



## **APNIC-41 PRESENTATION**

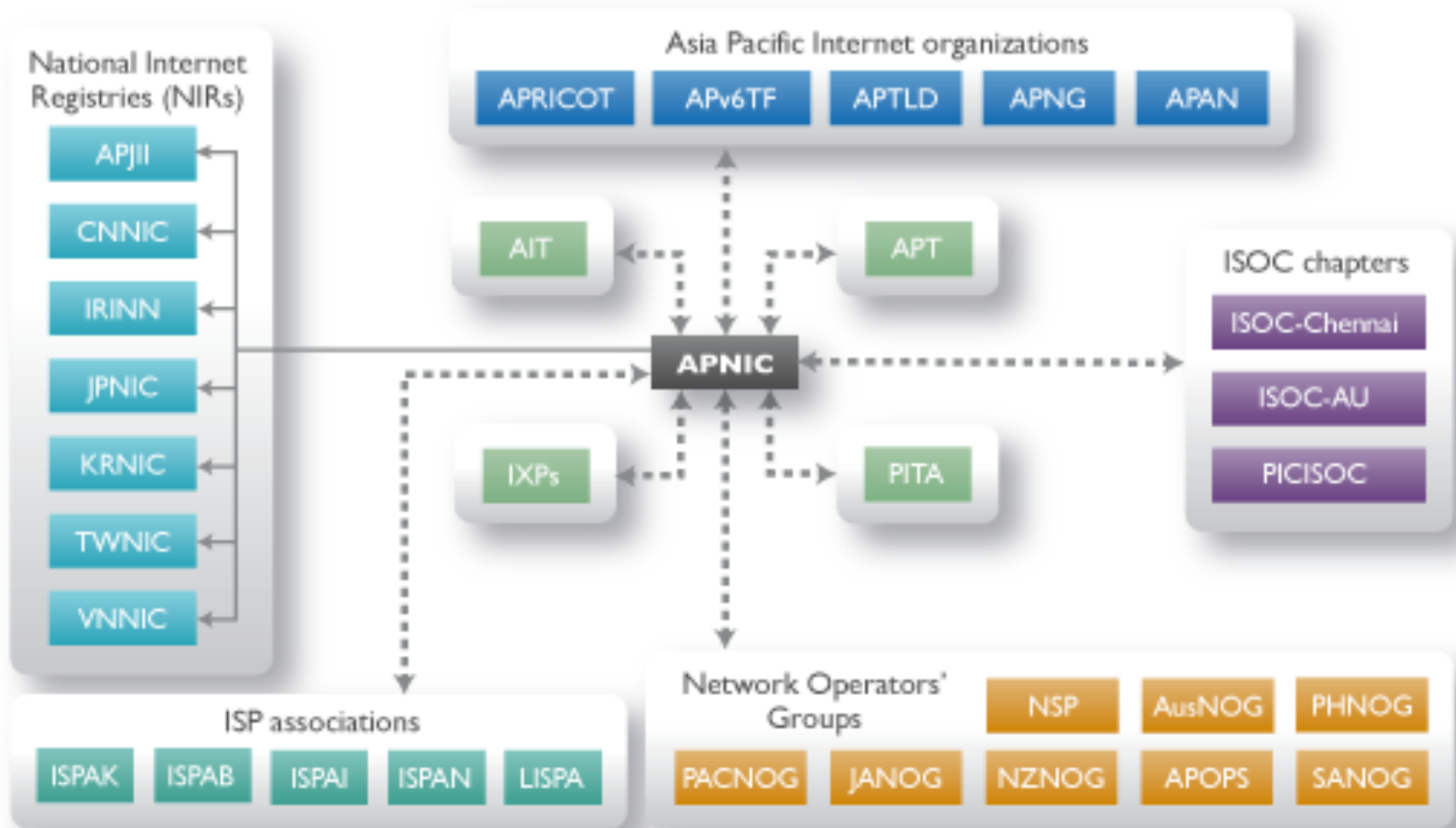
### **Progres Report APJII-IDNIC**

**Auckland, February 23, 2016**

**Benyamin P. Naibaho**

**Asosiasi Penyelenggara Jasa Internet Indonesia (APJII)**

# APJII as NIR in Indonesia



# IIX BGP Summary



## Looking Glass - show bgp summary

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**Router:** Router IIX-JK2 CYBER

**Command:** show bgp summary

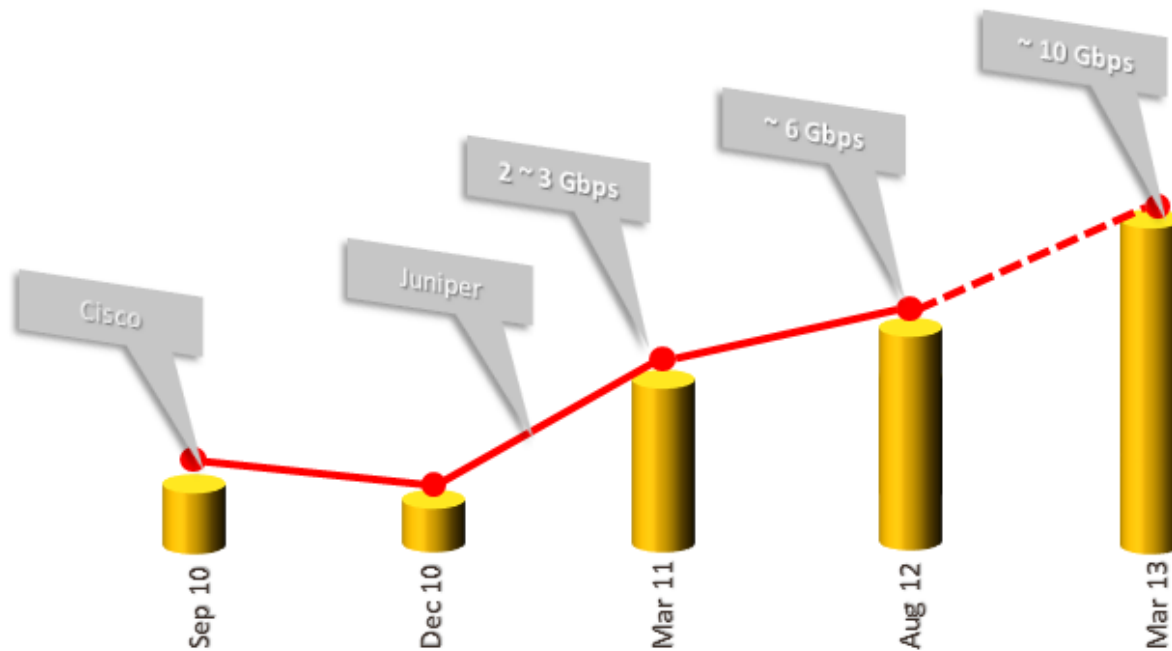
Groups: 5 Peers: 177 Down peers: 24

Table	Tot Paths	Act Paths	Suppressed	History	Damp	State	Pending
inet.0	10615	7591	0	0	0	0	0
inet6.0	12029	103	0	0	0	0	0

