Guidelines for creation, selection, and registration of an Autonomous System (AS)

Basics

- Internet-Draft

  draft-ietf-bgp-autosys-guide-01.txt
- Based on earlier RIPE document
- John Hawkinson, Panix co-author
- Not a tutorial, no detail
- Advisory document on when to register and utilize an AS
- Attempts to clarify the misnomers of an AS
- Aimed at NSPs and operators, expected familiarity of routing and configuration

Main points

- ❍ Confusion in the term AS
  - ❍ Not just an administrative label
  - ❍ Not something to have “for the sake of having it”
  - ❍ Not a “tag” for a routing process in a router
- ❍ Basic criteria
  - ❍ Exchange of external routing information but...(more details in a moment)
  - ❍ Many prefixes, one AS (providing consistent routing policy)
  - ❍ Consistent routing policy

External routing cases

- Over simplified....
- Single-homed site
  - Doesn’t need AS - has the same policy as provider
- Multi-homed site
  - AS needed to discern policy

- Topology
- Transition purposes
- Update on history

Other things

- Addresses loosely
  - IGP issues
  - AS space exhaustion

- End purpose of document

1) Try to reduce the proliferation of ASes

2) Provide documentation on how to set up ASes (not mandating)

3) Possibly help increase CIDR proliferation/ deployment in the process