

YANG Data Model for BGP about RPKI

draft-liu-idr-bgp-rpki-yang-00

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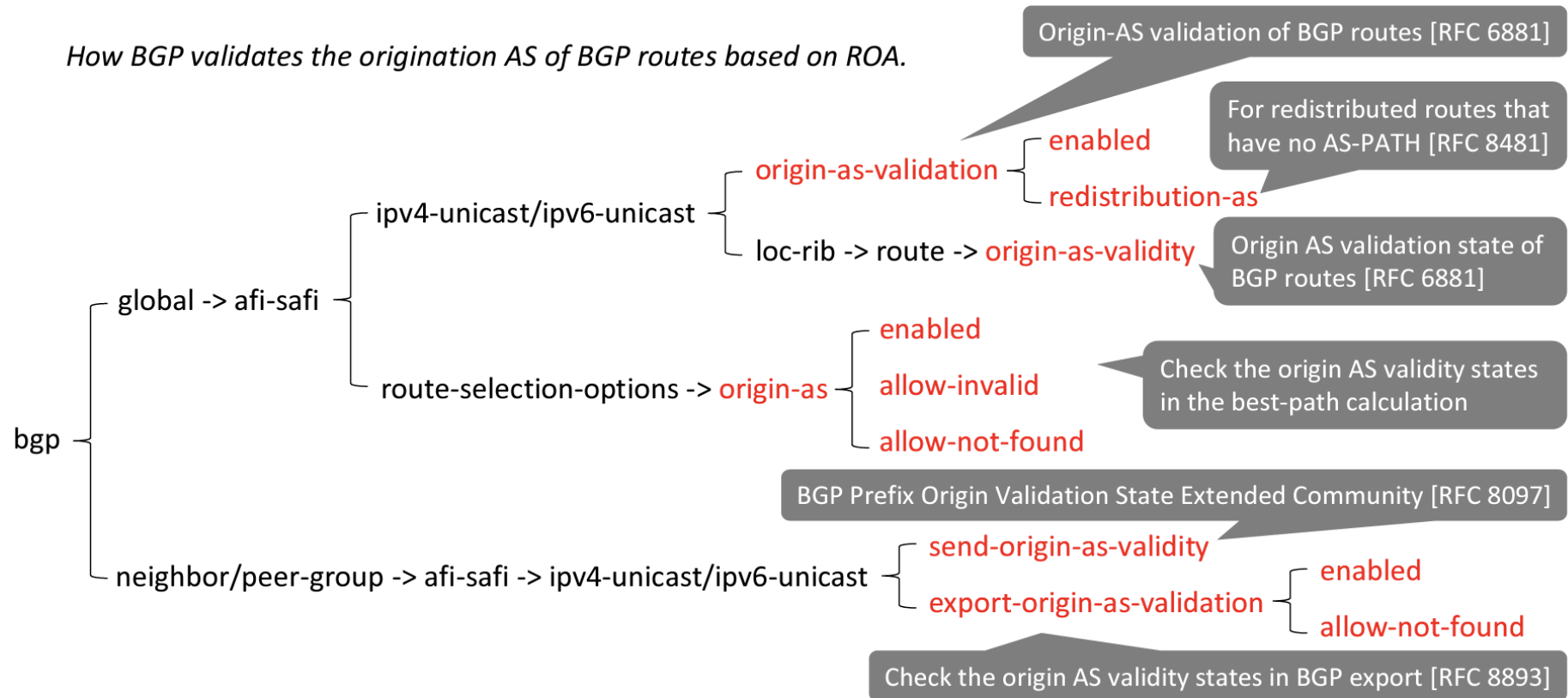
IETF 121, November 2024

Overview

- This document defines YANG data model for BGP about RPKI ([RFC 4210], [RFC6810], [RFC8210])
 - Three YANG Models have been defined:
 - ietf-bgp-origin-as-validation.yang: How BGP validates the origination AS of BGP routes based on ROA.
 - ietf-bgp-sec.yang: How BGP validates the BGPsec_PATH attribute of BGP routes .
 - ietf-bgp-asp.yang: How BGP validates the AS_PATH of BGP routes based on ASPA.
 - Draft split:
 - 'ietf-bgp-origin-as-validation.yang', 'ietf-bgp-sec.yang' and 'ietf-bgp-asp.yang' were carved out of draft-liu-sidrops-rtr-yang-06 to the “draft-liu-idr-bgp-rpki-yang”.

ietf-bgp-origin-as-validation.yang (Previous version)

How BGP validates the origination AS of BGP routes based on ROA.



