

AFRINIC and IXPs in AFRICA.

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AFRINIC's Role

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



Resource Members

Resource Members are compliant to:

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



Policies related to IPv4 assignment to IXPs

AFRINIC policies related to IPv4 Assignments:

- End User Assignments in AFRINIC service region 127-afpub-2006-gen-001
- Resource Reservation for Internet Exchange Points -AFPUB-2014-GEN-004-DRAFT-03
- Anycast Resource Assignments in the AFRINIC region AFPUB-2012-V4-001



Our Engagement

- 100% discount on assignment and annual membership fees for IXPs(*conditions apply)
- > 32 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



Prior to policy "Resource Reservation for IXPs"

Before Policy "Resource Reservation for Internet Exchange Points":

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



Implementation of IXP policy

- 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 will be used for regular assignments/allocations
- New Status on WHOIS "POLICY RESERVED"



What resources can an IXP benefit from?

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



The way forward

- 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?



Additional IPv4 requests for Services

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.

1.61 /8 IPv4 still available



Case1: IXPs with additional services

- 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.



Case 2: Org managing IXPs at several locations

- 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 and conditions of service

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 12 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 <u>100% discount on fees!</u>



How to apply?

- 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



Existing IXPs

- 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/



Challenges faced by Hostmasters

- 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.



Statistics

Usage on the IXP related resources:

- IXP reserved 196.60.0.0/16(Peering): 6 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: 4 X 2 byte ASN



Please come & visit the AFRINIC Team at the MS Booth during this week.

Email: meetingatbooth@afrinic.net

Staff onsite: Mr James Chirwa(Hostmaster) &

Mrs Madhvi Gokool(RSM)

Thank you for your Attention Questions?



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