EIX Activity Update 2011–05 and Switch Wishlist

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2011-05 - one slide

- "Safeguarding the future of Internet Exchange Points"
- Special /16 from final /8
- We discussed this at RIPE62, now please support the policy (addresspolicy-wg)
- Policy has good support already

Switch wishlist

Existing EIX document.

Thanks to Mike Hughes, the original shepherd

Certified to be the second most beautiful event from 2005.....



Beautiful because...

- Provides guidance to new IXPs on features they need from their switch
- Provides guidance to switch vendors about IXP requirements
- Provides hints to operators

Existing themes

- Security and Management Features
- Scalability and Resilience
- Environmental Monitoring
- Physical Wishes

Aim of this project:

- Update the document
 - Removed any "solved problems"
 - Increase detail in "remaining problems"
 - Add and document features we use today
 - Add and document roadmap/future features
- Looking for volunteers
 - Will discuss my thoughts, please consider whether you are an expert and offer help authoring

Missing Features Used Today

- Optical Port features
 - Detail on new WDM optics
 - Third Party Optics for funny edge cases
 - Would like to define what happens in the wild
- Port Density
 - How dense? Backplane speeds
 - Over subscription features ?

Missing Features Used Today

- DOM / Ethernet OAM
 - Road map and current use
- Port Security
 - Update current mac learning / drop BPDU based comments
 - DHCP Guard / RA Guard
 - Port Security per vlan
 - Exceed rules document all in use, missing modes

Link Aggregation

- Document algorithms used today
- Document desired options
- Different behavior for ISL / peer ports?
- Monitoring features desired, troubleshooting

Sflow

 Current document says "S-Flow Export Support" – is this enough detail?

VPLS

- Is not mentioned in the current document
- How do you do it ?
- Port security in multi-mac mode?

Roadmaps

- SPB / TRILL roadmap what would we like to see as exchange operators?
- Other loop-allowed protocols or operations modes.

Review Multicast Section

- PIM Snooping
- Use cases…

API

- Programmatic management
- Automation
- Customer self-service
 - E.g. port security reset
 - Data examination

Things I may have missed

- Everything else in the world
- Everything
- Ever

Things nothing to do with

- Do we need a similar document for DWDM/optical path stuff?
- Maybe Exchanges are buying them?
- Maybe not Our needs are not so different?

