

IX for Gateways: A New Approach

SANOG32 & BDNOG9

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AS 58587

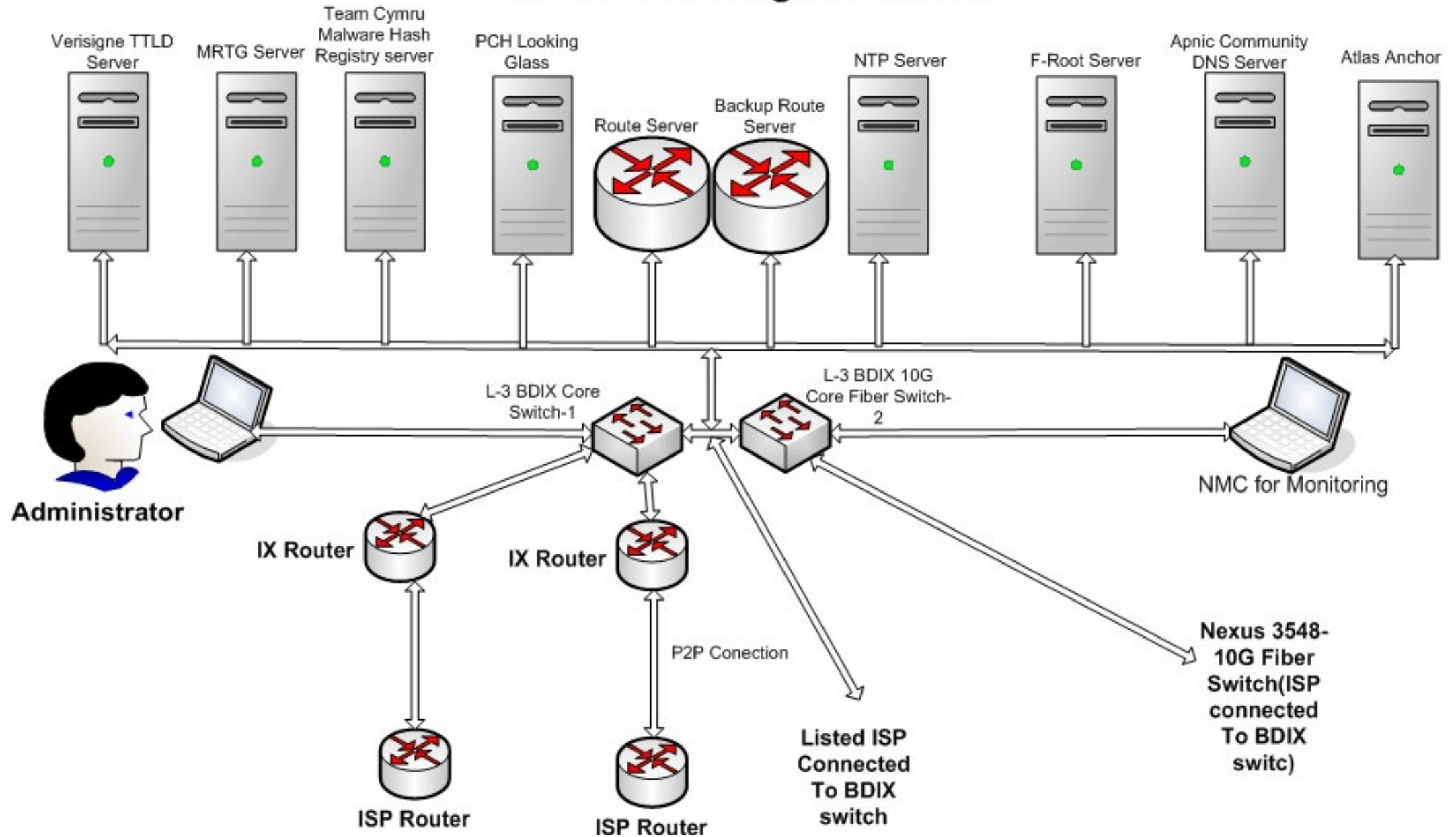
Overview

First Internet Exchange Point (IXP) of Bangladesh, BDIX.