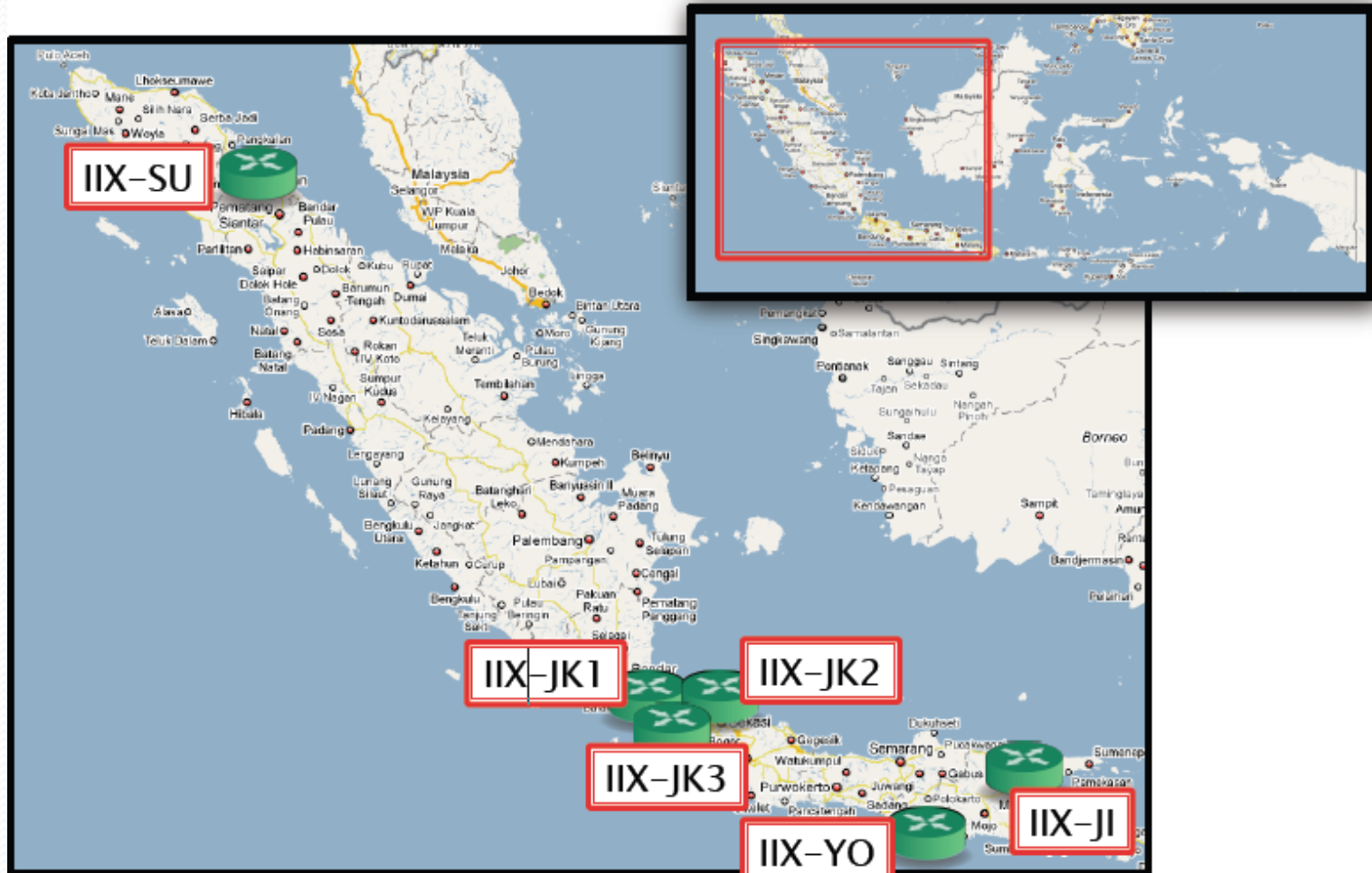
# Traffic Growth (IIX-IK2 – Jakarta)

Traffic **Growth** :

