APOLLON

DE-CIX APOLLON. CUTTING EDGE INTERCONNECTION.

apollon.de-cix.net

DE-CIX Apollon

Launch presentation at the

ENOG Forum #5

Saint-Petersburg, May 28th, 2013

- Goals
  - DE-CIX Apollon will provide cutting edge interconnection on a 100GE level by choosing and implementing new infrastructure for both the optical layer and the switching layer.
  - Apollon needs to support traffic and customer port growth for the next 3-5 years. This includes scalable capacity in the core of up to 20Tbps in 2016 and 45 Tbps in 2018.
  - Replace 1:1 redundancy in the core with n+1 redundancy.
  - Keep local traffic local (switch and site).
  - Core links must be 100GE to reduce the number of links, to better utilize bandwidth, and to be able to accommodate larger flows.
  - Redundancy and multipathing on upper protocol layers.

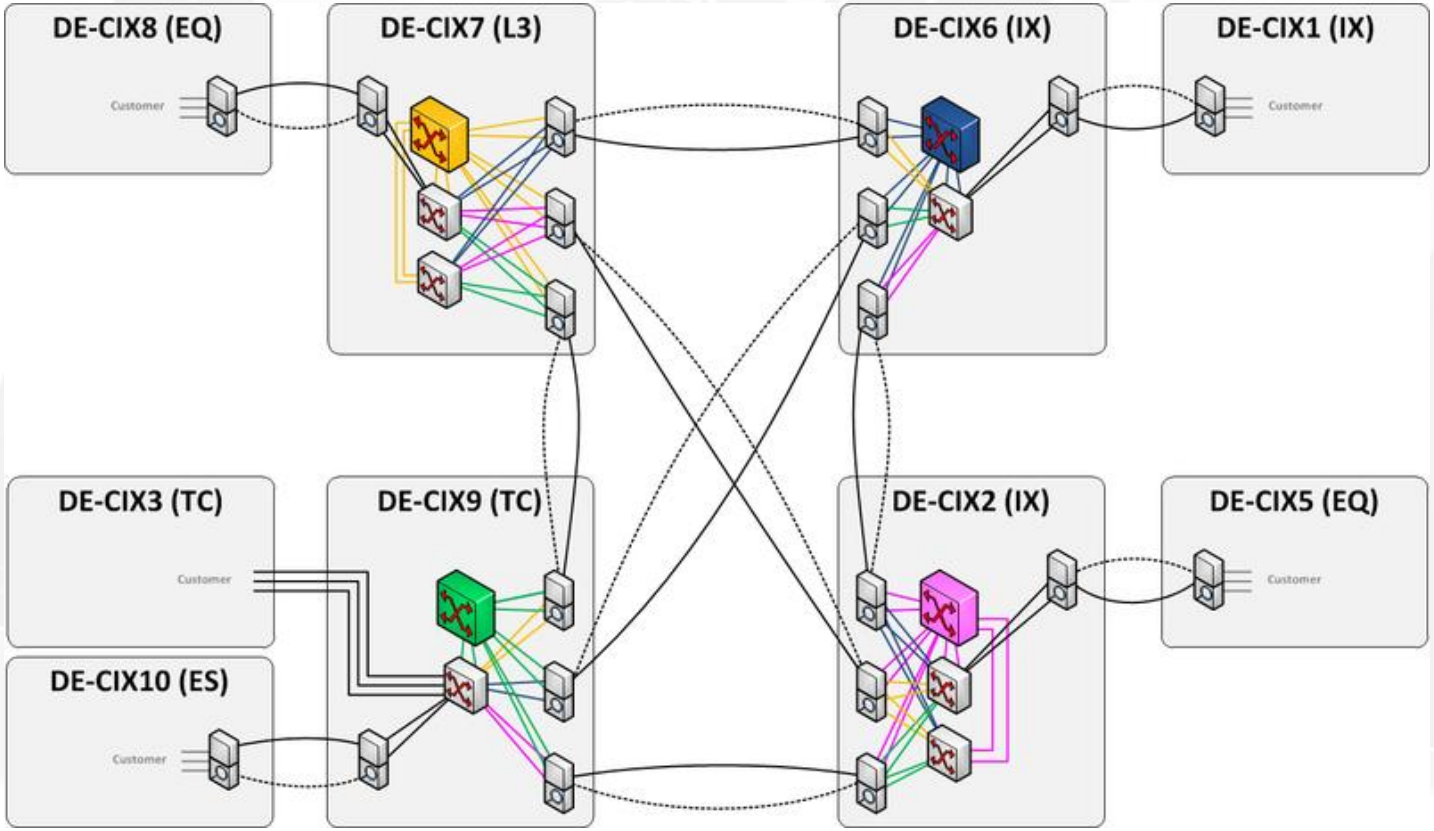
- Technology
  - Optical Layer
    - Adva FSP3000 DWDM
    - Up to 80 x 28GBit/s (=2TBit/s per fiber pair)
  - Switching Layer
    - Alcatel-Lucent („ALU“) 7950 XRS-20
    - Up to 80 x 100GE per chassis
    - 10 chassis in total incl. 4 x Apollon Supernodes (core) in 4 secure locations