Established to provide routing for local traffic locally.

More than 100 Organizations of different types (ISPs, mobile operators, content providers) are connected with BDIX.

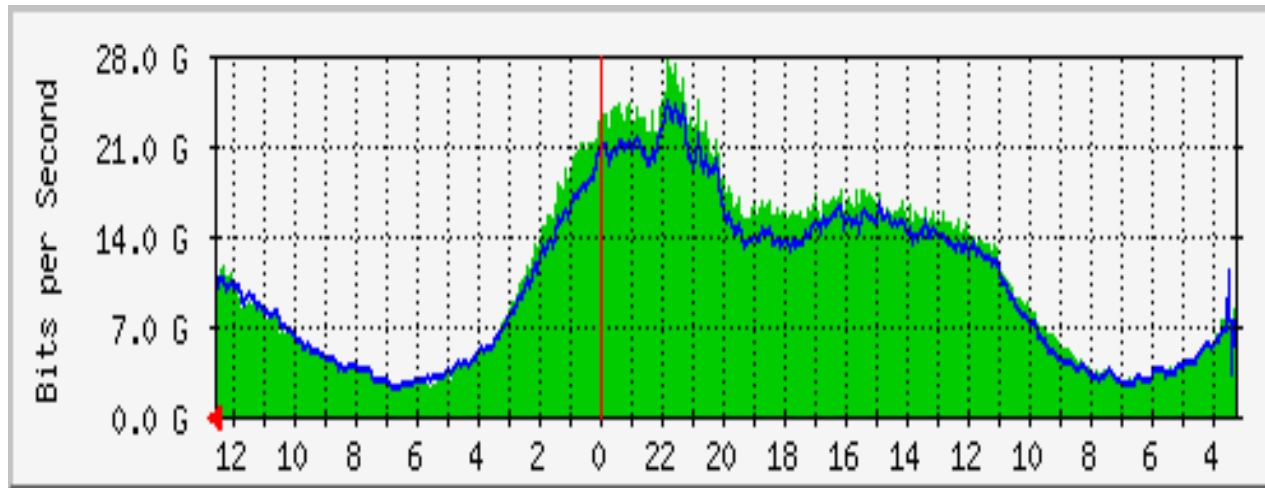
Schematic Diagram of NIX



Operational Statistics

MRTG GRAPH OF BANGLADESH INTERNET EXCHANGE (BDIX)

Daily Graph (5 Minutes Average)



**ISP connected with BDIX:
106**

**Total number of internet
subscriber: 87.790 milion**

The statistics were last updated on: 7-15-2018

Challenges

Specific Route:

=> Lower than /24 prefixes are advertising from ISPs towards BDIX.

In the Internet /24 is the lowest limit for advertising.

