

BGPsec Validation State Signaling

draft-borchert-sidrops-bgpsec-validation-signaling-00

IETF 104 Prague

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Proposal

- We propose to define a new opaque extended BGP community to carry the BGPsec path validation state within an autonomous system (AS).

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Validation State via Extended Community

- By signaling the BGPsec validation state of updates to iBGP peers, it may be possible for iBGP peers to reduce path validation workload.
- BGPsec routers could prioritize path validation resources for updates received over eBGP and those received over iBGP that have not yet been validated.
- Re-validating iBGP routes that have already been validated by other iBGP speakers in the AS could be given the lowest priority, or deferred completely.

RFC 8205: “defer validation”

- Section 5 of [RFC8205] (BGPsec Protocol Specification):

*“... a BGPsec speaker **MAY** temporarily **defer validation** of incoming BGPsec UPDATE messages. The treatment of such BGPsec UPDATE messages, whose validation has been deferred, is a matter of local policy”.*
- Note, as a result a BGPsec router may select and propagate in iBGP a route that has not been validated.

RFC 8205

“status of deferred messages is visible”

- Section 5 of [RFC8205] (BGPsec Protocol Specification):

“...However, an implementation SHOULD ensure that deferment of validation and status of deferred messages is visible to the operator.”

- Omitting the extended community string does not specifically indicate that no validation was performed.
 - Note, the reason **why** no validation was performed **is not relevant**, just the fact that **no validation** was **performed!**
- The validation state “**Unverified**” proposed at IETF 103 allows to indicate to the operator that no validation was performed.

See: draft-borchert-sidrops-bgpsec-validation-unverified-00

Questions

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