

1.0 / INTRODUCTION

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- Stefan Gulinck – Senior Network Architect and technical lead BNIX
- Agenda:
 - Realisations New platform
 - Increased port security
 - Private VLAN
 - Reminder: subnetmask

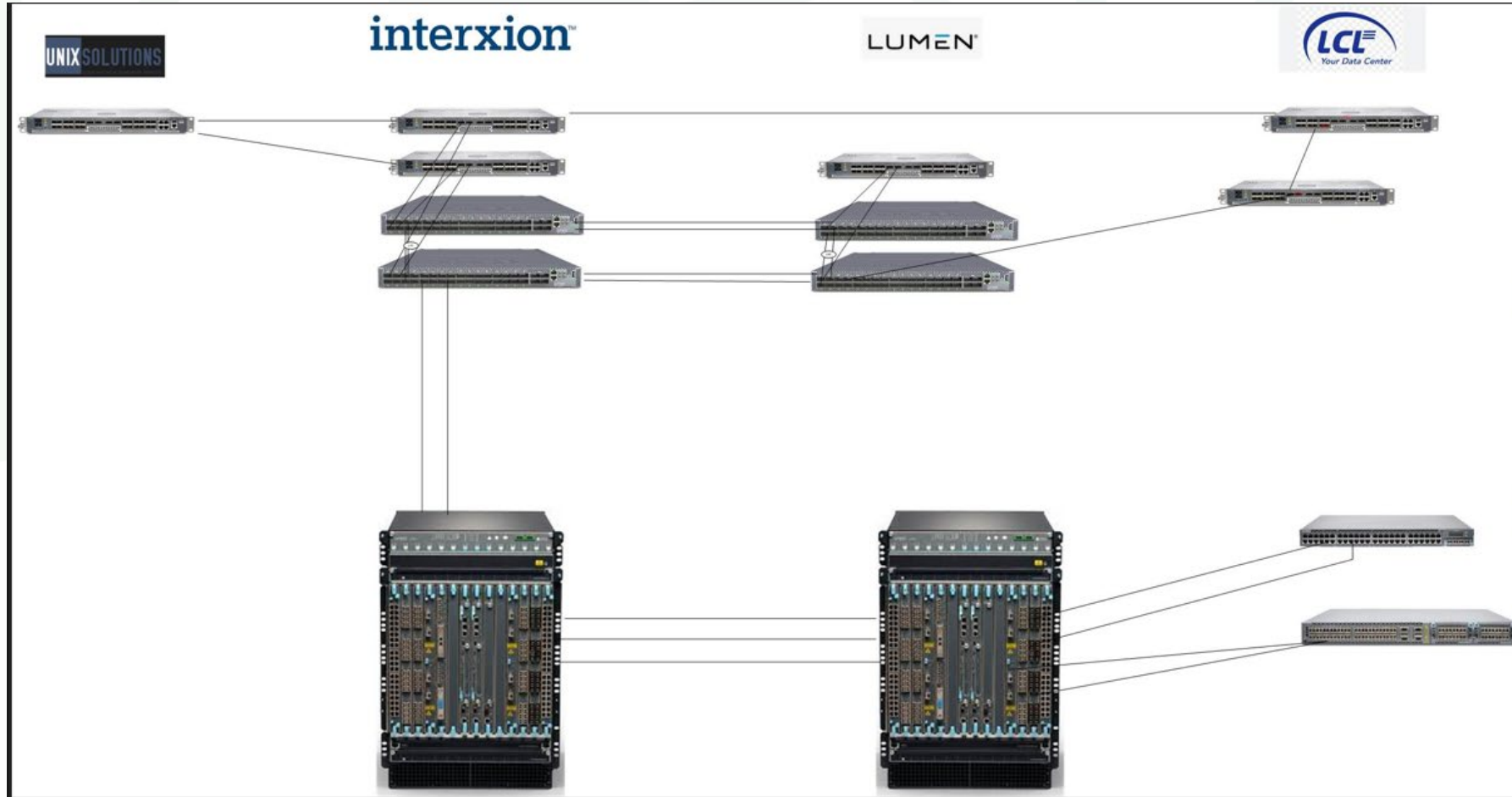
2.0 / REALISATIONS

2.0 / NEW PLATFORM

- 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 used
 - Juniper ACX710 (DC Power)
 - Juniper ACX7100
- Design remains the same, only VXLAN is replaced by MPLS

2.0 / REALISATIONS

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2.0 / NEW PLATFORM

- New Platform has been staged and is connected to the old platform
 - Several participants are already connected (Belnet, Cloudflare, Gcore and Verixi)
- LCL is 100Gbps capable and is foreseen to expand in the future
- We will migrate in a slow pace. First tackle LCL, then Lumen and finally Interxion)

