



# SWITCH

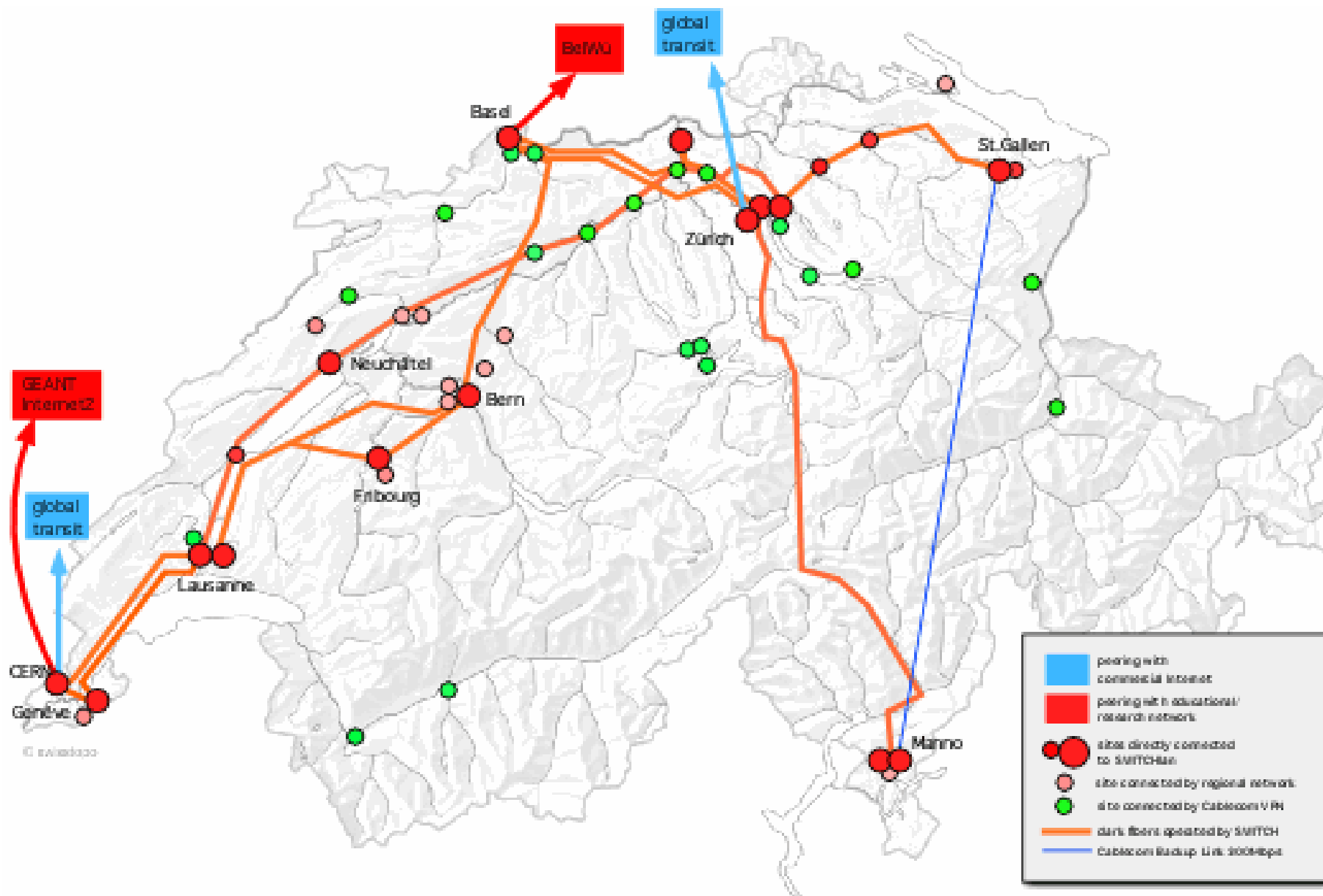
The Swiss Education & Research Network

## SWITCH IPv6 Experiences

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April 14, 2005



## Equipment

- Cisco 6500/7600, Sup2/Sup720 in backbone/data-centers
- Cisco 3750 in data-centers/head office