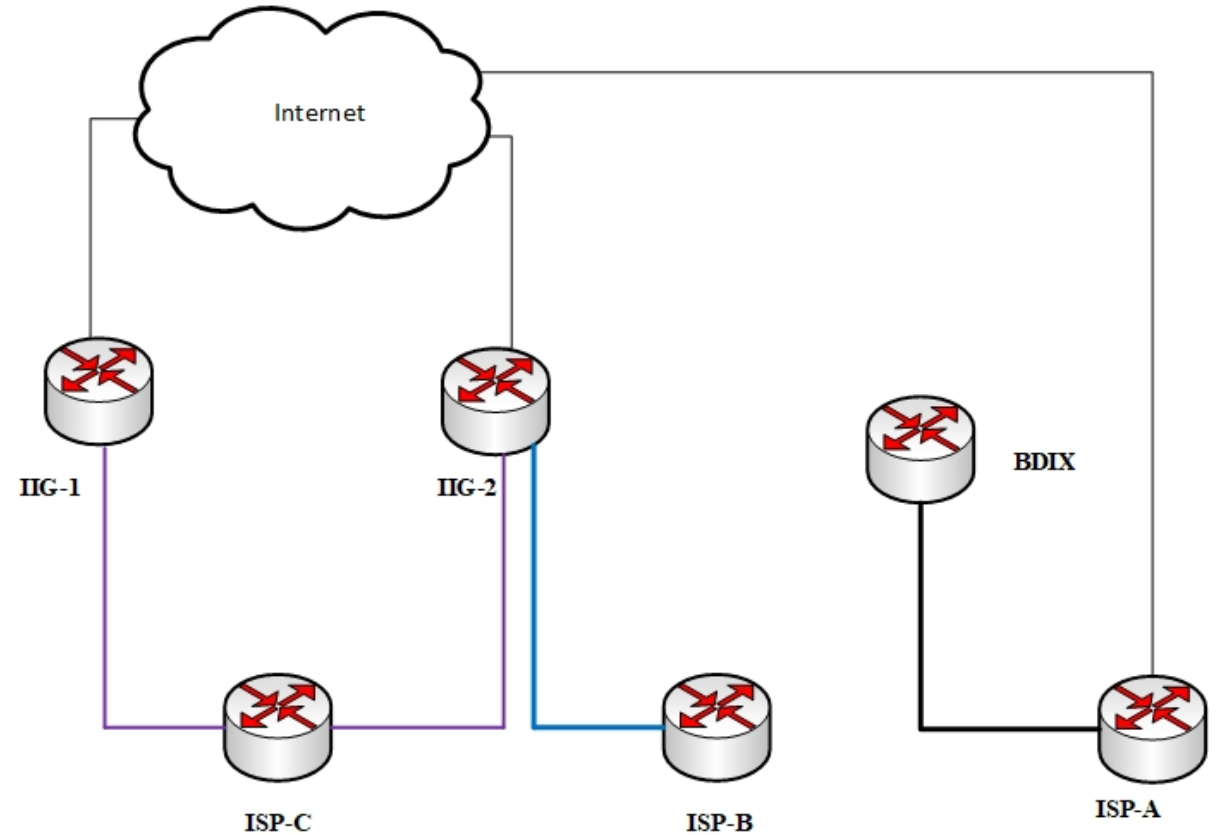
URPF: Some hosts are using **Unicast Reverse Path Forwarding**.

Necessity of New Layer (IIG)