ADVA Optical Networking

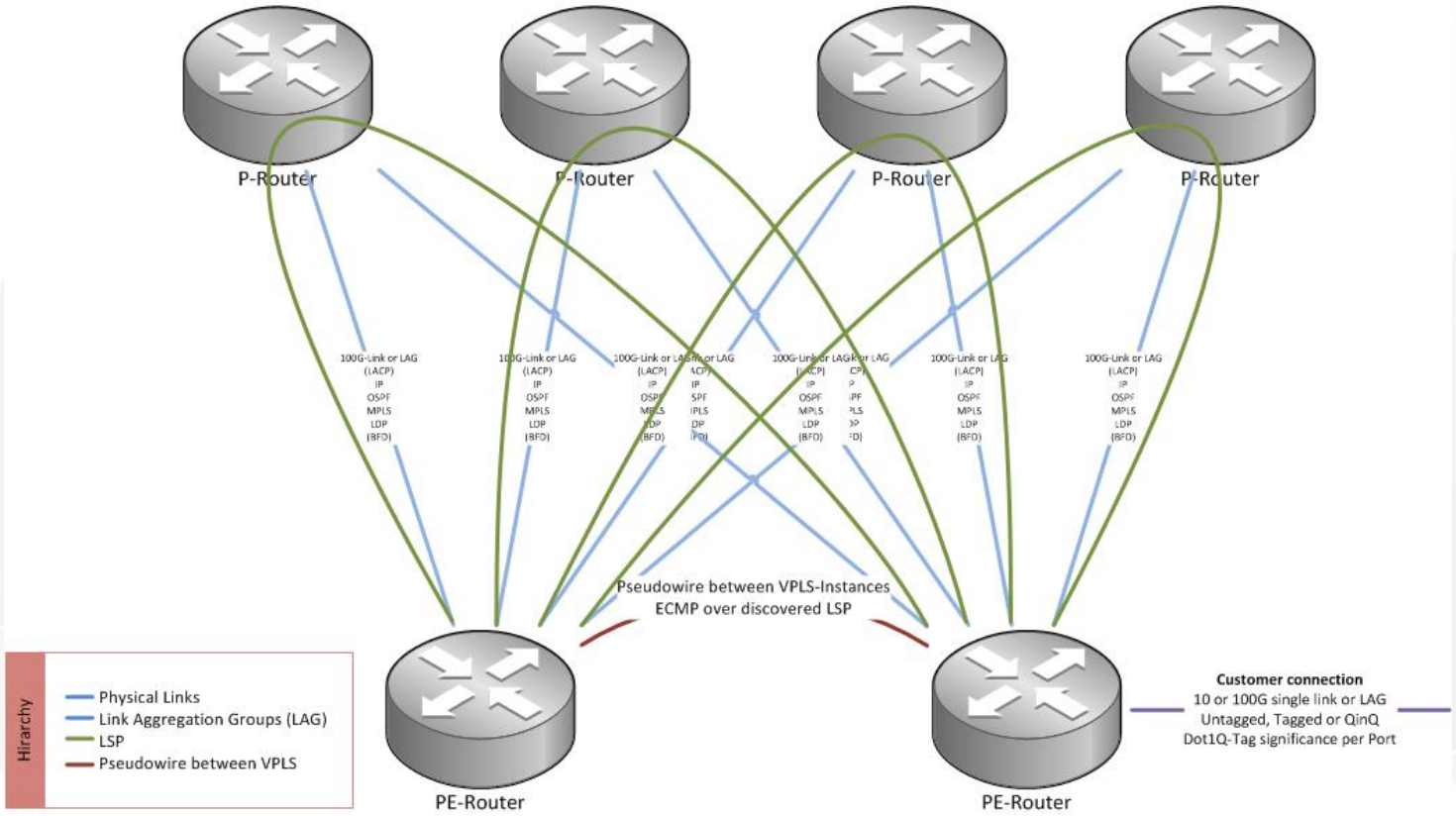
Alcatel·Lucent

- Alcatel-Lucent 7950 XRS-20
  - Pro
    - Ready for multi chassis
    - Best implementation of required features
    - Excellent hardware performance
    - Migration scenario possible
  - Con
    - Only DC chassis (needs external rectifiers)
    - No sflow (counter & samples; implementation necessary)