Changes

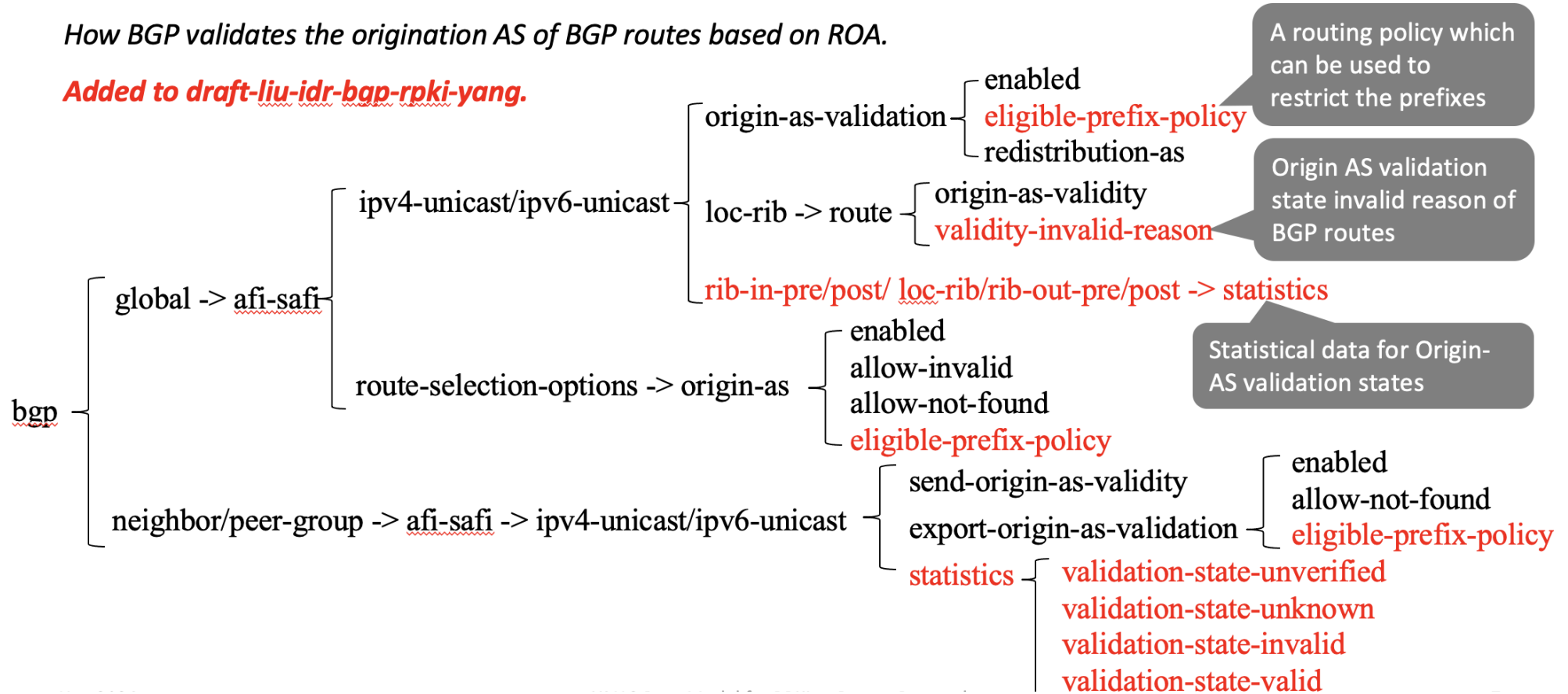
Leaves added :

- **“eligible-prefix-policy”** : To be used to restrict the prefixes for which Origin AS validation is enabled.
- **“statistics”** : To be used for statistical information for routes with validation-state valid | invalid | unknown | unverified
- **“route-validity-invalid-reason”** : To be used to determine the reason behind marking a route with validation-state invalid.