Yearly Traffic Graphed based on 1 Day Average

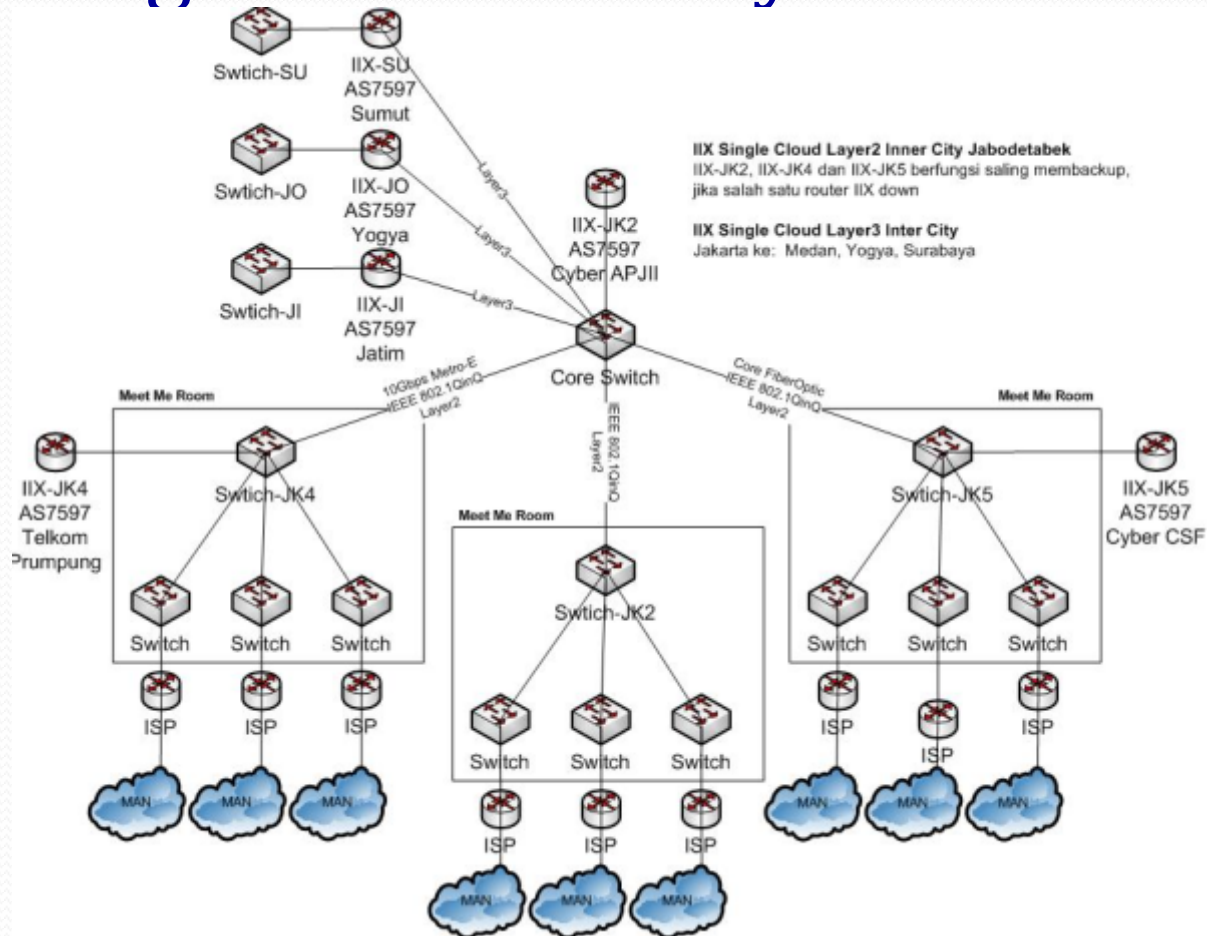


# IIX Deployment cross the nation



# DEVELOPMENT PLAN

## IIX design based on Layer2 IXP



# DEVELOPMENT PLAN

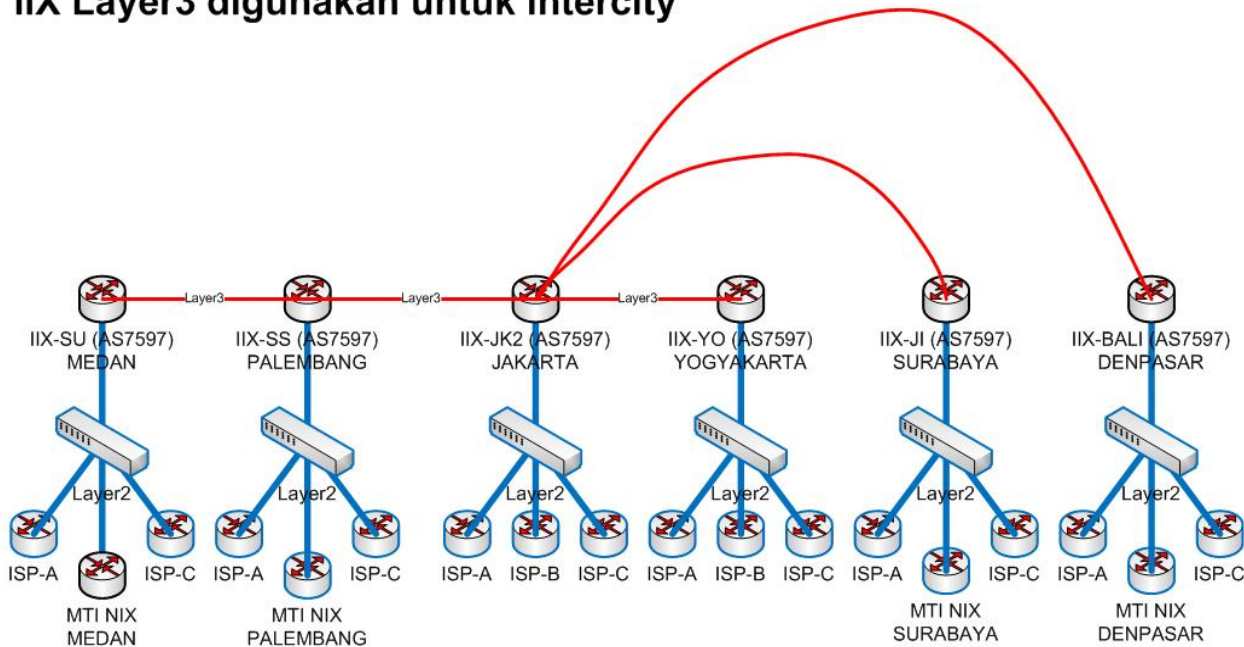
## IIX at Major City in Indonesia



# IIX Single Cloud Sumatra-Java-Bali

IIX Layer2 digunakan untuk innercity  
IIX Layer3 digunakan untuk Intercity

Thursday, October 11, 2012



Powered by

**MikroTik**

Company:	APJII
Name:	Harijanto Pribadi
Customer:	IIX-NIX

Custom Solution For:



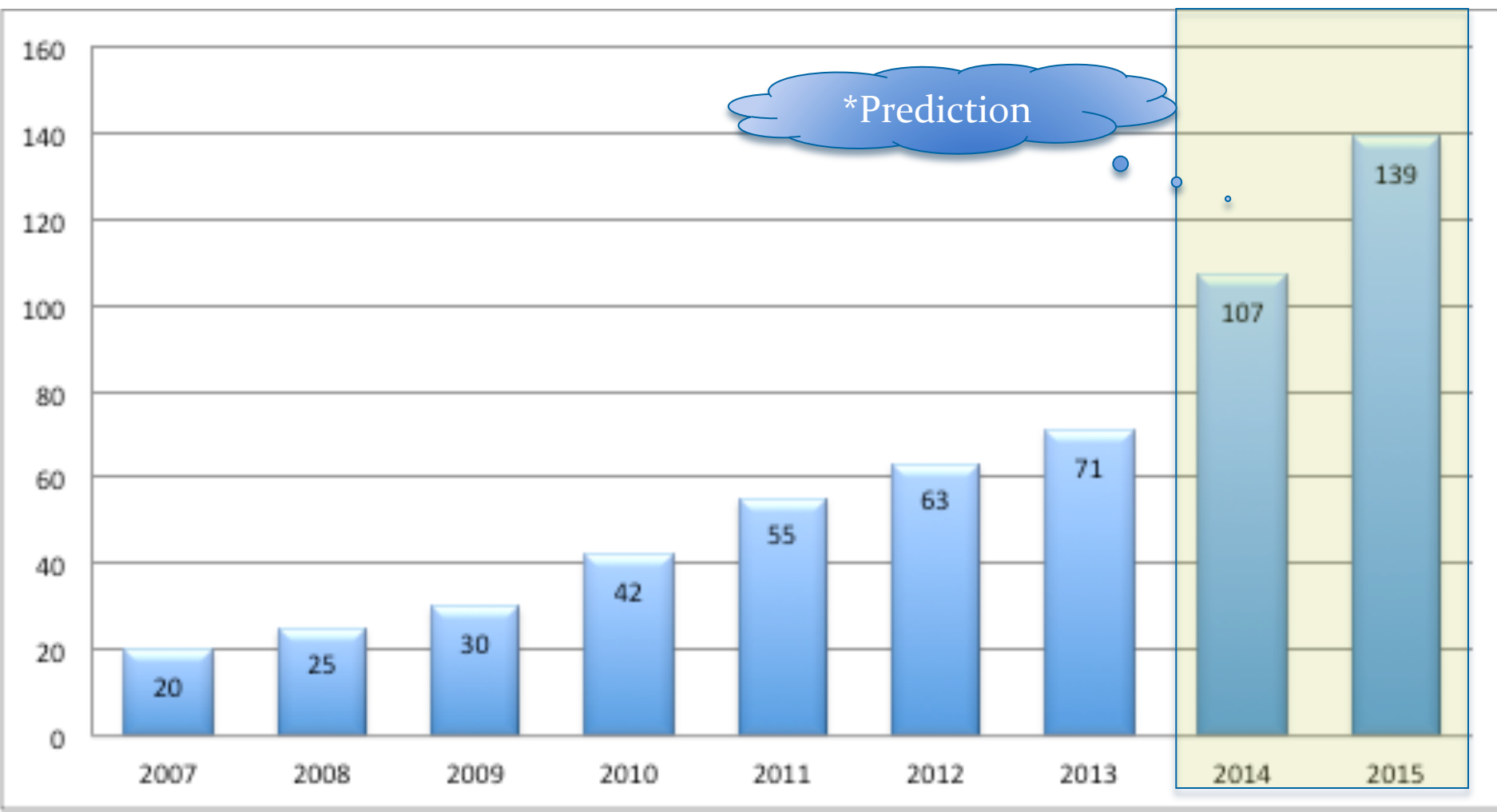
## IIX-JI (Surabaya - East Java)

- Total peers = 20 ISP ASN, and 2 non ISP ASN:
  - Dharmala Intiland (AS55675)
  - OMADATA Internet Exchange (AS55659)
- Total Prefix yang = 2.400 prefix, majority from TELKOM Surabaya (AS17974). Running dual stack for IPv6 exchange
- Max traffic daily can reach 70 Mbps to 100 Mbps (if there is new Linux release or online game event)
- IIX-JI traffic grow up bigger then other IIX outside Jakarta

# IIX Update

- IIX-Medan (North Sumatra) to IIX-Palembang (South Sumatra) then to IIX-JK2 (Jakarta) capacity upgrade from 10Mbps to 150Mbps integrated with NIX (Nusantara Internet eXchange, Government Project)
- IIX-JI/Surabaya (East Java) to IIX-JK2 (Jakarta) capacity upgrade from 10Mbps to 150Mbps integrated with NIX (Nusantara Internet eXchange, Government Project)
- IIX-Bali (Bali) to IIX-JK2 (Jakarta) capacity 150Mbps integrated with NIX (Nusantara Internet eXchange, Government Project)
- IIX-JK2 will upgrade soon use Extreme-Networks BD8810 or Brocade MLX-8 or MLXe-8 evaluation on progress

# Internet Penetration

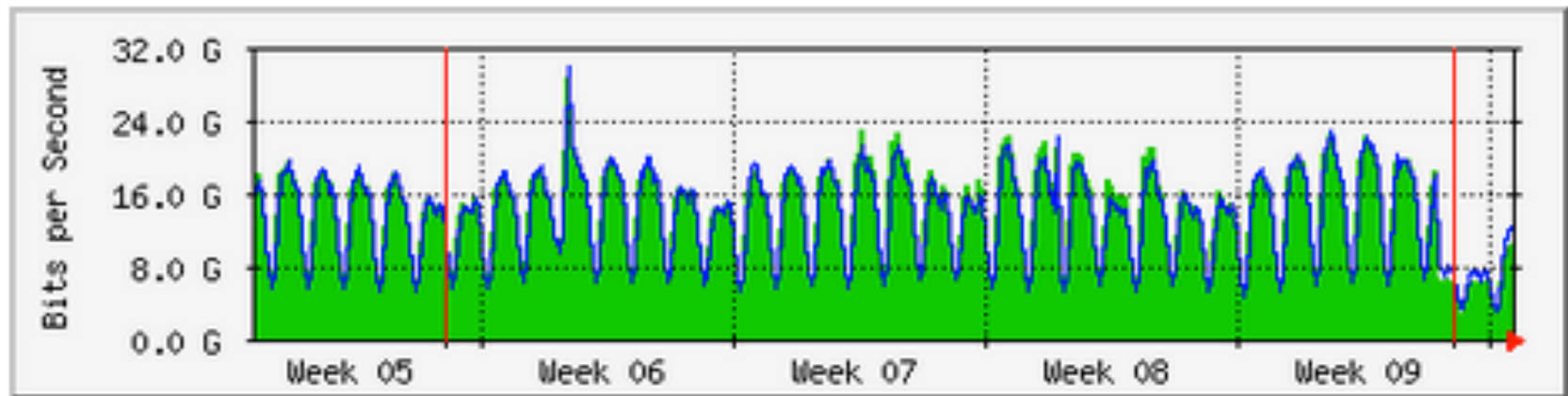


# IIX Local Internet eXchange (Year 2015)

- Total Peering 179 Peers ISP, 17 Peers Non ISP
  - IPv4 = 8984 tables/prefix
  - IPv6 = 245 tables/prefix
- Direct Peer With other Local eXchange Point:
  - CBN Nusantara eXchange
  - MCS Internet eXchange
  - IIX Bali
  - IIX Palembang
  - IIX Surabaya

