

2.0 / TECHNICAL UPDATE

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NETWORK ARCHITECT @BELNET (AS2611)

1.0 / INTRODUCTION

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- Stefan Gulinck – Senior Network Architect
 - I could insert a bunch of links to socials, but not really active... Work in progress
- Since January 2021 business lead of the Business Unit BNIX within Belnet
- Agenda:
 - Realisations
 - Private VLAN
 - IXPMANAGER
 - New Platform



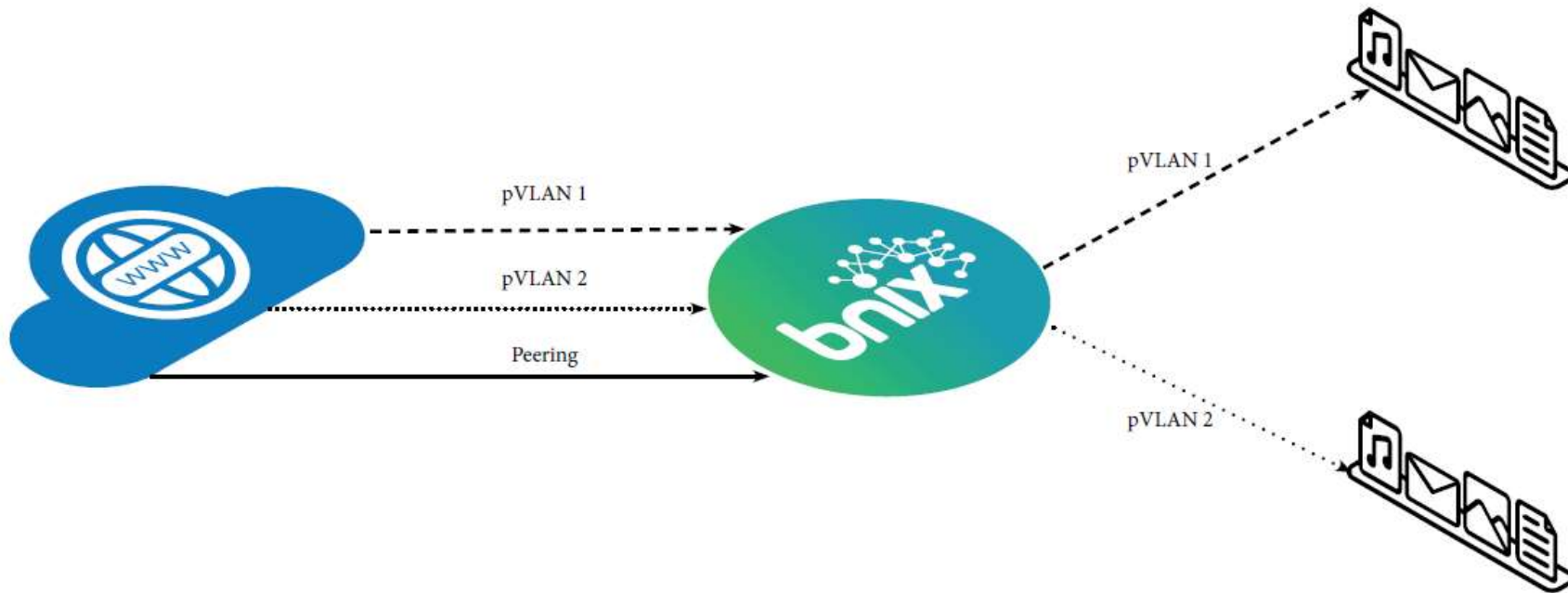
2.0 / REALISATIONS

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- Launch of a reseller programme
- Review of pricing, making it more granular
- Migration Routeservers, with introduction of RPKI
 - MANRS application pending
- Collaboration with LU-CIX
- Private VLAN service
- IXPManger
- Launch project new hardware platform

3.0 / PRIVATE VLAN

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- New service introduced to extend the use of BNIX connection
- Extra VLAN('s) are added to allow direct connections between Service Providers and potential customers
- Service delivery: Transit, anti-DDOS, cloud services...
- Same port, same crossconnect
- Extends the use of you port, which reduces the price/Mb

4.0 / IXPMANAGER

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- is a customer and management portal based on the international standard of IXPManager
 - This is a webportal created by INEX and currently used at 176 IXP's
- <https://www.ixpmanager.org/>
- Introduces:
 - Smokeping
 - looking glass
 - and last but not least peer to peer traffic flow based on sflow
- We will create a user for everyone
- Will co-exist with the current portal for a while. Still some development needed.
- Launch will be October 2022



Looking Glass

<https://ixpmanager.bnix.net/lg/rsbruevev4/route-search>

Bird v2 2.0.8 | API: 1.2.2 | Router ID: 194.53.172.2 | Uptime: 84 days. | Last Reconfigure: 2022-09-21 09:00:09 | Cached data. Maximum age: 5 mins. | JSON:

