1.0 / INTRODUCTION

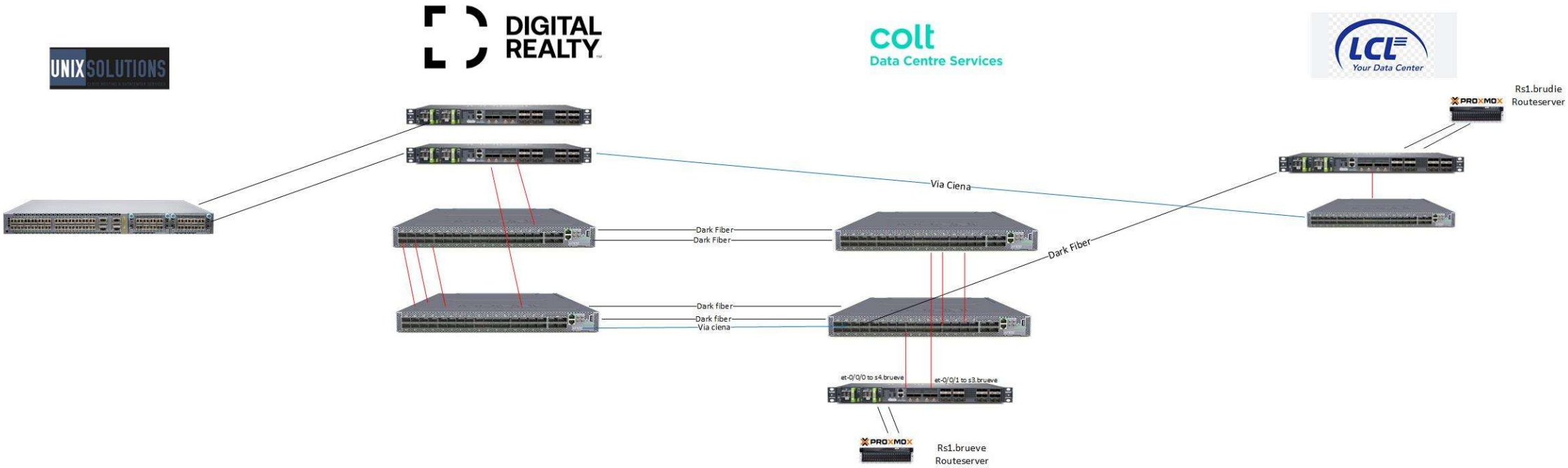
- Stefan Gulinck – Senior Network Architect and technical lead BNIX

- Agenda:
  - Realisations New platform
  - Increased port security and MANRS (reminder)
  - New at BNIX

2.0 / NEW PLATFORM

- All sites have been migrated
  - After identifying a stable release and close collaboration with our partner
- Hardware used is the ACX7000-32C and ACX7024
- Upgrade JUNOS EVO is foreseen beginning of february
  - Waiting on release that solves the sflow bug

2.0 / NEW PLATFORM



2.0 / NEW PLATFORM

- We’ve come a long way in 30 years
- Coming from X-router in our offices to a resilient and flexible platform across different datacenters
- 100 Gbps is the new 10Mbps
- Going for 400Gbps

3.0 / INCREASED PORT SECURITY

- To be completely MANRS compliant we introduce two things:
  - Fixed MAC address
  - More strict filtering and a Acceptable Use Policy
    - Not enforcable, but it helps everyone

3.0 / INCREASED PORT SECURITY

- Fixed Mac address
  - The fixed MAC address was already introduced on ingress level
    - You can always opt for a statically assigned MAC when you replace a device
  - Since we know the destination MAC we are working on filtering this as well
    - Some cases on traffic destined for a MAC that is not behind the port
  - Culling of traffic before upgrade
    - We set a filter that breaks BGP but still forwards traffic. To avoid blackholing.

3.0 / INCREASED PORT SECURITY

- The members are encouraged to implement the following directives:

  - Disable spanning tree on the BNIX port. Disable outgoing BPDUs and ignore incoming BPDUs (although no BPDUs should be received from a BNIX port).
  - Disable all unnecessary protocols. Take extra care with link-local protocols, esp. discovery protocols such as LLDP or CDP and VLAN propagation protocols such as VTP or GVRP/MRP.
  - If possible, terminate the BNIX connection on a L3 port rather than using a switchport and a SVI/IRB interface, and avoid using L2 switches between BNIX infrastructure and your L3 device.

4.0 / FUTURE DEVELOPMENTS

- Extend the footprint of the BNIX to Penta-Infra
- Allowing Belnet PoPs for BNIX access. BNIX not solely as a public peering platform
- Introducing an Apple Cache on the platform
  - Will be available as an opt-in via communities
- Upgrading our backbone links to 400Gbps
- Nawas no longer connected

QUESTIONS?

Happy to answer questions during the networking part!