ISP-C & ISP-B: Both are connected with IIG-2

ISP-A: Connected to BDIX and Internet through another IIG

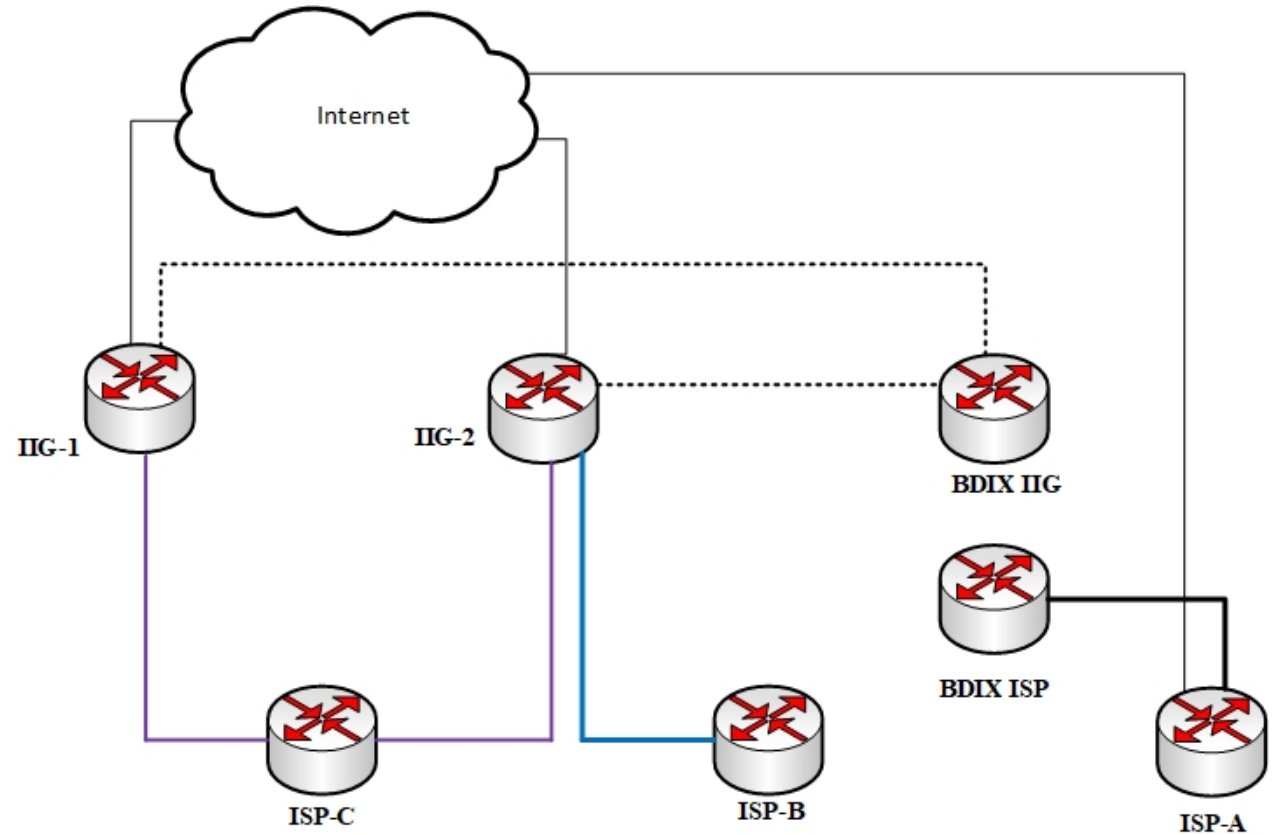
- ISP-B & C can only reach any client/host under ISP-A via internet.
- National traffic is passing through Internet.



