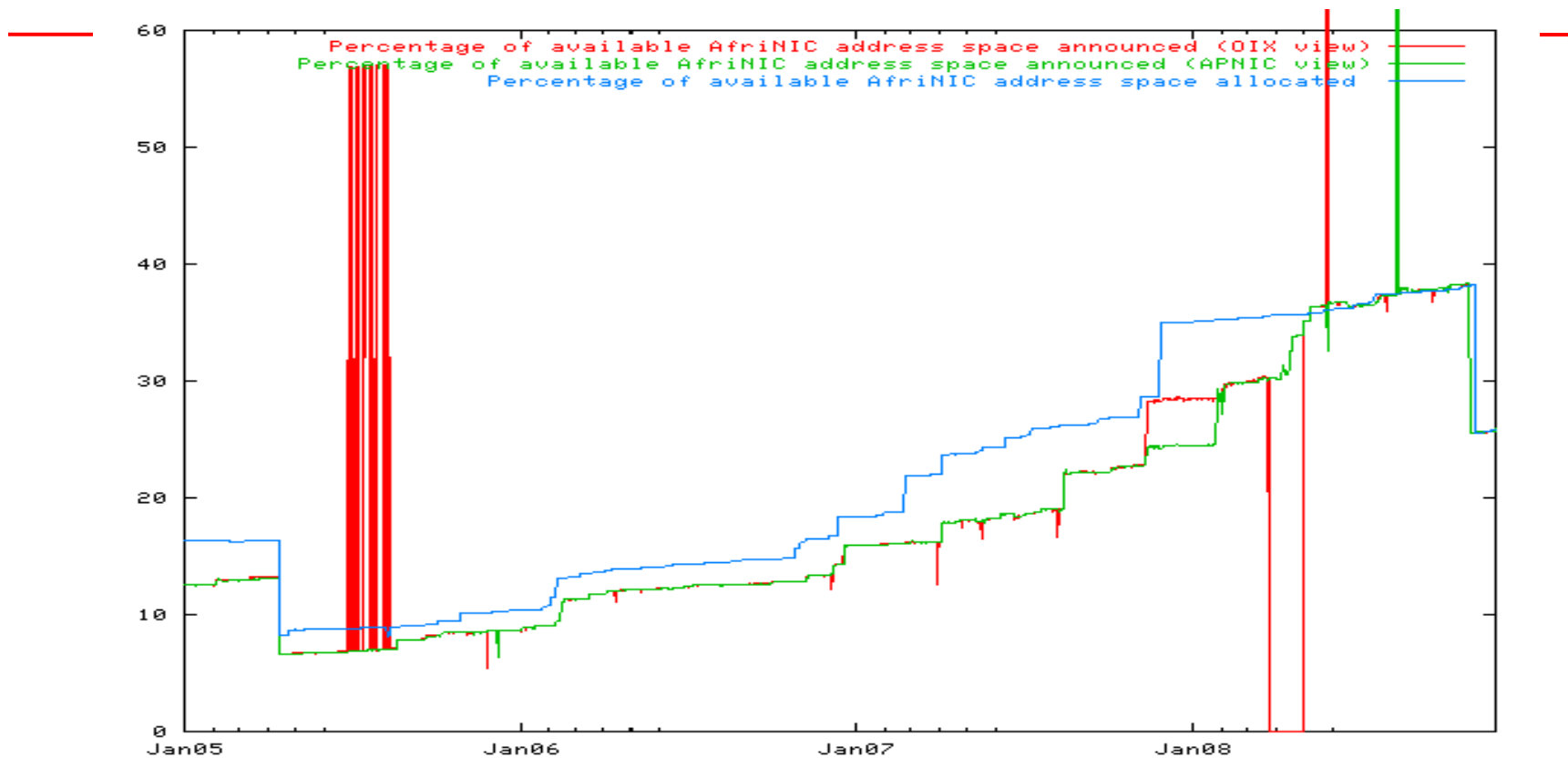
Allocation vs routing(1)



Source: <http://afrinic.net/report> (20th NOV 2008)



Allocation vs routing(2)



Source: <http://airrs.afrinic.net/report> (26th Nov 2008)

