RPSLng status update

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Overview

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RPSLng overview

- RPSLng updates the Routing Policy Specification Language (RPSL) to support IPv6 and Multicast
- Updates RFC's 2622 and 2725
- Maintains backward compatibility with RPSL
- Goal: limit number of new classes and attributes
- Mailing list at: rpslng@ripe.net
  - Archives at www.ripe.net/ripe/mail-archives/rpslng

Summary of Changes

* One new class created – "route6"
  * Analogous to the "route" class, but for IPv6 prefixes
* Changes to existing aut-num: class
  * New "mp-import", "mp-export", and "mp-default" attributes
  * Adds "afi" keyword to specify address families
* Existing "route-set", "filter-set", "peering-set", "rtr-set" classes also get new "mp-" attributes for multi-protocol set membership expressions
* New "interface" and "mp-peer" attributes are added to the "inet-rtr" class

Examples

```
route6: 2001:620::/32
descr:   SWITCH, The Swiss Education & Research Network
origin: AS559

....
```

```
autnum:     AS559
as-name:    SWITCH
mp-import: afi ipv6.unicast from AS4589 accept AS-EASYNET
mp-import: afi ipv6 from AS6680 accept ANY
mp-import: afi ipv4.multicast from AS20932 accept AS-IP-MAN
....
mp-export: afi ipv6.unicast to AS4589 announce AS-SWITCH
mp-export: afi ipv6 to AS6680 announce AS-SWITCH
mp-export: afi ipv4.multicast to AS20932 announce AS-SWITCH
....
```

Standard Status

* The Internet Draft was brought before IETF Operations and Management WG chairs
    * Did not want to try to reconstitute the the RPS WG
    * WG chairs agreed to shepherd Draft through IESG to be published as a proposed standard
* Internet Draft has received IESG approval
    * draft-blunk-rpslng-08.txt
    * HTML version at http://www.radb.net/rpslng.html
* Awaiting RFC Editor comments/approval

Implementations

* Merit and RIPE NCC have both implemented RPSLng support in their whois server software
* Merit IRRd source available at www.irrd.net
* RIPE NCC has also updated IRRToolSet with RPSLng support
    * Also recently incorporated a number of fixes and updates including support for gcc 3.x
    * Will be turning code maintenance over to ISC

Deployment status

* As of today, Merit now supports RPSLng in the RADB routing registry
  * Also have deployed native IPv6 transport support for whois queries – use v6.radb.net
* RIPE planning on production deployment sometime in November
  * Test server available at rpslng.ripe.net port 53001
* Not currently aware of the deployment plans of other registries

IRR Coordination

* Merit has created an email list to foster better coordination between routing registry operators
* The irrc@merit.edu list is an open forum where both registry users and operators can participate
  * Archives will be at www.merit.edu/mail.archives/irrc
* Will address RPSLng deployment and other issues
  * mirroring/replication issues
  * Authority and authentication
  * New standardization efforts