Case-1

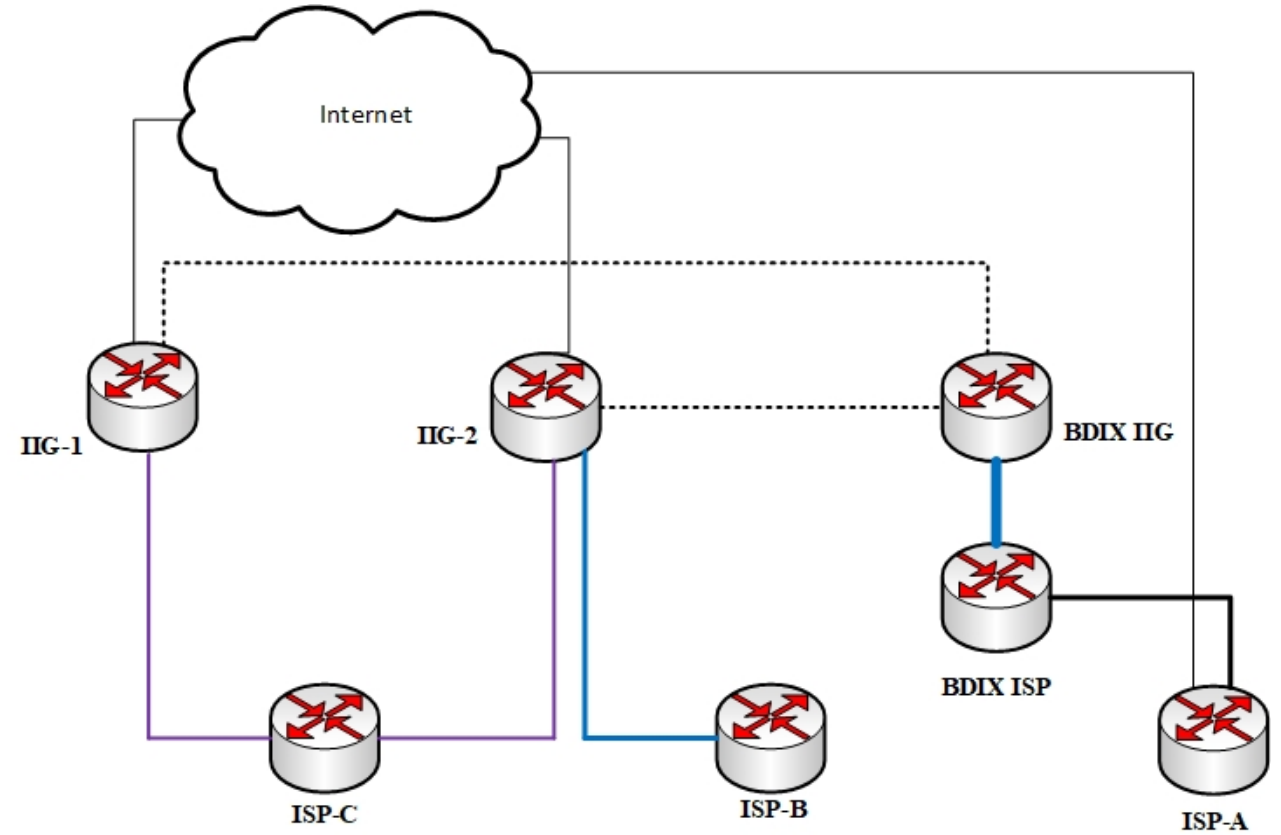
Necessity of New Layer (IIG)

- New Layer for IIGs
- Traffic matrix with subnet as per internet standard.
- Each IIG receive prefixes with no-export community and AS filtering locally connected ASNs.
- Each IIG will advertise prefixes filtering upstream ASNs.
- BDIX will receive prefixes allowing only local prefixes with prefix limit.
- IIGs can save their international bandwidth.
- Latency will be minimum.



Necessity of New Layer (IIG)

- In future BDIX should have a plan to merge both the IIG & ISP layers.



Achievement

- ISPs without BDIX connectivity can reach locally hosted clients in the neighborhood.
- Performance will be better.
- Internet BW will be saved.
- Latency will be in well satisfactory level.
- Cost will be minimized.

Policy

BTRC defined policy: BTRC can help to develop a policy for logical connectivity with BDIX for ISPs via IIGs.

Future policy: Need to establish a policy for future, how IIGs should connect with BDIX both physically and logically.

Traffic plan: We need to inaugurate a plan for traffic matrix by which our purpose will serve to minimize cost and better experience.

Future Plan

Need to build a concrete plan for future where IIG and ISP both layer will be merged.

Mainly, we need to focus on routing issues.

Goal

Need to add more content provider with BDIX. Like:

=> Facebook

=>Google

=>Akamai

=>Limelight

=> Amazon etc.

Goal

Internet Exchange Nepal

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NEWS

6G TRAFFIC IN NPIX

🕒 JUNE 15, 2018 👤 RUPESH SHRESTHA

On 14th July 2018, while the world was busy watching FIFA World-cup 2018, npiX saw its traffic increase to almost 6 Giga bits per second (5.7G to be more precise), thereby providing smooth service to our members and their customers. This is very encouraging for us to see the content traffic building up over npiX. We hope to see 10G traffic mark soon!!

PREVIOUS POST

HIGHLAND INTERNATIONAL JOINS NPIX

Aggregate Traffic

ARCHIVES

- June 2018
- May 2018
- March 2018
- February 2018
- January 2018
- December 2017
- August 2017
- July 2017

Question

Thank You