# Monthly Total Traffic (Year 2015)

## 'Monthly' Graph (2 Hour Average)



	Max	Average	Current
In	28.7 Gb/s	13.4 Gb/s	10.4 Gb/s
Out	29.5 Gb/s	13.3 Gb/s	12.0 Gb/s

# IIX BGP4 and BGP6 (Year 2015)

## IPv4 Peer Summary

Router ID: 103.28.75.0 Local AS Number: 7597

Number of Neighbors Configured: **203**

**Total Prefix: 10973**

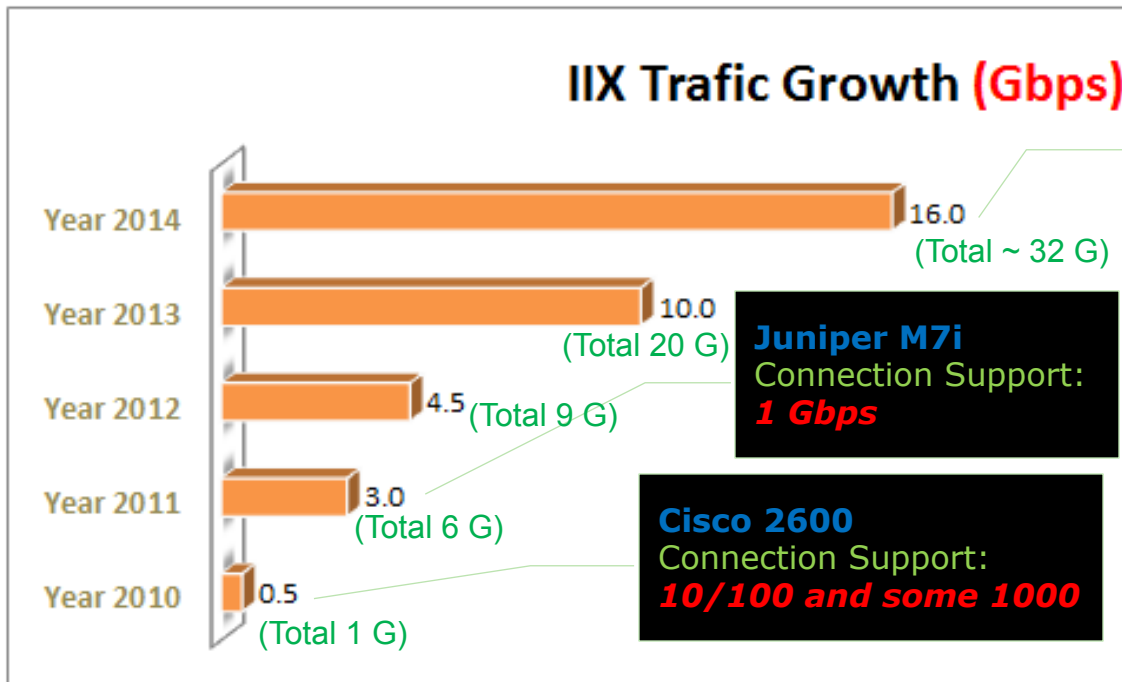
## IPv6 Peer Summary

Router ID: 103.28.75.0 Local AS Number: 7597

Number of Neighbors Configured: **74**

**Total Prefix: 249**

# IIX Traffic Growth



**Brocade MLXe-16**  
Connection Support:  
**1 Gbps and 10 Gbps**

**Juniper M7i**  
Connection Support:  
**1 Gbps**

**Cisco 2600**  
Connection Support:  
**10/100 and some 1000**

# Minister Regulation of National IP Number Chamber No. 32 / 2015

- Coordinated by Director General of Telecommunications, Ministry of Communication and Informatics
- The chamber structure :
  - a. The National Policy Forum of IP Number
  - b. National Internet Registry
  - c. Local Internet Registry (ISP, NAP, or company which has telecommunication license)
  - d. Users of IP Number
- The National Policy Forum No. IP Number consists of 9 (nine) people: representatives of the government (4 people), representatives of members and communities (5 people)





# The Important Information of the IP Number Regulation

- Chairman and members of the National Policy Forum of IP Number
  - appointed for a term of three (3) years and may be re-elected for 1 (one) next period
  - appointed and dismissed by the Minister based on the proposal of the Director-General
  - The Minister may revoke the decision of the National Policy Forum
- Legalization of NIR conducted at the latest one year after the Minister Regulation signed
- Institution that has implemented management IP Number before the Chamber assigned, can still carry out its activities
- LIR and IP Number Users which have got the allocation from APNIC must follow the Regulation of the Minister, not more than 1 (one) year



# What APJII – IDNIC do to implement this regulation?

- Direct Members (Non-ISP Company, Government Institutions, Educational Institutions, etc.) are required to become the official members of APJII, as a National Internet Registry (NIR)
- The adjustment of APJII Statutes and bylaws has been submitted to members in December 2015
- APJII – IDNIC will get the official designation from Ministry of Communication and Informatic as a National Internet Registry (NIR)
- NIR will be supervised by the National Policy Forum. Director General of Telecommunication as a leader of the Forum will report to Minister of Communication and Informatics at least once in a year