IPv4 lifetime Projections

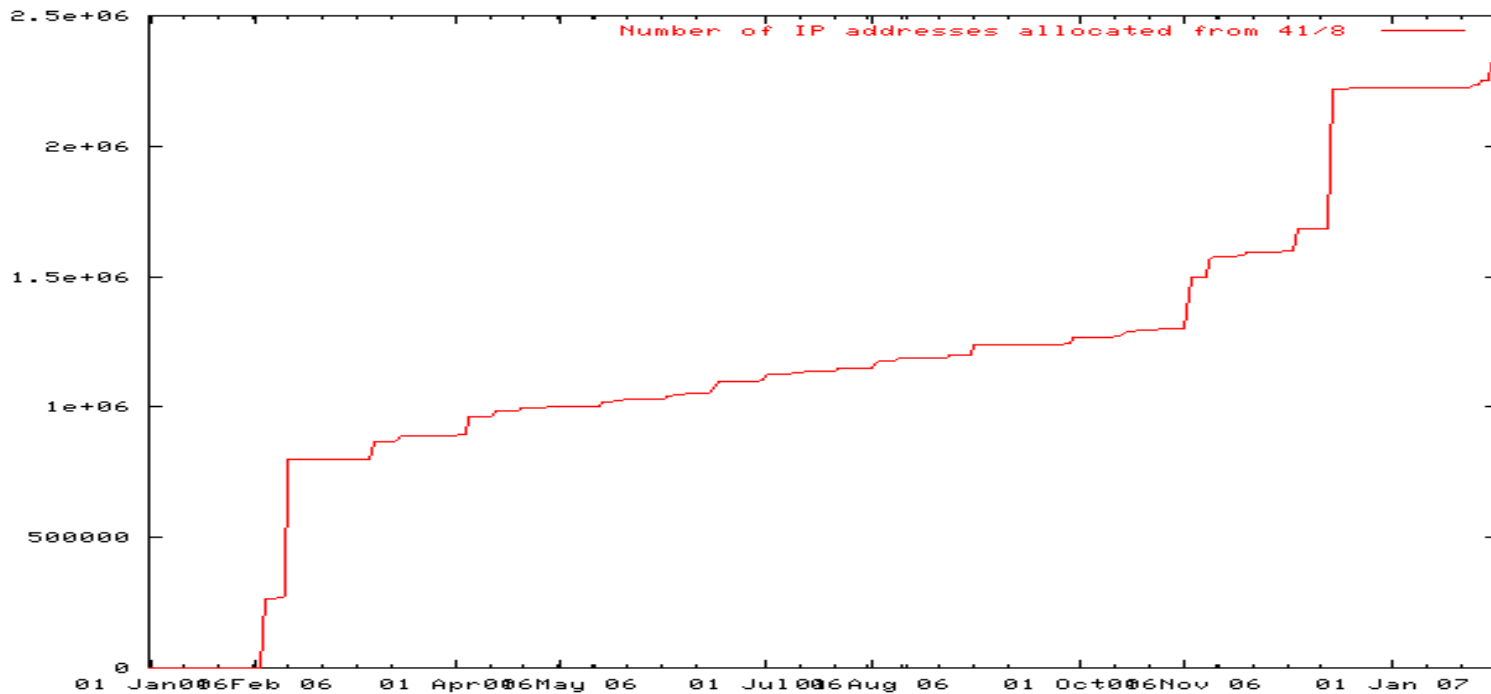
- **“Using the current allocation statistics, the Internet would exhaust the IPv4 address space between 2005 and 2011”**
 - ALE projections (RFC 1752 - 01/1995)
- **Projected IANA Unallocated Address Pool Exhaustion: 29 Nov 2010**

<http://www.potaroo.net/tools/ipv4/> (26-Nov-2008 07:58 UTC+1000)

Projections on AfriNIC pool(1)

- - We used one year(02/01/06 to 02/01/07) allocation statistics for the 41/8
- - Apply an exponential model with instantaneous growth rate of 0.29% based on the current consumption rate
- - We projected the date for AfriNIC pool exhaustion according to IANA's pool
- - **Analysis done in 04/07**