3.0 / INCREASED PORT SECURITY

INCREASED PORT SECURITY

- To be completely MANRS compliant we introduce two things:
 - Fixed MAC address
 - More strict filtering

INCREASED PORT SECURITY

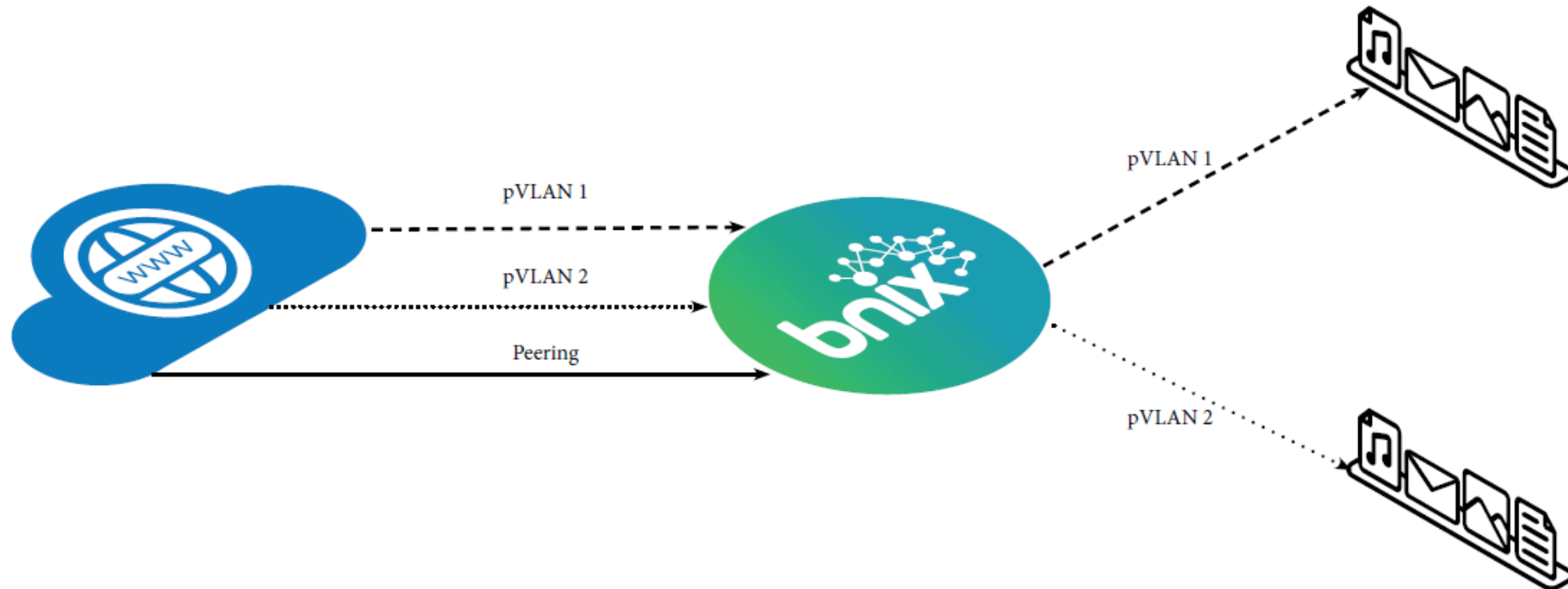
- Fixed Mac address
 - Before: port was limited to 2 MAC addresses
 - Flexibility for participant to migrate router
 - Not secure in case of loops
 - Now: we fix the MAC on the port.
 - Less flexibility, but more secure
 - In case of migration: open a ticket at servicedesk@bnix.net
 - Working on automation

INCREASED PORT SECURITY

- Increased filtering
 - Only certain types of traffic allowed
 - 0x0800 (Ipv4), 0x0806 (ARP) and 0x86dd (IPv6)
 - Ratelimit ARP
 - Limit ICMPv6 to ND and NS and ratelimit
 - Block BPDU packets (Spanning tree)
 - Only allow TCP 179 (BGP) from the BNIX range (194.53.72.0/24).

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 / FUTURE DEVELOPMENTS

- Extend connections to other IX's (France-IX, TOP-IX,...)
 - Working on a European cloud within EURO-IX
- Ready to deliver 400 Gbps
- Price review
- Extend the footprint of the BNIX
- Being only a peering platform is no longer sustainable
- Remaining neutral

5.0 / EXTENDING SUBNETMASK - REMINDER

- To ensure the future
 - Going from 194.53.172.0/25 to 194.53.172.0/24

6.0 / QUESTIONS?

QUESTIONS?

Happy to answer questions during the networking part!

