

Signaling Prefix Origin Validation Results from an RPKI Origin Validating BGP Speaker to BGP Peers

**draft-ietf-sidrops-validating-bgp-speaker
IETF 104, March 26 2019, Prague**

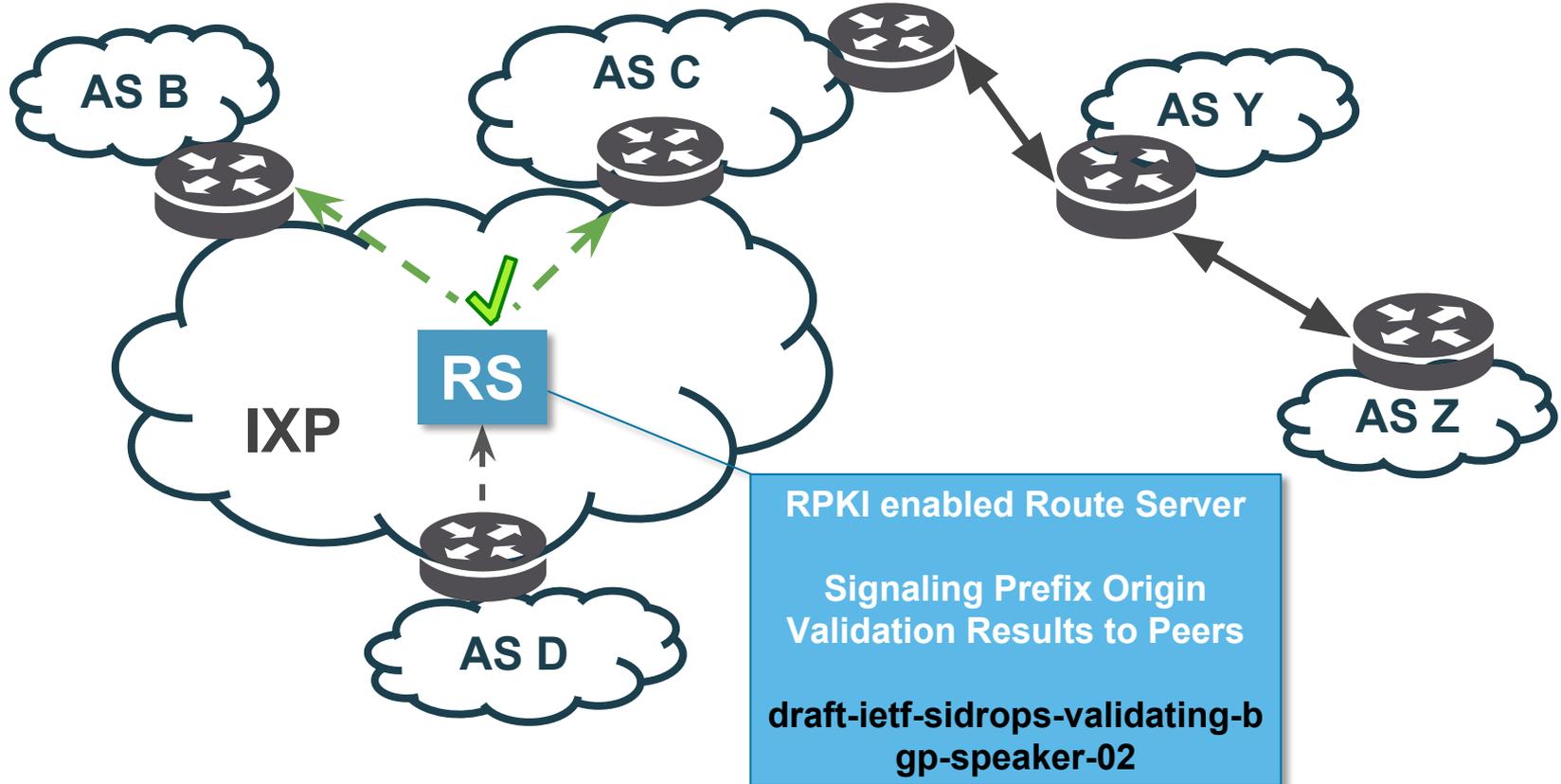
Main idea

- In the domain of an IXP network, forward ROA validation results from a route server to its peers

Why?

- Lightweight method for peers to make use of RPKI for
 - using the validation results of the IXPs route server
 - monitoring, maintenance, troubleshooting
 - educational and research purposes

