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

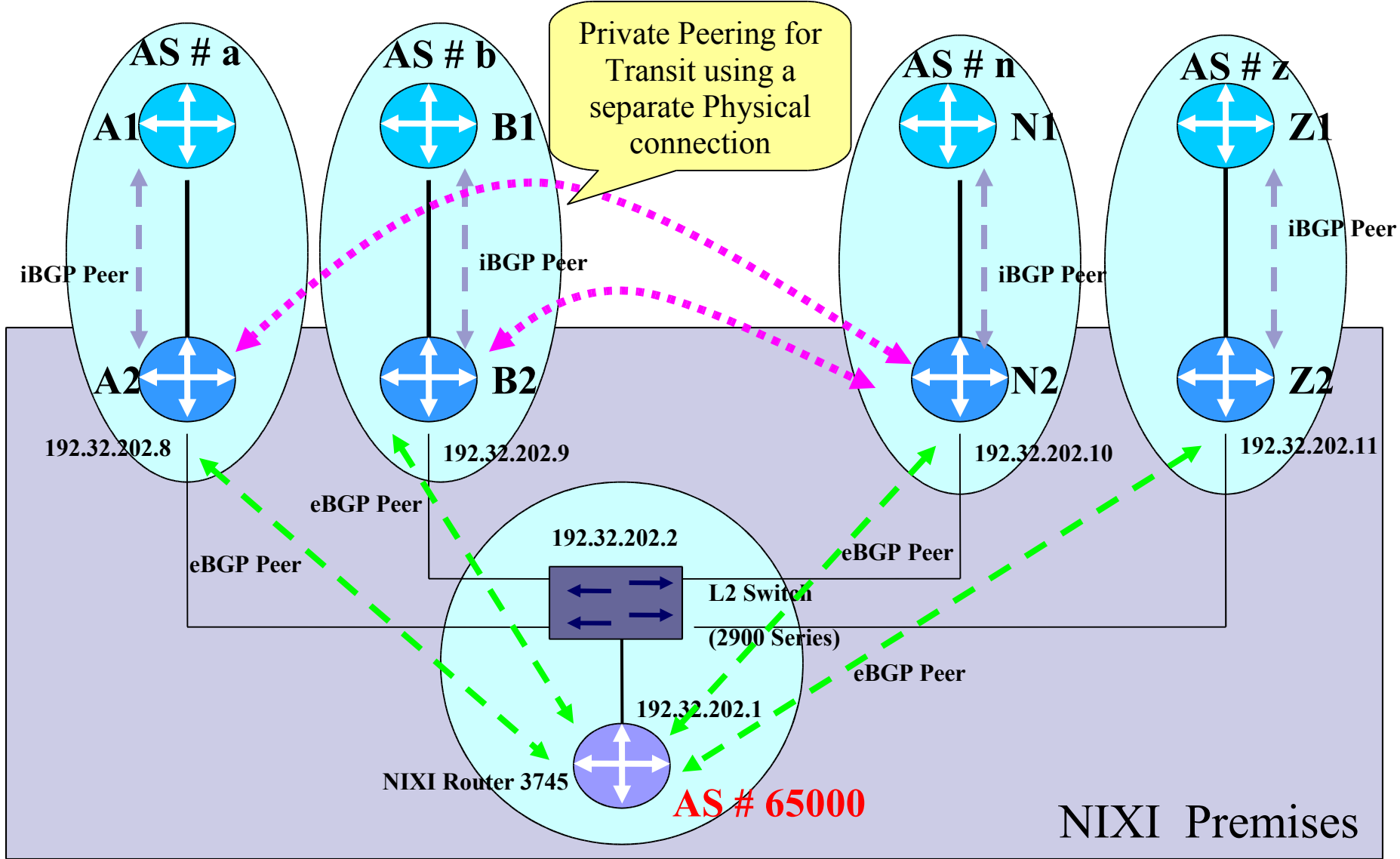- NIXI will allow domestic as well as international transit on separate switches

NIXI

Architecture and Configuration

NIXI - Setup

AS # a

AS # b

Private Peering for Transit using a separate Physical connection

AS # n

AS # z

A1

B1

N1

Z1

iBGP Peer

iBGP Peer

iBGP Peer

iBGP Peer

A2

B2

N2

Z2

192.32.202.8

192.32.202.9

192.32.202.10

192.32.202.11

eBGP Peer

192.32.202.2

eBGP Peer

eBGP Peer

L2 Switch

(2900 Series)

eBGP Peer

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