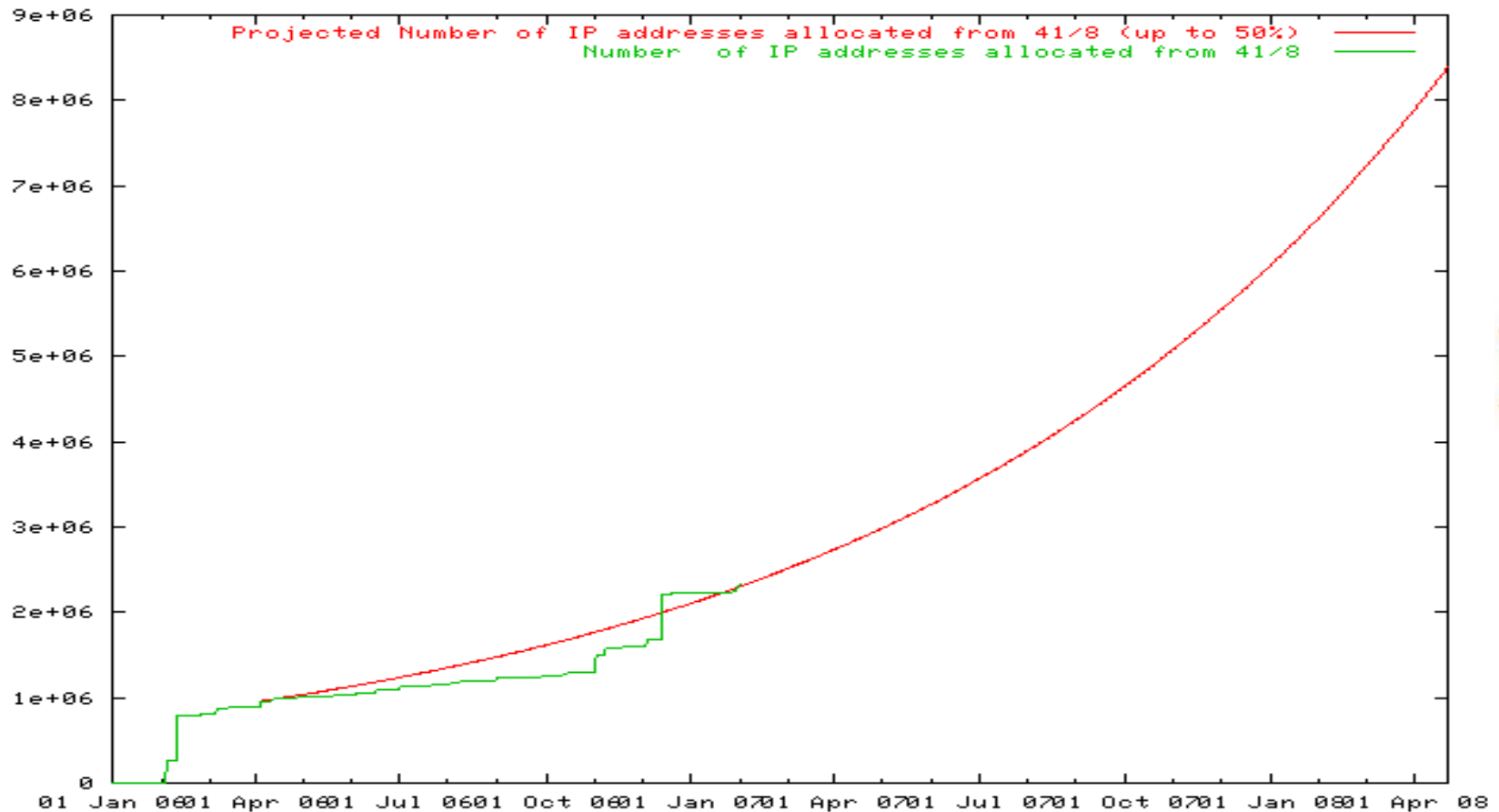
Projections on AfrinIC pool(2)