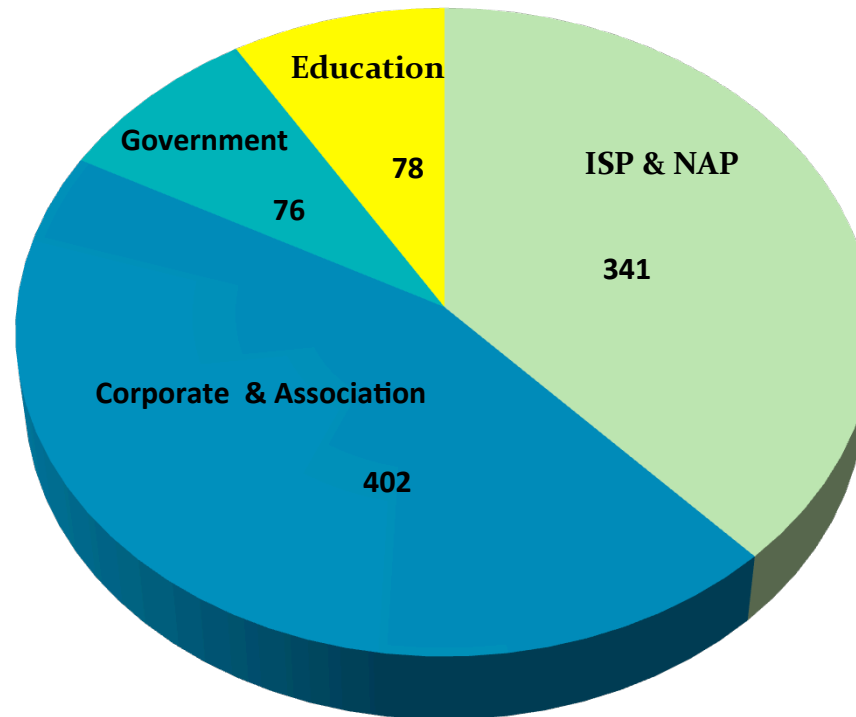


# APJII-IDNIC Routine Activities

- Manages and distributes blocks of IP numbers from APNIC
- Verification of the requirements to get the IP Number
- Establish technical guidelines for implementation IP numbers
- Organizing programs of education and socialization
- Reported on the implementation of APJII-IDNIC activities to APNIC, periodically or at any time
- Coordinate with the finance department for member's billing



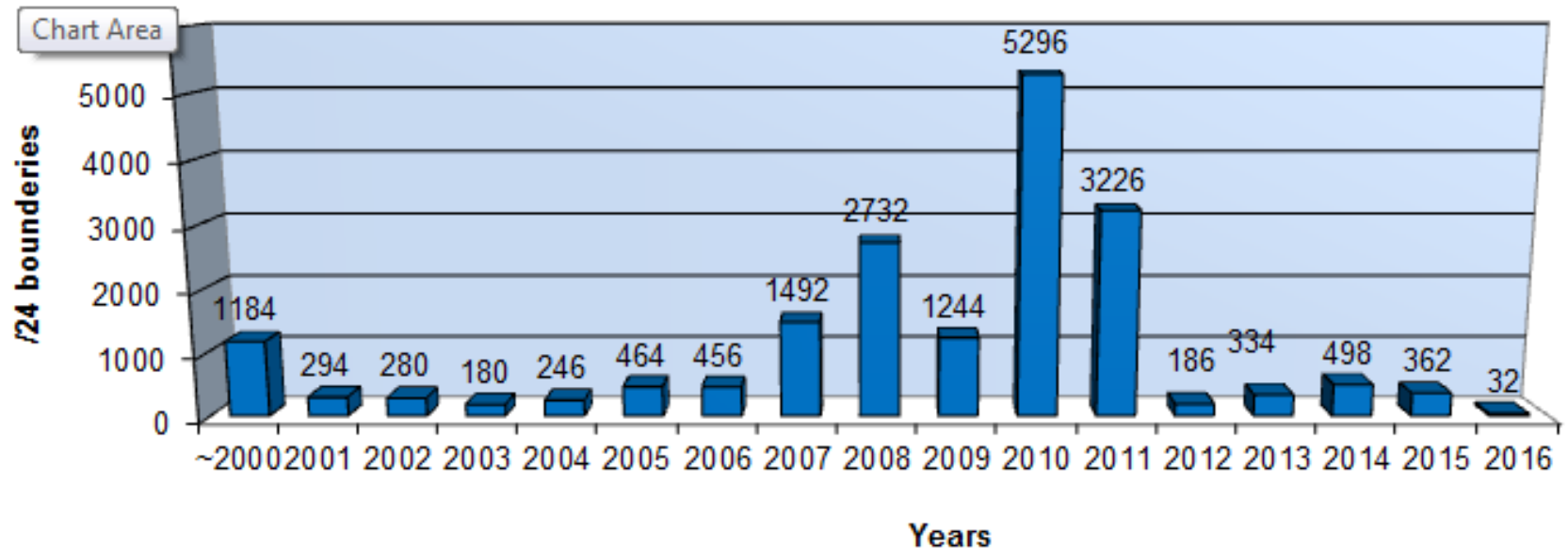
# IPv4 Allocation (1)



Total APJII Member (341) + IDNIC Direct Member (556) =:  
897 members (NAP,ISP dan Direct Member IDNIC)



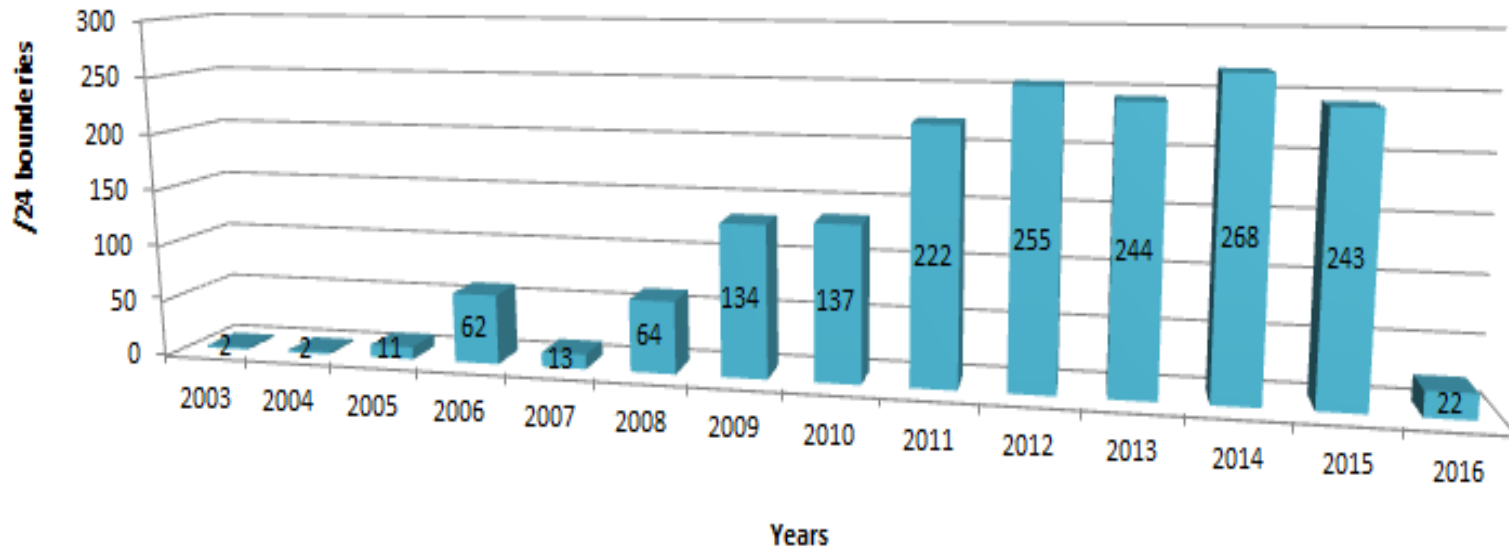
# IPv4 Allocation Statistic – APJII Members



