SFINX update

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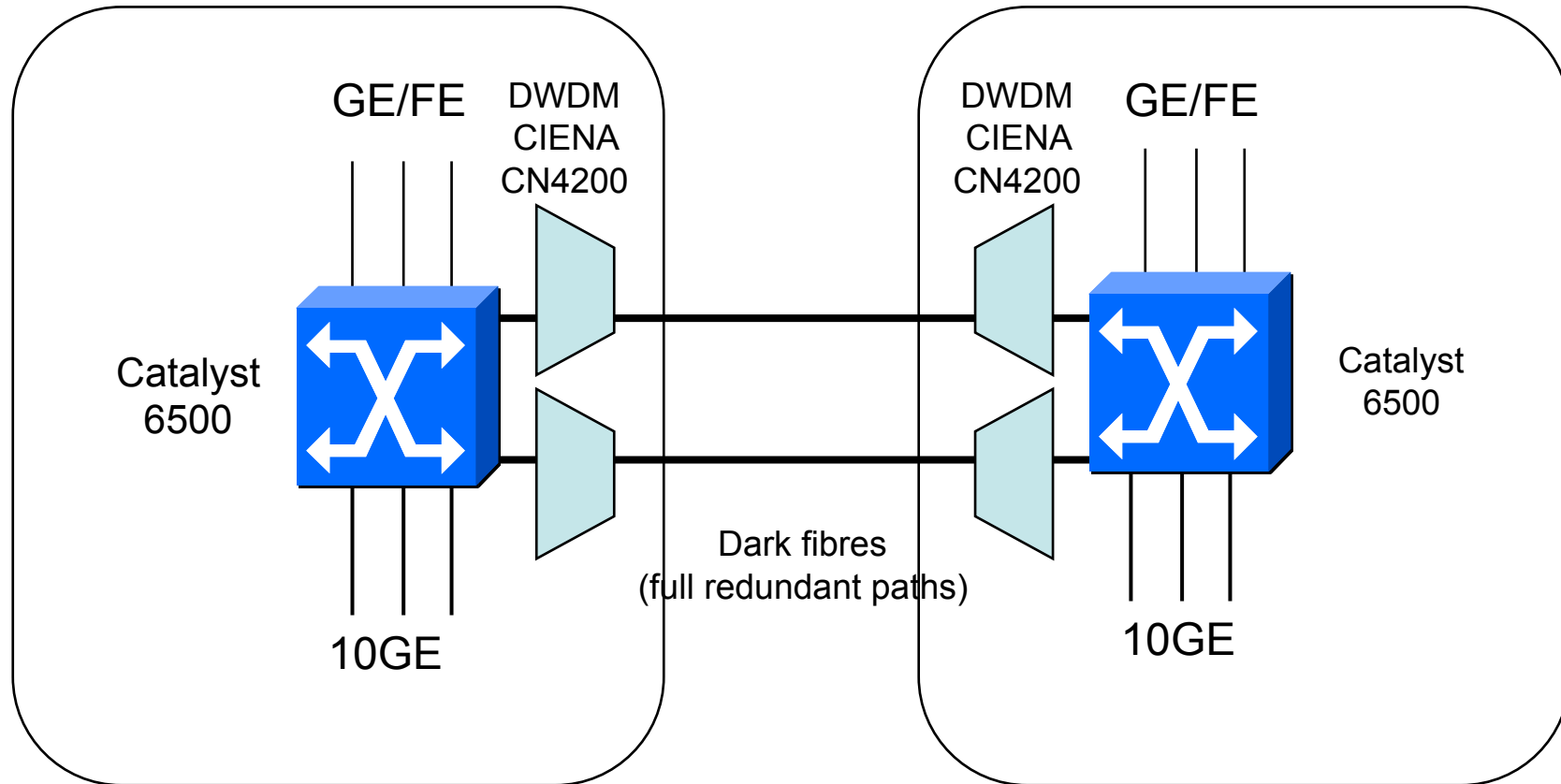
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SFINX

- GIX managed by RENATER (French Academic Network – Non Profit Organisation) since 1995
- No transit allowed on SFINX
- 2 PoPs in Paris : Interxion-1 & Telehouse-2
- About 90 ISPs connected to the SFINX
- Average traffic volume : between 12 and 15 Gbps of traffic for each SFINX PoP
- Allocated ports
  - 100 Mbit/s (free) : 40+ ports
  - 1 Gbit/s : 45+ ports
  - 10 Gbit/s : 15 ports

SFINX : current architecture

GE/FE   DWDM CIENA CN4200

DWDM CIENA CN4200   GE/FE

Catalyst 6500

Catalyst 6500

Dark fibres
(full redundant paths)

10GE

10GE

SFINX - services

- IPv4 and IPv6 (now in a same VLAN, but originally 1 VLAN for IPv4 and 1 VLAN for IPv6)
- IPv4 Multicast (and possibly IPv6 Multicast)
- DNS service :
  - secondary DNS for .fr : to be migrated to anycast service
  - local nodes for DNS root servers
    - F and M root in Telehouse-2
    - I root in Interxion-1
- Port aggregation (EtherChannel or 802.3ad)
- VLAN service (creation of private VLANs between ISPs within a same PoP)
- 24/7 NOC
- NTP service

- Security advisory (RENATER CERT)
- New dedicated portal (web interface) for ISPs : for the management of their contract, access to their stats, require for extra ports and services ...

SFINX - upgrades

- Within the next few months :
  - Replace the existing core switches (Catalyst 6500) by tera-switches to be able to provide much more 10GE ports capacity
  - Either keep Catalyst 6500 as edge switches or replace them by smaller switches dedicated for 10/100/1000M and GE ports
  - Option for adding a new PoP

=> Information to be sent in the SFINX mailing-list to have feedback about the proposed changes