Data: <ftp://ftp.afrinic.net/pub/stats/>

~14% allocation in 12 months

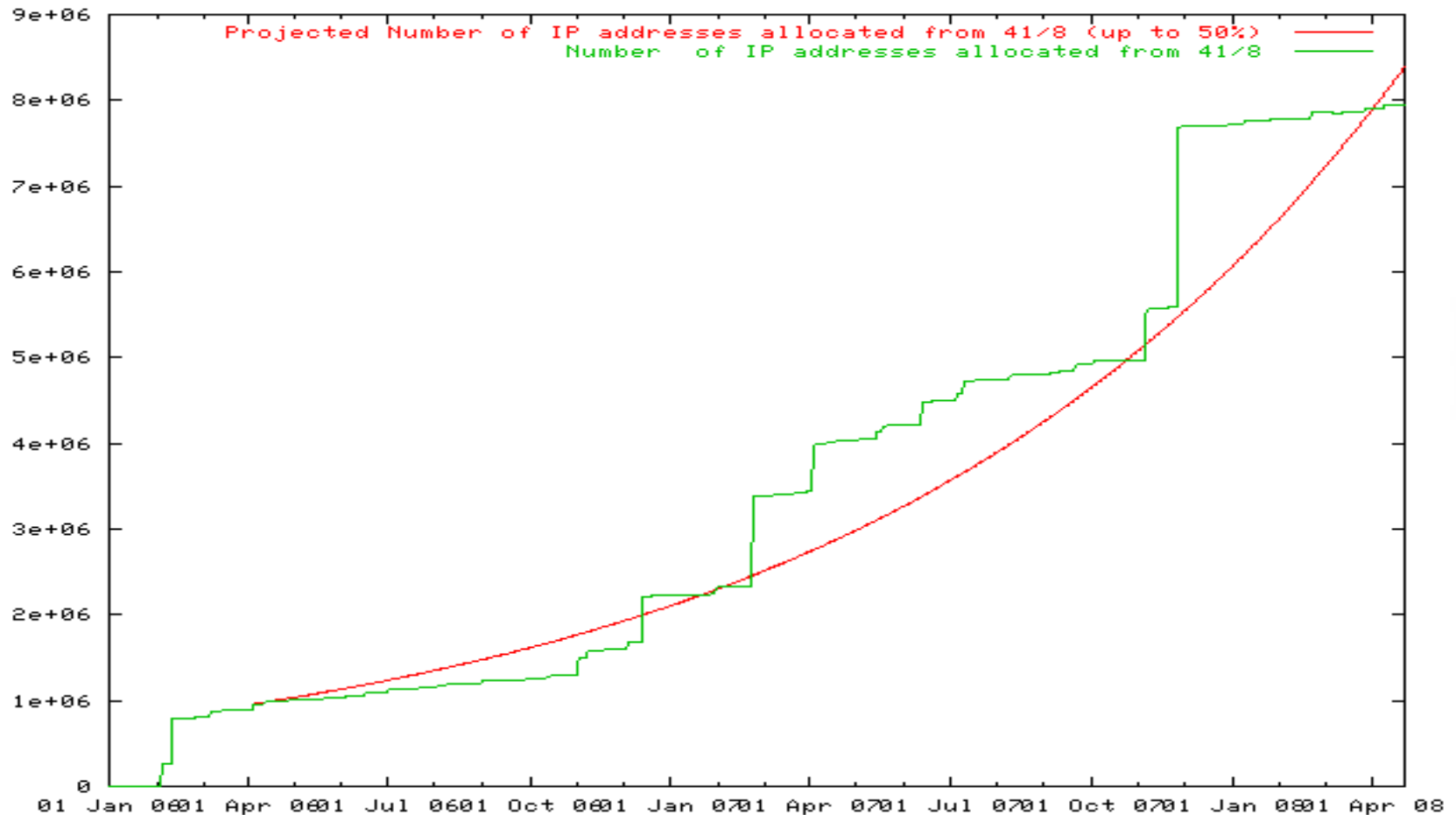
Projections on AfrinIC pool(3)



Projections on AfrinIC pool(4)