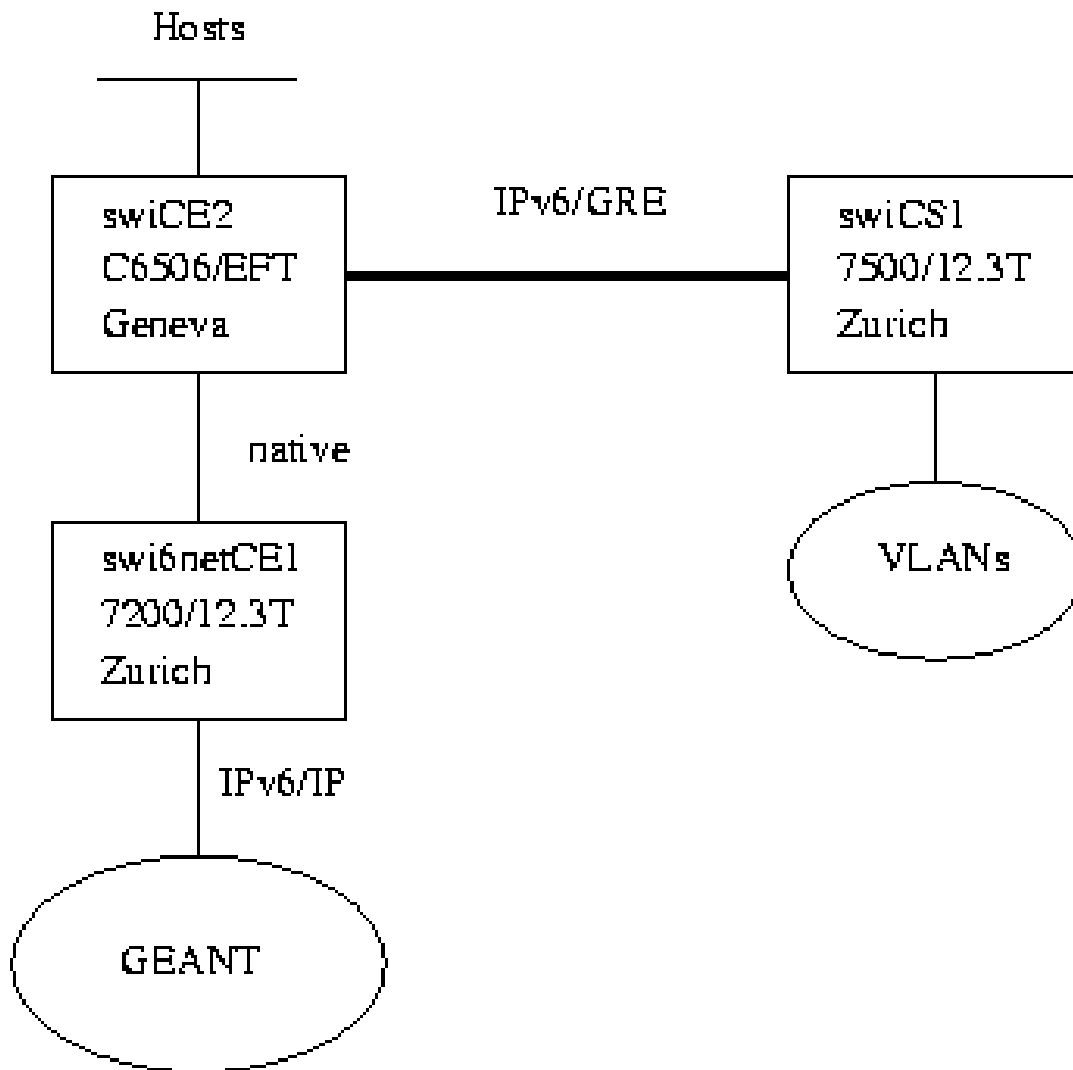
Dual-stack since May 2004.

- OSPFv2/v3, iBGP
- IPv6 software-switched on Sup2/MSFC2
- Sustained IPv6 traffic rate (mainly NNTP)  $\approx$  50Mb/s

## IPv6 upstreams

- TeliaSonera (Zurich, IPv6/GRE tunnel)
- GBLX (CERN, IPv6/IP tunnel)
- GEANT (CERN, native)

- Sup720/MSFC3 in core/border, rest Sup2/MSFC2.
- In general very stable.
- Many small glitches, often related to link-local multicast. Mostly impossible to debug.
- EFT "Rockies2" with interesting features
  - Multicast (SSM, embedded-RP, "SSM-mapping", HW switching)
  - QoS, can be used to count IPv6 traffic
  - Soon available as 12.2(18)SXE
  - No IPv6 mcast SAFI, will be in Rockies4 EFT (4/05)



- Very stable
- No multicast
- No ACLs on interfaces (EFT coming soon)