Benchmarking

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What do we do?

- Two for a per year
- IXPDB and tools
- Support Programmes
- Benchmarking Club (BMC)
Association of IXP

82 affiliated IXPs;

• 56 IXP in the Euro-IX region, 49 countries, operating over 100 peering LANs

• 26 IXPs from the rest of the world
What is Benchmarking?

At it’s simplest; improving ourselves by learning from others.
What is Benchmarking?

• Benchmarking is the exchange of data about your business to enable you to compare performance.

• Ask yourself,
  • Why are others better?
  • How are they better?
  • What can we learn?
  • How can we become better?
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Why?

• It was identified very early on that Euro-IX should have a Benchmarking Club (BMC).
• IXPs all thought they have unique problems and circumstances, and so..
• Seemed to be very inward looking.
• Benchmarking helps you look up and outwards..
• Benchmarking needs and ‘honest broker’
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**The proposal**

- Optional for the membership
- Operated by Euro-IX secretariat, under supervision of small steering committee
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**Club Rules**

- Data contributed by members remains their property and stored in a confidential manner.
- Data contributed members will only be reported back to others in an anonymised and aggregated form.
- Data will be requested and contributed in specific categories.
- Steering committee decide on format data is requested, represented and presented.
- There is no charge for the service.
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**Categories**

- Prices
- Member/customer satisfaction
- Financial performance & margins
- Service delivery times
- Traffic metrics
- Financial polices
- Staff wages, bonus and other benefits
- Services
- Staffing
- Membership/customer base & growth
- How equipment maintenance is handled
- Network up-time
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How’s it work?

• BMC survey is opened in November, we keep it open till around February
• Needs a lot of pushing from the secretariat
• Started Round 1 in 2004 – with 18 member participants
• Introduced new rule in 2013 – must complete >50% to view report
• Now able to show / compare data gathered 5 / 10 years ago
• Round 11 (last year) we had a record 44 participants, over 50% of the membership!
What kind of organisation manages your IXP?

- Membership based IXP: 45%
- IXP in academic institution/academic service: 20%
- CommerciaIly owned IXP: 12%
- Government: 7%
- Other types of not for profit: 7%
- Other: 5%
- Operated by commercial data centre org: 2%
- Joint ventures: 2%

* The non-profit association is the sole owner of the commercial company and handles the IXP on a daily basis.
* Ltd, owned by a non-profit association
* Internet Service Provider Association (ISPA).
* G.I.E - Groupement d'Internet Economique
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Organisation of NOC

63% of IXPs have their NOC in-house
23% of IXPs outsource their NOC
For 14%, the NOC is partly outsourced, partly in-house (the pie chart shows the breakdown of within the partly-outsourced/ in-house NOC)
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SNMP based tools used at IXPs

- MRTG: 56%
- Custom-built: 36%
- IXP Manager: 23%
- Ilonga: 18%
- Observium: 18%
- Zabbix: 8%
- OTRS: 8%
- BaseN: 8%
- PMACC1: 8%
- Other (please specify): 8%
- Munin: 5%
- PHP4Nagios: 5%
- SaaS Platform: 0%

*Custom build
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Who connects to an IXP

- Other IXPs: 30%  
- Access Providers: 97%  
- Academic Networks: 92%  
- Dedicated hosting providers: 84%  
- Content providers: 95%  
- Mobile Operators: 92%  
- CDNs: 88%  
- Search engines: 54%  
- Governmental: 88%  
- Enterprise: 51%  
- eCommerce companies: 46%  
- Dedicated VoIP providers: 46%  
- Gaming companies: 35%  
- Adult' hosting company: 16%  
- Gambling companies: 5%  
- Other: 14%  

Special mentions:
- DNS
- Emailing companies, media
- Localisation co.
Thank You!

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