# NIXI

## INTRODUCTION

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# NIXI - Need

- Neutral exchange point
- Cost effective way to exchange domestic traffic
- Better access to Local Content
- Better Performance

# NIXI - Policy

- Neutral

- Current policy: forced regional multilateral peering

- Allows players to have private interconnects for full peering and transit (both domestic and intl)

# NIXI - Infrastructure

- Located at STPI POPs
- Have adequate UPS power and Generator Power
- Precision ACs
- Access Control
- NMS from IIT Chennai (Cygnet)

# NIXI - Costs

- Cost of a router at NIXI
- Cost of a leased line to the NIXI
- Setup fees
- Management fees
- Port Charge

# NIXI - Peering

- ISPs to bring in Routers
- 100 Mbps Switched LAN
- Single EBGP session with NIXI Router
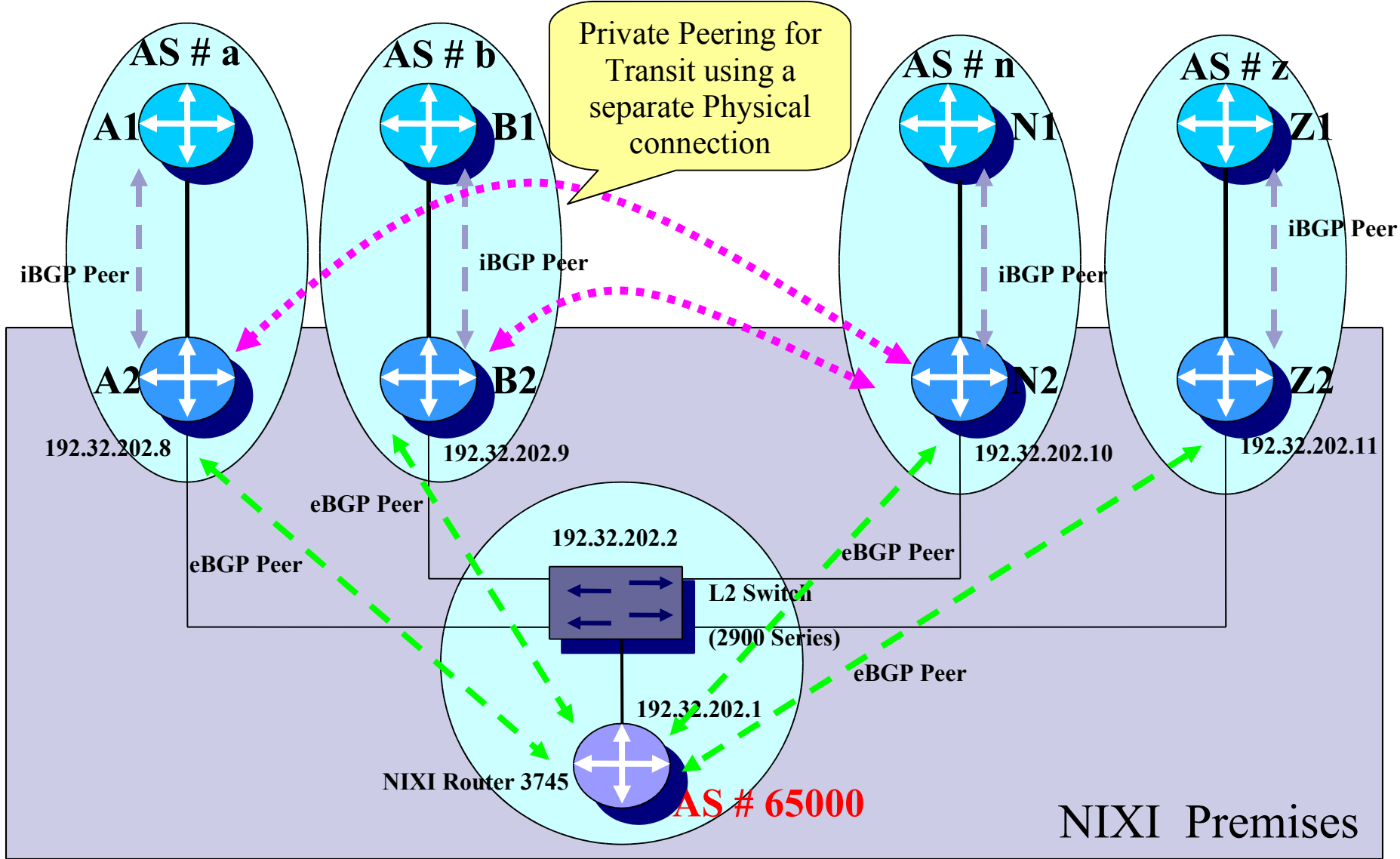- Traffic directed to respective ISP Router

# NIXI - Transit

- Private Transit between co-located ISPs
- Does not overload NIXI switch
- NIXI will allow domestic as well as international transit on separate switches

# NIXI

## Architecture and Configuration

# NIXI - Setup

**AS # a**

A1

**iBGP Peer**

A2

192.32.202.8

**AS # b**

B1

**iBGP Peer**

B2

192.32.202.9

Private Peering for Transit using a separate Physical connection

**AS # n**

N1

**iBGP Peer**

N2

192.32.202.10

**AS # z**

Z1

**iBGP Peer**

Z2

192.32.202.11

**eBGP Peer**

**eBGP Peer**

**eBGP Peer**

**eBGP Peer**

192.32.202.2

L2 Switch

(2900 Series)

192.32.202.1

NIXI Router 3745

**AS # 65000**

NIXI Premises

# NIXI – IP addressing

- 198.32.202.0/24
  - Four /26s for the four locations
  - Delhi uses 198.32.202.0/26
- NIXI has its own public AS

# NIXI – Router Config

- Cisco 3745
- Fast Ethernet
- RAM- 128MB (min)
- BGP configuration – Multiple BGP sessions one per ISP
- Use Ethernet IP for peering
- Security
- Policies

# NIXI – Summary

- Simple and un-complicated L2 architecture
- The ISPs will bring in their own Routers
- ISPs will do EBGP with NIXI router
  "Third Party Next-hop " takes effect
- ISP's define routing policies.

# NIXI – Summary Contd…

- ISP's will connect to their Backbone network using Leased lines from the their respective routers.
- ISP's that require private peering/transit are directly connected.

# NIXI – Status

- ISPs connected in Mumbai include:
  1. NetMagic
  2. Reach
  3. SIFY
  4. Bharti
  5. MTNL
  6. VSNL
  7. Hathway
  8. STPI

# NIXI – Status

- ISPs connected in Delhi (Noida) include:
  1. STPI
  2. Reach
  3. SIFY
  4. Bharti
  5. MTNL
  6. BSNL
  7. VSNL
  8. Net 4 India
  9. Data Access
  10. Spectranet
  11. Dishnet
  12. HCL Infinet
  13. ERNET
  14. NIC
  15. Primus
  16. Hughes Escorts Commn. Ltd.

# NIXI – Status

- ISPs connected in Chennai include:
    1. STPI
    2. SIFY

- NIXI  Kolkatta – Ready for operation

# NIXI - Status

- Tariffs has been finalized – Tariffs are available on NIXI website www.nixi.org

- Routing Policy has been finalized – current routing policy is available on NIXI website www.nixi.org .

- Expected to exchange significant traffic soon….

# END

## THANK YOU