



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

## The Vienna Internet eXchange

operated by the Vienna University  
Computer Center / ACOnet

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

# Current Status

- Oct 2007: 91 participants (ASes) (+2 since May'07)
  - on 123 ports (+4)
  - 21 ASes doing IPv6 peerings (+2)
- Summary peaks @ 15 Gbps (+2)
- Since March 2006 we are running on:
  - a pair of Foundry BigIron RX-16
  - without any incidents
- 10Gig Customer Ports: 4 (+2)
- **CDN providers welcome** as regular participants

# Port Security, Remote L1

- strict port security in place
  - only 1 MAC address per port allowed !
  - we accept a maximum of 2 for HW transitions
  - shutdown port when >2 MAC addresses seen
- Remote Peering-Router Connections (Layer1)
  - On request and special agreement:
    - on Dark Fibre
    - on dedicated Lambda
    - WDM / Media Converter allowed
  - but still **no intermediate L2 equipment** allowed!

# Charging since April 2006

SetUp Fee	once per contract	€ 1000
Switch port	100Mbps	€ 200/month
	1Gbps from	€ 700/month
	10Gbps from	€ 2200/month
RackSpace	various packages from	€ 150/month/3RUs (+50/month/RU)

# Peering Traffic Matrix

- [http://www.vix.at/vix\\_peeringmatrix.html](http://www.vix.at/vix_peeringmatrix.html)
  - sFlow-based
  - automatically updated every 12hrs
  - reflects the **traffic relations**, but not necessarily all peering relations at VIX (sampling 1 / 8192)
  - IPv4 / IPv6 view available
  - opt-out possible

# Web & Portal

- login area for VIX participants
  - now production since June'07
  - [http://www.vix.at/vix\\_webportal.html](http://www.vix.at/vix_webportal.html)
- portal written in php, CMS is Typo3
- integrated Event Management
- Layer2 View (IP / MAC addresses)
- IXPwatch View
- Nagios View
- sFlow Peering Traffic View
- other features to come

# sFlow Peering Traffic View

- sFlow based Peering Statistics
  - sampling 1 / 8192
  - written to RRD files
- Every participant only sees own statistics
- perPort(IP) and perPeer(ASN) view
- IPv4 and IPv6 view
- Top5 view ...

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- sFlow collector module and experience:
  - Elisa Jasinska (AMS-IX)
- [www.VIX.at](http://www.VIX.at) - Matrix & Portal:
  - Christine Dworak (UniVie/VIX)
  - Wolfgang Hennerbichler (UniVie/VIX)



# Contact

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# Questions ?

