Euro-IX

SANOG 7
Mumbai India

by Serge Radovcic of Euro-IX
What is Euro-IX?

- Euro-IX = European Internet Exchange Association
- Formed in May 2001
- Established with three main objectives in mind:
  1. To act as a portal for organizations looking to join an IXP
  2. To educate the general community
  3. To provide a platform for IXPs to exchange information and come together to resolve common industry related issues
- As Euro-IX evolved the last of the three objectives seemed to take priority
- As of the 1st of January 2005 our membership agreed to invited IXPs from around the world to join Euro-IX
- Euro-IX is **NOT** an Internet Exchange Point!
Some current statistics (1)

- 36 Affiliated IXPs
- (33 European, 1 Asian and 2 American)
- 23 countries represented (on 3 continents :-)
- Total aggregated peak traffic of European member IXPs is just under 470Gpbs and rising (was 260Gbps January 2005: 80% increase in 1 year)
  - this equates to about 16.7Gbps per IXP
    (with one IXP now peaking at over 120Gbps)
- 19 European member IXPs are now offering 10GE port services
Some statistics (2)

• Total membership customer base is about 2,400 connectees with approx 1,400 unique ASNs
  – 3 ASNs are connected at more than 12 different IXPs

• Average of 250Mbps peak traffic per customer

• Average cost for a 1GE port in Europe is: 880 EUR / 47,000 Rs. / 1,150 USD per month (this is exclusive of housing and transit costs)
Make up of our membership

IXP Size (Traffic/Customers)  IXP Age (Establishment date)

- Small
- Medium
- Large
- V Large

- '00 - 02
- '97 - '99
- '94 - '96
- 1993

IXP Switching fabric

Other variants ....
- Financial models (79% Non for profit)
- Topologies
- Customer base

January 2006
Euro-IX offers its members (1)

• A network/community of 36 IXPs
• Biannual meetings (Euro-IX Forums)
  – More than 30 IXPs in one room discussing IXP specific topics (both technical and organisational)
• Web portal for ISPs looking for IXPs
  – All members have the ability to keep their IXP information up to date on the Euro-IX website
• Regulatory services
  – Part time regulatory officer who directs us to and explains relevant laws that may effect IXPs
Euro-IX offers its members (2)

• Conferencing services facilities
  – Euro-IX has a dedicated server which runs conferencing software that our members are free to use for IXP related discussions

• Benchmarking club
  – Newly introduced initiative to allow members to compare certain performance aspects of their IXPs

• Mailing lists

• A number of information repositories:
  – Member developed network monitoring tools
  – Maintenance diary
  – Euro-IX Switch DB
  – Euro-IX Staff eXchange DB
# IXP Switch DB
(currently 150 separate entries)

<table>
<thead>
<tr>
<th>IXP</th>
<th>Switch Name</th>
<th>Vendor</th>
<th>Model</th>
<th>Software</th>
<th>Further info</th>
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# Staff eXchange

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Our membership is willing to share its knowledge!

• Shown by:
  – Number of attendants and discussions that take place at our forums
  – Amount of member entries in Euro-IX information repositories and databases
  – Responsiveness to questions on the mailing lists

• Presentations on implementation experiences
  – What went wrong and what went right!!

• Willing to answer questions from IX community
Our membership fees

• Volunteers are great, but we can’t rely on them all the time.
• We do charge a membership fee
  – We have costs (Secretariat, Web designer, office, meetings, etc.)
  – When an IXP pays a fee it then pushes them into a level of commitment to get a return on their investments.
  – Makes it easier for engineers to ask there supervisors to have permission to go to forums as part of the fee goes into running the forums :-)
• Current European membership fee is 4.000 EUR per annum
• Current Non-European fee is 2.500 EUR per annum
  – No voting rights and reduced subsidies at forums
I can’t afford the fee?

• Don’t let that stop you

• We have policies in place to help out those IXPs.
  – We are a non for profit association and we are not profit motivated!
  – If you make the case, Euro-IX will review your application
  – Your time in making a case shows your willingness to put in effort and the value that you would bring to Euro-IX
  – However, if we believe you can afford the fee, we will ask you to pay it!
What we might be willing to do?

• As we are an association, major initiatives need to approved by board/membership
• However some possibilities might include.....
  – Sending training groups to other countries
  – Our network monitoring tools in other languages
  – Documentation switch configurations in other languages
  – In certain situations funding to allow other IXPs to come to Euro-IX Forums (at least meeting admission, hotel and meals)
• If any of above is of interest to you, then please approach me
• We are always willing to at least consider proposals!
www.euro-ix.net