



[www.VIX.at](http://www.VIX.at)

**The Vienna Internet eXchange**  
and all we know about  
**Peering in Austria**

**CEE Peering Day 2013**

**Prague, 23. May 2013**

[Christian.Panigl@UniVie.ac.at](mailto:Christian.Panigl@UniVie.ac.at)

Inquiries: [<admin@vix.at>](mailto:admin@vix.at)

Ein Service der





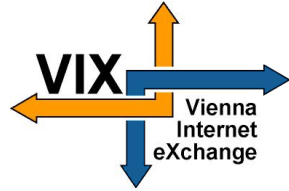
## IP Peering in Austria



- started with the birth of the **Vienna Internet eXchange**
  - in 1996: VIX1 was established @ **University of Vienna**

Ein Service der





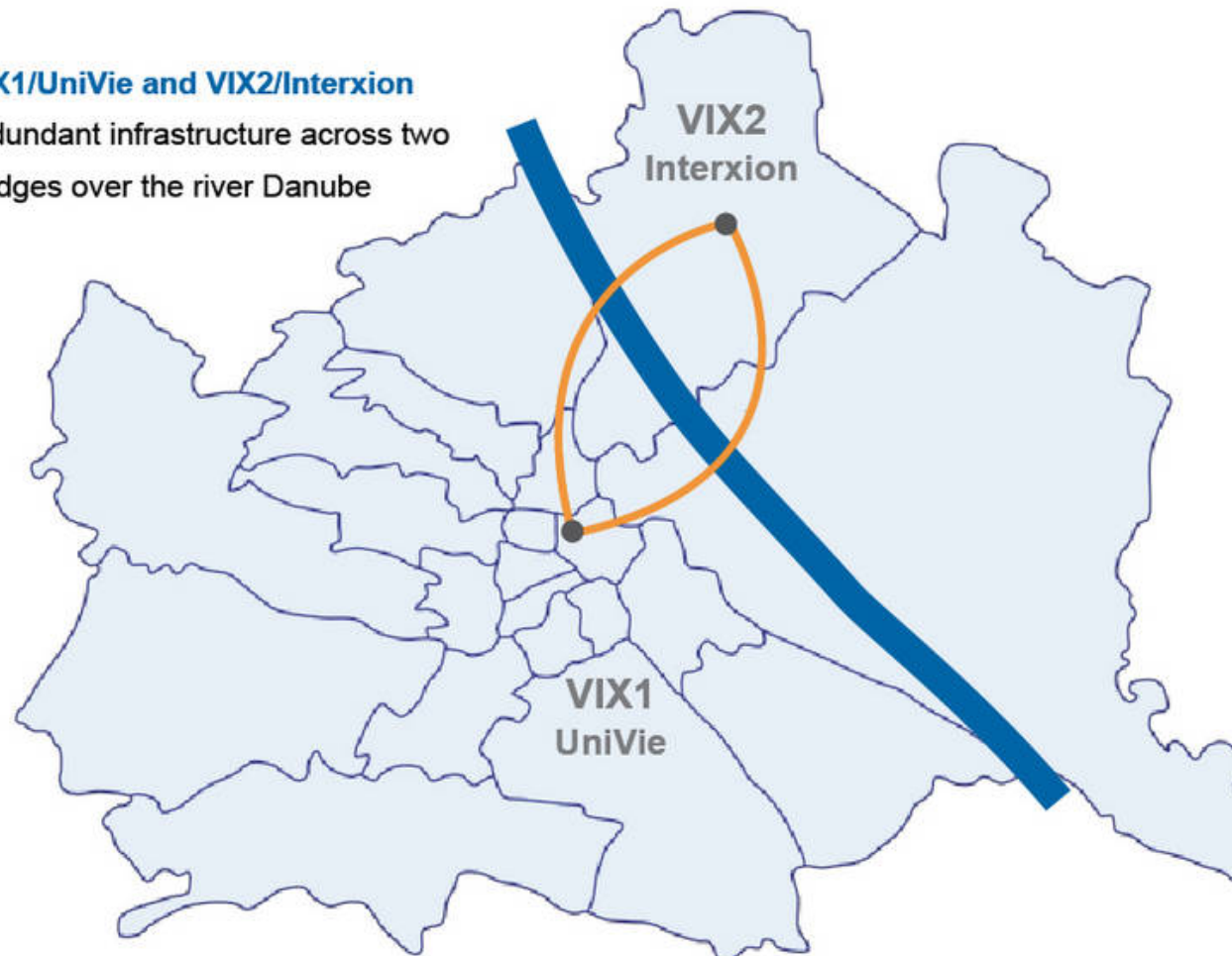
## VIX Early Days

- 5 founding members of VIX in 1996:
  - ACOnet
  - VIAnet
  - ~~IBM Global Network~~ now: ATTGlobal
  - EUnet.at
  - APA, Austria Press Agency
- 12 months later already 20 participants @ VIX
- another 48 months later: 70 participants
- 2001: second location, **VIX2 @ Interxion Austria**



## Dual-Site since 2001

**VIX1/UniVie and VIX2/Interxion**  
redundant infrastructure across two  
bridges over the river Danube



Ein Service der



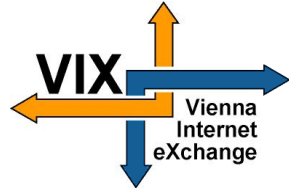
## The Days after 2001

- massive consolidations in the ISP market in Austria
- Telekom Austria (A1TA) was “integrating” many alternative ISPs (incl ATnet, eTel, EUNET, ...)
- Others have been taken over by
  - Tele2 (e.g. UTA/Netway) and
  - UPC (e.g. Inode)
- Today only 3 big “eyeball” providers in Austria:
  - A1 Telekom Austria
  - Tele2
  - UPC



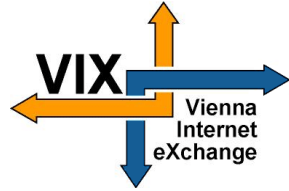
## Current Status VIX (May 2013)

- VIX switching infrastructure still operated by the Vienna University Computer Center / AConet - Team
- neutral, robust, resilient and non-profit peering environment for the academic and commercial Internet market in the CEE region
