AMS-IX experience with RPKI prefix validation

Optional on AMS-IX Route Servers

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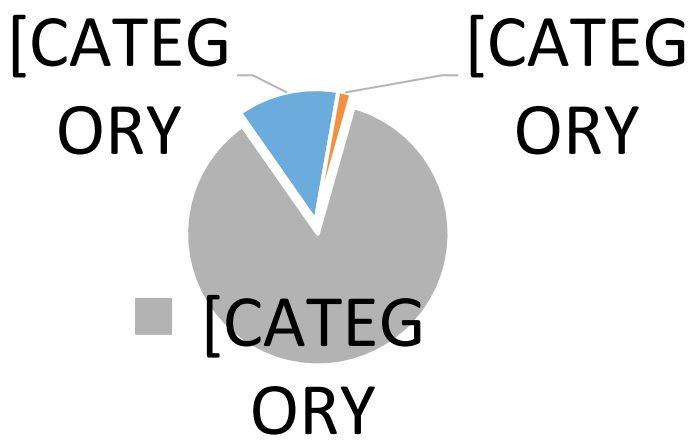
Use of RPKI at AMS-IX

- Provide means to distinguish acceptance of prefixes based on origin validation
  - Prefixes advertised to route server are tagged with community depending on validation
    - Auth: VALID, INVALID or UNKNOWN
- Route server peer can, based on community, decide on acceptance of the prefix
  - Have the route server drop on advertisement
  - Accept but process internally

Operational Experience

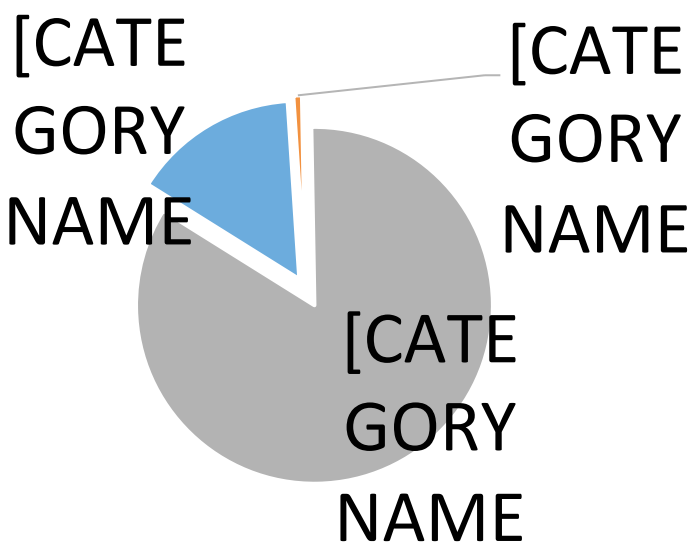
Active peers: 101

IPv4



Active peers: 69

IPv6



On the default route servers

- 650 IPv4
- 560 Ipv6

For 101 IPv4 peers:

- 53 peers prefer to receive all prefixes, but tagged according to ROA status and/or IRR route object existence
- 13 peers prefer to not receive prefixes marked as ROA invalid and/or not registered as an IRR route object
- 0 peers prefer to not receive prefixes marked as ROA invalid
- Similar for IPv6

Why that many RPKI invalids?

- **More specifics without ROA** **55%**
- **Assignment to downstream** **35%**
- **Company acquisitions / mergers** **5%**
- **IGP leakage** **5%**
- **Hijack** **0%**

Trust Anchors

Enabled	Trust anchor	Processed Items	Expires in	Last updated	Next update in	Update all
☑	APNIC from AFRINIC RPKI Root	12 0 0	3 years and 7 months	41 seconds ago	9 minutes	Update
☑	APNIC from ARIN RPKI Root	117 0 0	4 years and 11 months	9 minutes ago	27 seconds	Update

Validated ROAs from **APNIC from AFRINIC RPKI Root, APNIC from ARIN RPKI Root, APNIC from IANA RPKI Root, APNIC from LACNIC RPKI Root, APNIC from RIPE RPKI Root, ARIN RPKI Root, AfriNIC RPKI Root, LACNIC RPKI Root, RIPE NCC RPKI Root.**

Questions ?