IP Address/Prefix

Lookup table
 Lookup protocol

Source

[Search](#) [Help](#)

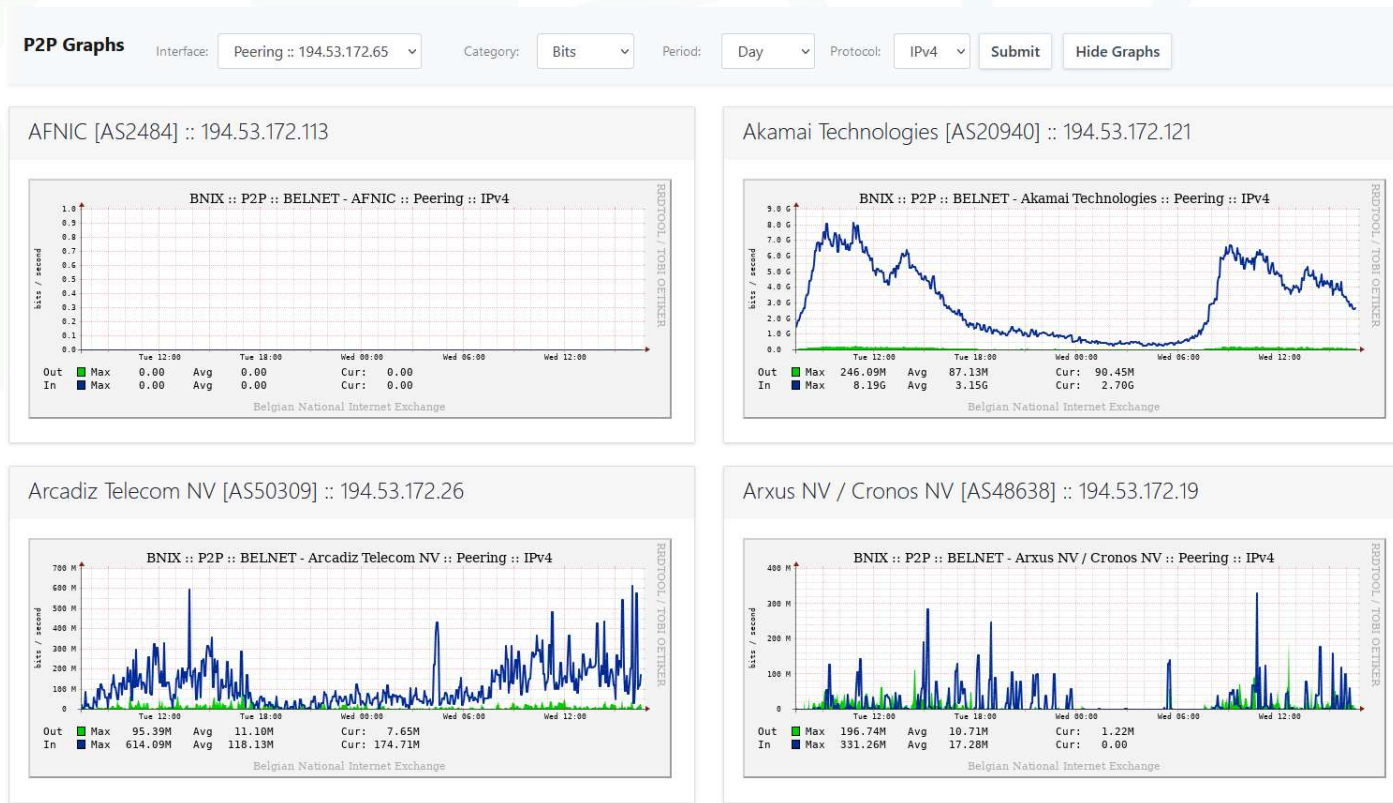
Route Details - 193.190.0.0/16 in table master4

Network	193.190.0.0/15
Gateway	194.53.172.65 PRIMARY
From Protocol	pb_0025_as2611
Age	2022-07-01 17:47:16
Metric	100
Type	BGP univ
BGP :: AS Path	2611
BGP :: Next Hop	194.53.172.65
BGP :: Local Pref	100
BGP :: Large Communities	5406:1000:1 RPICE_VALID
Network	193.190.0.0/15
Gateway	194.53.172.97 NOT PRIMARY
From Protocol	pb_0047_as2611
Age	2022-07-01 17:47:07
Metric	100



4.0 / IXPMANAGER

Graphs for you peer to peer traffic



5.0 / NEW PLATFORM

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- Has been in the pipeline for quite a while
- Problems with initial design
 - Chipsets weren't adequate
 - Buffer size too small for the type of IX traffic
 - Back to the drawing board
- New hardware ordered and delivered beginning of September
 - Juniper ACX710
 - Juniper ACX7100
- Design remains the same, only VXLAN is replaced by MPLS

6.0 / QUESTIONS?

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Happy to answer questions during the networking part!