- **129 active participants** (AS numbers)
  - on **161 ports** (IPv6 on 115 of them)
  - 52 participant ports @10GbEth
- traffic summary peaks > 107 Gbps
- well accepted Route Server with convenient Admin Web-GUI
- availability since 1996 better than 99.99%
  - in every single year
    - until 2001 (single-site) better than 99.97%
    - since 2001 (dual-site) better than 99.98%



## Other public IP Peering Points in Austria

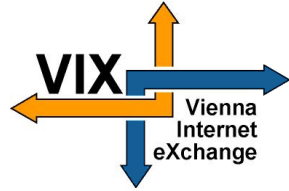
- **Alpes Adria Internet Exchange (Klagenfurt)**
  - <http://www.aaix.at/>
  - 1Gb port for free
  - 8 (12) participants
- **Grazer Internet eXchange**
  - <http://www.grax.at/>
  - 1Gb port for free
  - 12 participants
- + some (private) peering facilities at universities, ISPs and datacenters



## Peering Situation @ VIX (May 2013)

- ~ 50% (increasing) of VIX participants from outside Austria
  - Carriers, ISPs, CDNs, Content/Hosters, Cloud Provider ...
- ~ 70% of the participants have an Open Peering Policy
- focussed on CEE regional peering



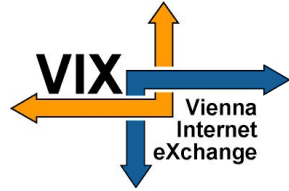


**Coming soon ... (June 2013)**

- **Core: 2 x Brocade MLXe-32**
- 100Gbit Ports
- VPLS
- Planned from Fall 2013:
  - Partner Program
  - Carrier/Reseller Ports
- Other services on demand

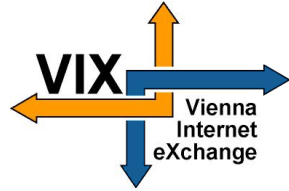
**BROCADE** 





## Coming later ... (~ Summer / Fall 2014)

- **New big carrier-neutral datacenter provider approaching Vienna !**
- 3<sup>rd</sup> VIX site in the south of Vienna
- Additional resilience and disaster tolerance options



Comments ?  
Questions ?  
Suggestions ?

M: [<admin@vix.at>](mailto:admin@vix.at)

T: +43 1 4277 14030

[www.VIX.at](http://www.VIX.at)

Ein Service der