Total Allocations: 4.737.536 Address



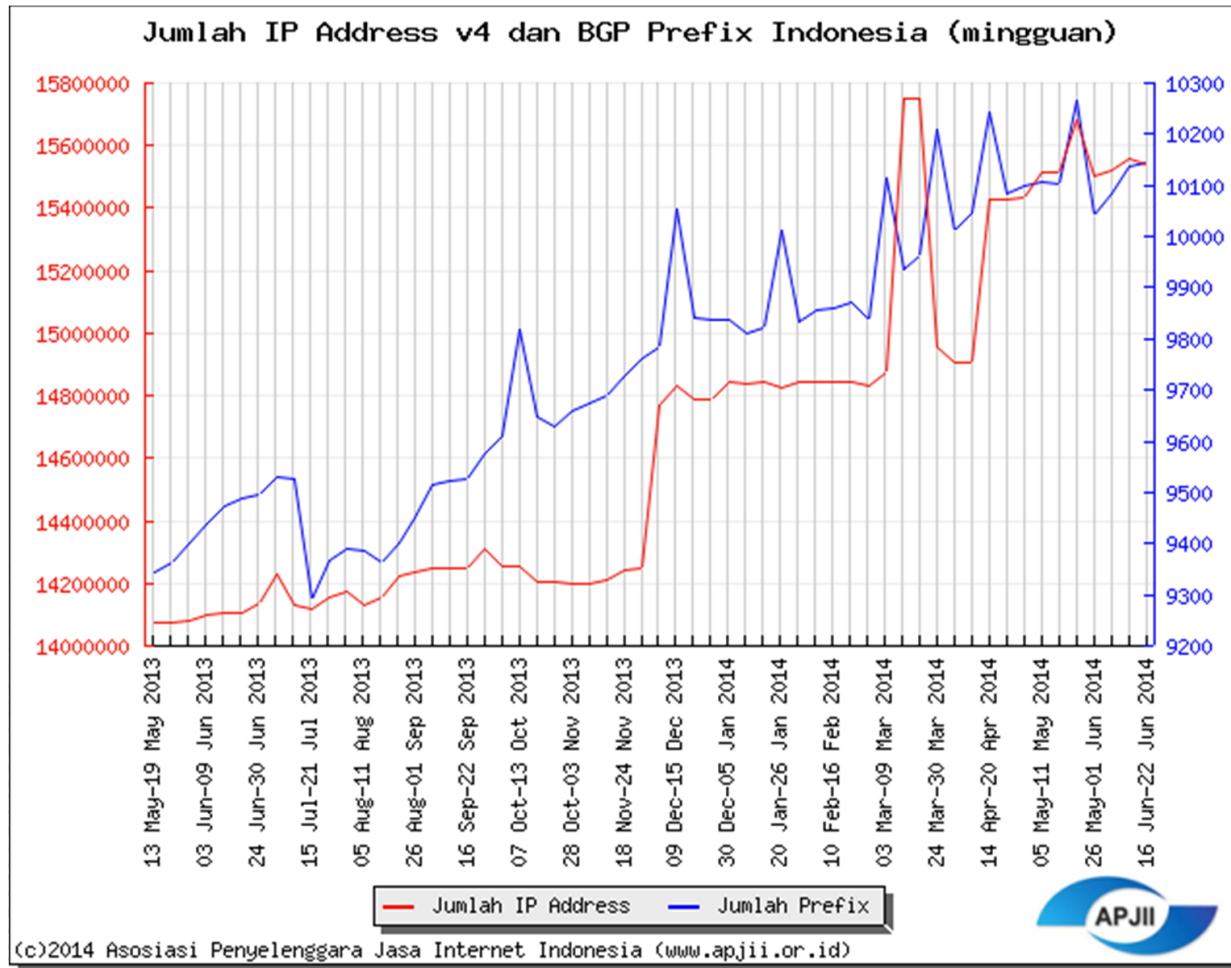
# IPv4 Allocation Statistic – Direct Member IDNIC