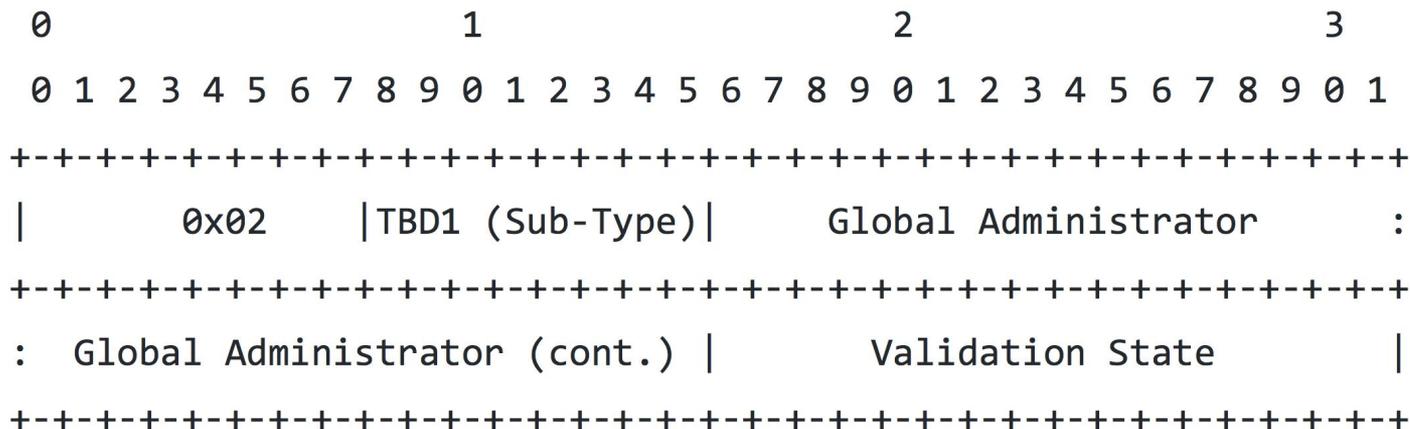
Signaling at an IXP



Current Implementation

Introduce a transitive four-octet AS Specific Extended Community, which signals:

1. ROA validity status of a prefix (Local Administrator field)
2. Signaling ASN (Global Administrator field)

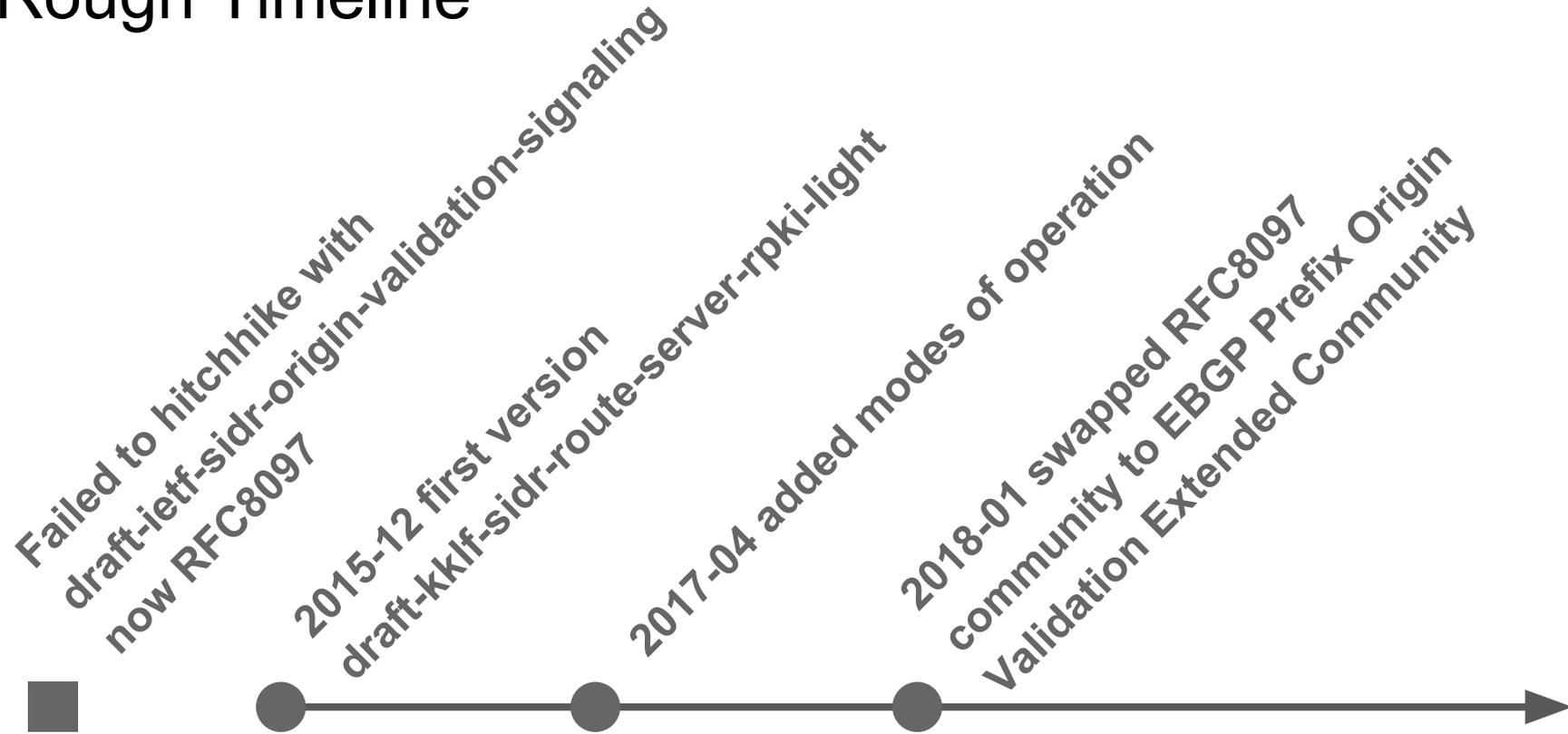


Modes of operation

Allow for 3 modes of operation for validating BGP speaker:

1. **Tag prefixes** with their ROA validity status, and advertise them.
2. **Drop prefixes with ROA status "Invalid"**
Tag the remaining "Unknown" and "Valid" routes, and advertise them.
3. **Drop prefixes with ROA status "Invalid" and "Unknown"**
Tag the remaining "Valid" routes, and advertise them.

Rough Timeline



...Meanwhile

- Discussions on the mailing list, suggestions have been included
- RPKI adoption continues, e.g. dropping RPKI invalids at IXP route servers
- Demand for tagging of RPKI validation states with BGP communities persist

Continuing...

- With people asking for this draft,
we would like to finalize/finish the draft
- Any **input / idea / discussion** is welcome