Euro-IX Data Export Schema

Nick Hilliard <nick@inex.ie>
Elisa Jasinska <elisa@bigwaveit.org>
Rationale - IXP View

• Many IXPs export participant data
• Most IXPs exported the same sort of data
• Every IXP had their own different schema
• Most of these formats are based on CSV
• CSV sucks
Rationale - Participant View

- Everyone has different formats
- CSV sucks
- Some IXPs don’t export structured data
- Screen scraping necessary sometimes
- Cost efficiency requires increased automation
JSON Export Schema

• Basic IXP information, contact lists, etc
• VLANs
• Switches
• Addressing information
• Member info: contact details, ports, addressing
JSON Export Schema

- Released v0.3 at RIPE69 in London
- Presented at RIPE69 Connect Working Group
- Deployed at 8 IXPs after 1 week
- Three separate code implementations
Feedback

• “We need to publish the addresses of our RS’s”
• “Can we put MAC addresses in there?”
• “How do we handle multiple IXP infrastructures?”
• “More contact details”
• Stats?
JSON Schema v0.4

- Support added for multiple IXPs
- Adds member_list.member_type atom:
  - ["peering","ixp","routeserver","probono","other"]
- mac_addresses list added to vlan_list
- Added emergency contact details, stats_api
- Some data structure reorganisation
- Released on github in February 2015
Grand Vision

• https://euro-ix.net/tools/asn_search
• https://euro-ix.net/tools/peering_matrix
• 8312 ASNs presented at Euro-IX IXPs, 4285 unique
• 2.2m potential peering sessions
• 20 minutes per peering session: 350 FTE years
• Figures exclude route servers, selective peering, interconnection politics, etc
Effort Categorisation

Useful

Waste of Time
End User Viewpoint

- Easily available peering automation
- Looking at code libraries
- For example: python, php, perl
IXP Viewpoint

- Integration with PeeringDB 2.0
  - PeeringDB 2.0 is due any day now, lol
- Solves ixp->euro-ix data export issue
Thanks!

… but any questions?

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