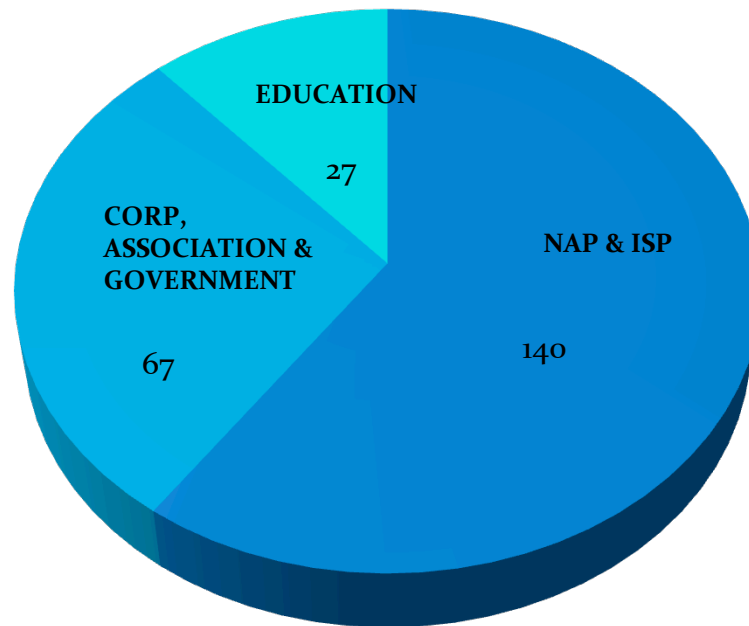
Total Allocations: 429.824 Address



# IPv4 and prefix at National Exchange



# IPv6 Distribution (1)



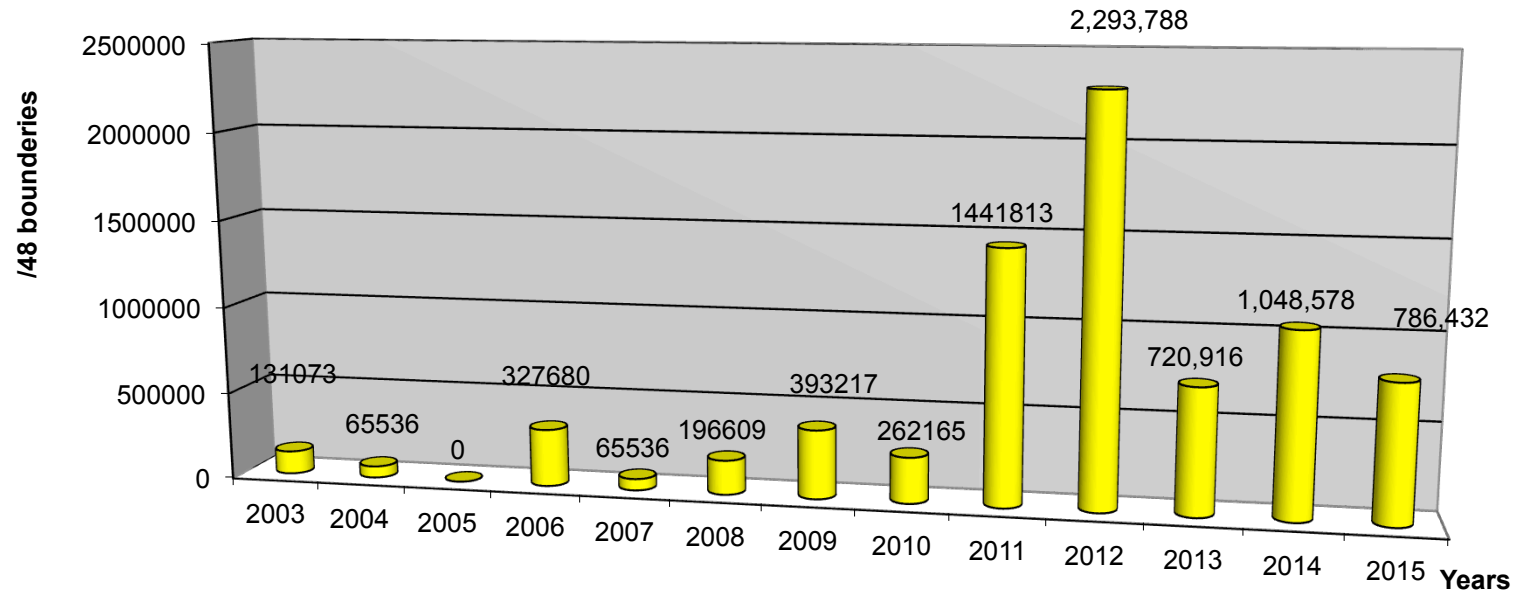
Total: 234 Members





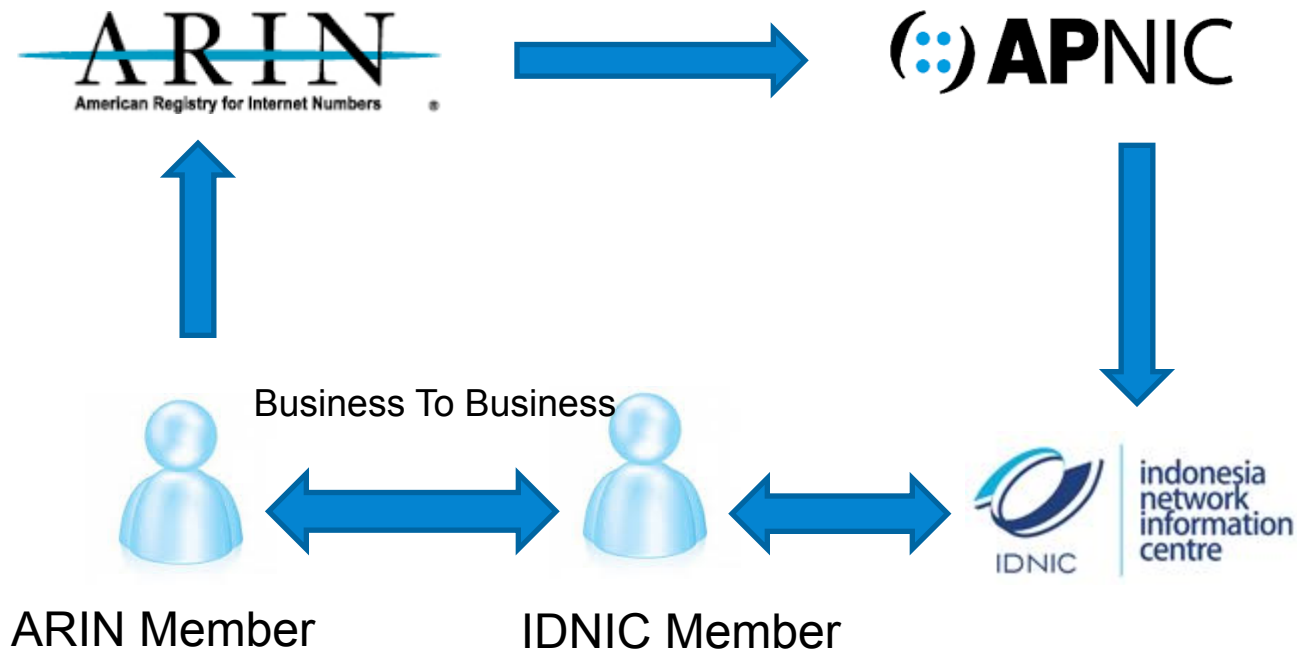
# IPv6 Distribution (2)

IPv6 Address Statistic



# Inter-RIR Transfer

We have processed /19



# Inter-IDNIC Members Transfers



# APNIC - APJII Training Schedule 2016



# On Going Project – MyIDNIC/MyAPJII

- MyIDNIC / MyAPJII Portal -> <https://myapjii.net>
- <https://myapjii.net> forward to <http://apjii.or.id>
- Features: Login, Home, Resources, Administration (billing), Training & Events, Technical, Tools, etc
- APJII Developer team in collaboration with the APNIC team, will be completed in May



# On Going Project – MyIDNIC/MyAPJII



Tentang

Layanan

Gudang data

Statistik

## Halaman Login

Silahkan [Daftar](#) untuk membuat akun baru.

@ Email

🔒 Kata sandi

[Lupa kata sandi?](#)

Login





indonesia  
network  
information  
centre

# Thank you

