



AFRINIC and IXPs in AFRICA.

By

Madhvi Gokool

Registration Services

AIS'17 Nairobi

28 May 2017



www.afrinic.net



blog.afrinic.net



[/afrinic](https://www.linkedin.com/company/afrinic)

- Manage the IP Number Resources for its service region
- Implement number resource policies/bylaws

Resource Members are compliant to:

- Registration Service Agreement
- AFRINIC bylaws
- ICP-2 document
- Resource Number Policies
- AFRINIC business rules and procedures

AFRINIC policies related to IPv4 Assignments:

- End User Assignments in AFRINIC service region - https://www.afrinic.net/library/policies/1829-afrinic-consolidated-policy-manual#s5_6
- Resource Reservation for Internet Exchange Points - https://www.afrinic.net/library/policies/1829-afrinic-consolidated-policy-manual#s11_0
- Anycast Resource Assignments in the AFRINIC region
- https://www.afrinic.net/library/policies/1829-afrinic-consolidated-policy-manual#s12_0

- 100% discount on assignment and annual membership fees for IXPs(*conditions apply)
- > 30 IXPs have benefited from this initiative in AFRICA.
- AFRINIC provides assistance to IXPs to fully benefit from this engagement and get IP Resources easier & speedier

Before Policy “Resource Reservation for Internet Exchange Points”:

- All resources were issued from 196.223.0.0/16 & 196.49.0.0/16 for Peering and Management
- ASNs were issued from the AFRINIC Inventory (No reservation for specific range)

- A /16 (196.60.0.0/16) IPv4 is now reserved for IXPs for the purpose of **peering** as per ratified policy
- A /16 IPv4 (196.49.0.0/16) is reserved for IXPs for the purpose of **managing** the IXPs
- Adjacent contiguous IPv4 blocks are reserved per IXP(peering and Management) respectively for future use
- 2-byte ASNs are reserved as per ratified policy - AS37769 to AS37887
- Free IPs in 196.223.0.0/16 are used for regular assignments/allocations
- New Status on WHOIS “POLICY RESERVED”

- 10 IXPs benefitted in the past 12 months since this policy was implemented
- No renumbering request from existing /24s held by IXPs in the 196.223.0.0/16 block

IXP resources with 100% discount(*conditions apply)

- /24 IPv4 for Peering
- /24 IPv4 for Management
- /48 IPv6 for Peering
- /48 IPv6 for Management
- 2 byte ASN for Peering
- 4 byte ASN for Management

- Are you future proof? Get your IPv6 prefix(es).
- Do you have your resources for Peering and Management respectively?
- Are the IXPs in this room using their peering resources?

- Update your contact information on the AFRINIC member portal (myafrinic)
- Update your website information on myafrinic/whois db
 - This will enable us to know who is actually running an IXP
- Report any non-use of IXP resources in your country to hostmaster@afrinic.net .

For IXPs deploying services around the Exchange Point:

- Eligible to get the Internet Number Resources through other policies
 - IPv4 Address Allocation.
 - End User Assignment.
 - Anycast Resource Assignments.

IPv4 resources are still available

- What if the IXP is deploying services around the Exchange Point?
- Can this Resource Member get IP addresses from AFRINIC?

> Yes, this is possible.

The IXP will be billed for these resources but will still benefit from the 100% discount for the peering and management IP resources.

- There can be multiple IXPs managed by a single authority
- For each IXP, AFRINIC will approve ASN, /48 IPv6, /24 IPv4 for peering & management respectively
- Conditions of services should be respected.

Documents you need to have in hand:

- ✓ Proof of legal presence in the AFRINIC service region
 - Certificate of Incorporation , Act of Parliament, etc
 - **No founding document?** Another legal entity request with a document signed by the peers at the IXP
- ✓ An IP Addressing Plan detailing your current and 8 months needs.
- ✓ Details on the services you provide to your users
- ✓ Signed MoU with at least 3 peers. Should contain the contact details and ASN for each.
- ✓ Provide clear details on your request.

Note: Publicly available information such as a website with open peering policy details enables 100% discount on fees!

- Via <https://nmrp.afrinic.net>
- Contact details of the administrative, technical & Billing contacts & identify signatory for the contract (Registration Services Agreement)
- State clearly the resources and purpose that you are requesting.
- Know the policy stipulations – if you are asking more than one /24 IPv4 , one /48 IPv6 and one ASN for peering/management, back it up with supporting documentation
- You may also request for renumber to new IXP blocks

- Are you using your own resources from AFRINIC?
- Does your IXP benefit from the management and peering IP resources?
- Ensure **contact details** are up to date
- Update your account with details such as your website.
- Can request for renumber from the 196.223.x.x/16 prefix

Send your request for additional resources via the MyAFRINIC portal: <https://my.afrinic.net/>

- Delayed feedback from requester
- Invalid contact details
- Lack of clear information on:
 - Peering policy(open/free or paid)
 - How the resources shall be used(Management, peering or other services)

AF-IX can encourage all the new IXPs to contact AFRINIC while in their early days setting up.

Usage on the IXP related resources:

- IXP reserved 196.60.0.0/16(Peering): 10 x /24 IPv4
- IXP reserved 196.49.0.0/16(Mgmt) : 34 x /24 IPv4
- Old IXP reserved 196.223.0.0/16: 44 x /24 IPv4
- 2 byte ASN reservation: 6 x 2 byte ASN

Do all your peers at the exchange point have IPv4 & IPv6?

IPv4 depletion is on its way - encourage your peers at the exchange point to get their own or additional IPv4 & IPv6 resources to facilitate their IPv6 transition

Please book a consultation with the AFRINIC Team at AIS'17 this week.

Email : [*meetingatbooth@afnic.net*](mailto:meetingatbooth@afnic.net)

<https://goo.gl/forms/wyn40L1dsN96TU452>

Staff onsite: *Keessun Fokeerah & Dev Jeenia (Hostmasters)*

Thank you
for your
Attention
Questions?



[twitter.com/ afrinic](https://twitter.com/afrinic)



[flickr.com/ afrinic](https://www.flickr.com/photos/afrinic/)



[facebook.com/ afrinic](https://www.facebook.com/afrinic)



[linkedin.com/company/ afrinic](https://www.linkedin.com/company/afrinic)

media

.net



[youtube.com/ afrinic](https://www.youtube.com/afrinic)



[www. afrinic](http://www.afrinic.net)