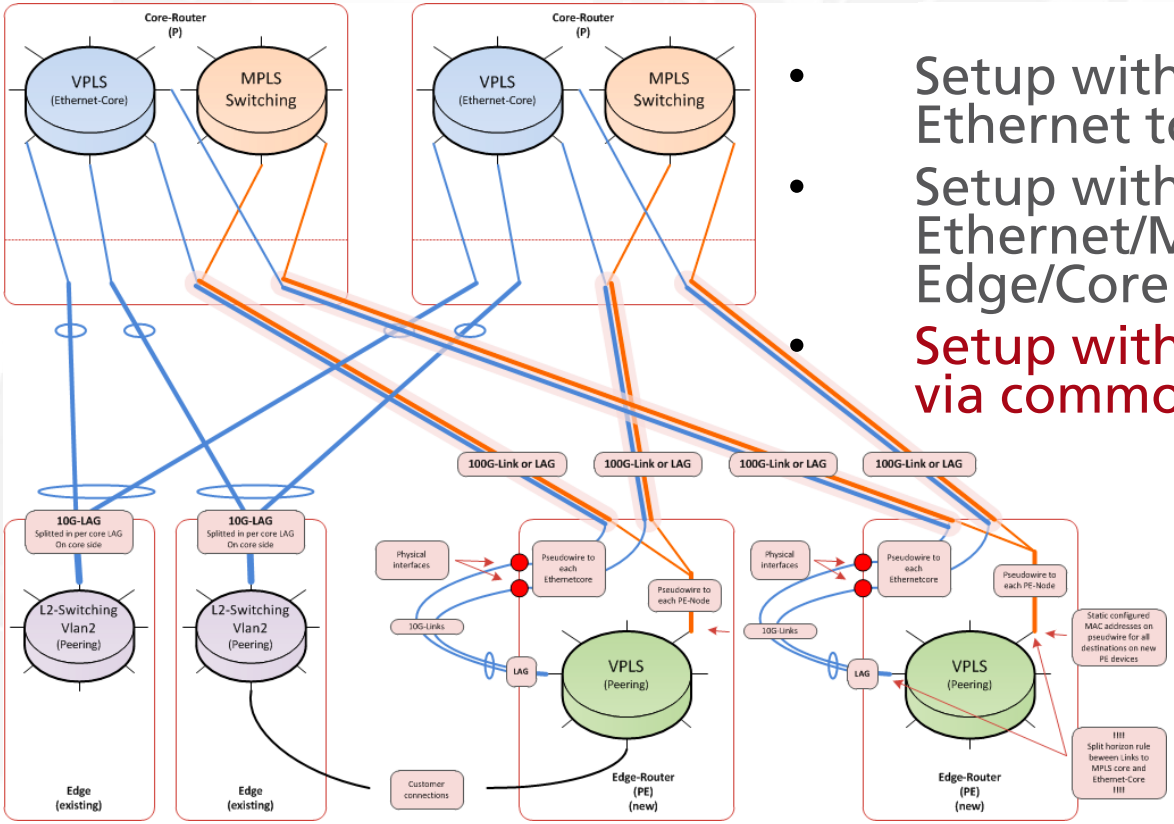
- New Topology (snapshot)



- VPLS / MPLS Design



- Migration Setup



- Setup with hard switch from Ethernet to MPLS
- Setup with both Ethernet/MPLS, but separated Edge/Core links
- Setup with both Ethernet/MPLS via common link

- Summary
  - DE-CIX Apollon will provide a larger spectrum of Ethernet based interconnection services incl. Internet Exchange and Layer 2 data link functionality.
  - DE-CIX Apollon will be available in Frankfurt first (RFS 01 July 2013) and on selected international markets soon.
  - DE-CIX is a one-stop shop for interconnection in an all Ethernet and all IP environment. All backed by industry leading SLAs.