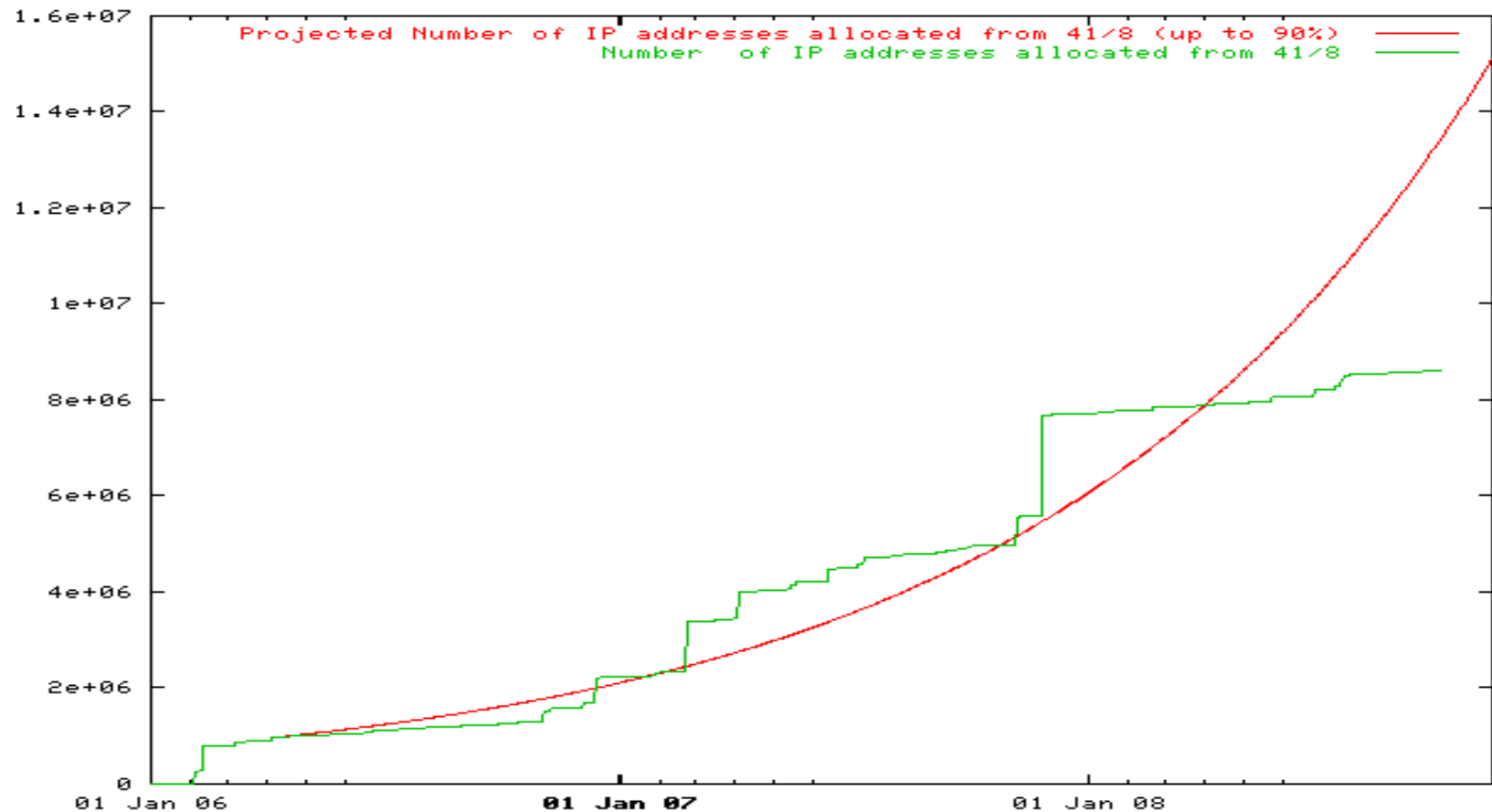
- IANA pool exhaustion before July 2011
- AfrinIC pool exhaustion by 11 August 2011
- http://www.afrinic.net/news/ipv4_exhaustion.htm
 - Projections and possible actions and solutions

Update on the situation(1)





Update on the situation(2)





Update on the situation(3)

■ What happened since 04/2007 ?

- AfrinIC requested and received one /8 in October 2008
- Likely the last one to get through the current policy
- Global Policy for the Allocation of the Remaining IPv4 Address Space adopted.
 - A /8 will be added to the pool

■ The pool will last more than previously predicted.

- We need to predict the new pool exhaustion date



AfriNIC

AfriNIC-9

22 - 28 Nov 08

Mauritius

Thank you for attention