ietf-bgp-origin-as-validation.yang - Updates

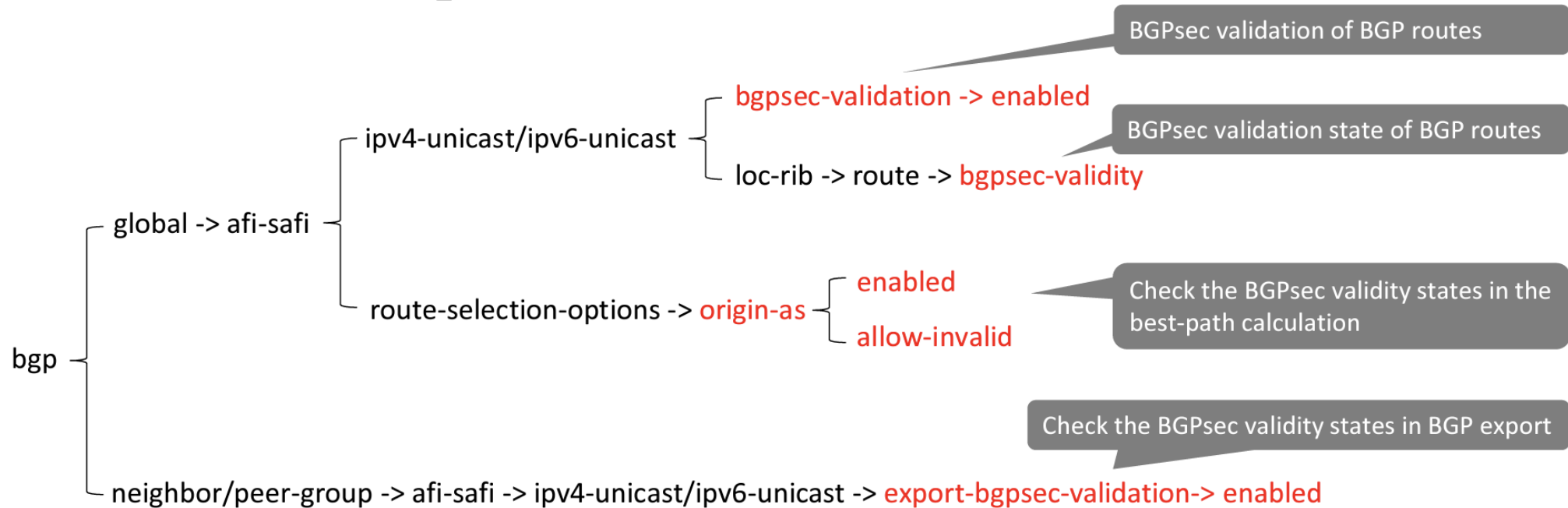
How BGP validates the origination AS of BGP routes based on ROA.

Added to draft-liu-idr-bgp-rpki.yang.



ietf-bgp-sec.yang (Previous version)

How BGP validates the BGPsec_PATH attribute [RFC 8205].



Changes

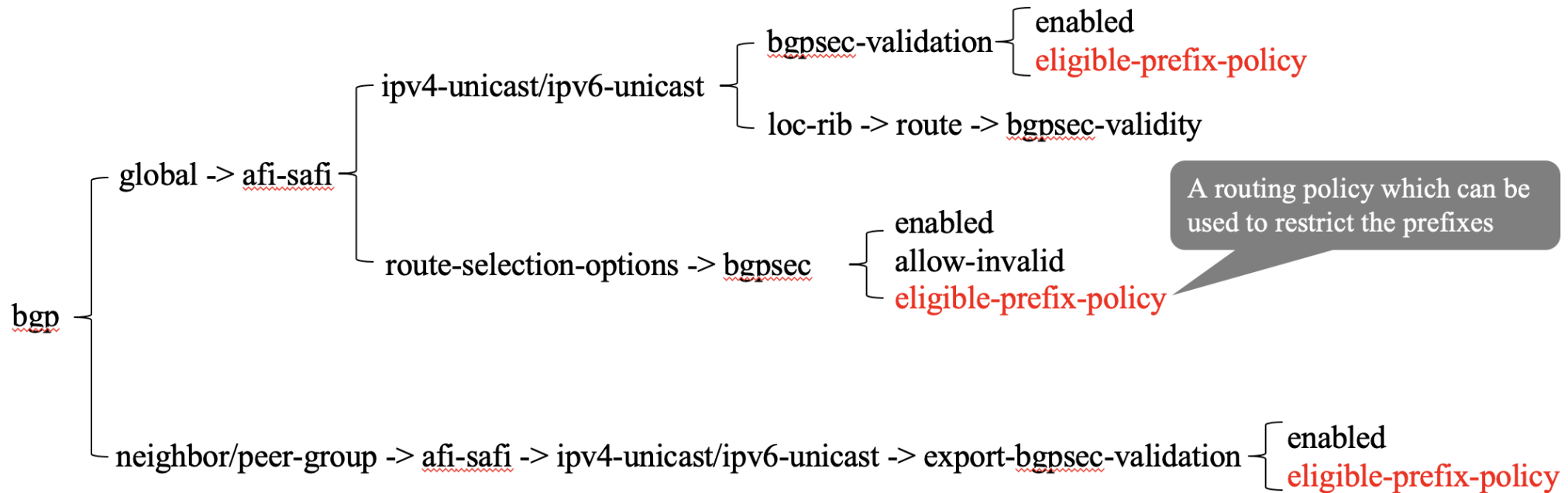
Leaves added :

- **“eligible-prefix-policy”** : To be used to restrict the prefixes for which BGP Sec validation is enabled.

ietf-bgp-sec.yang - Updates

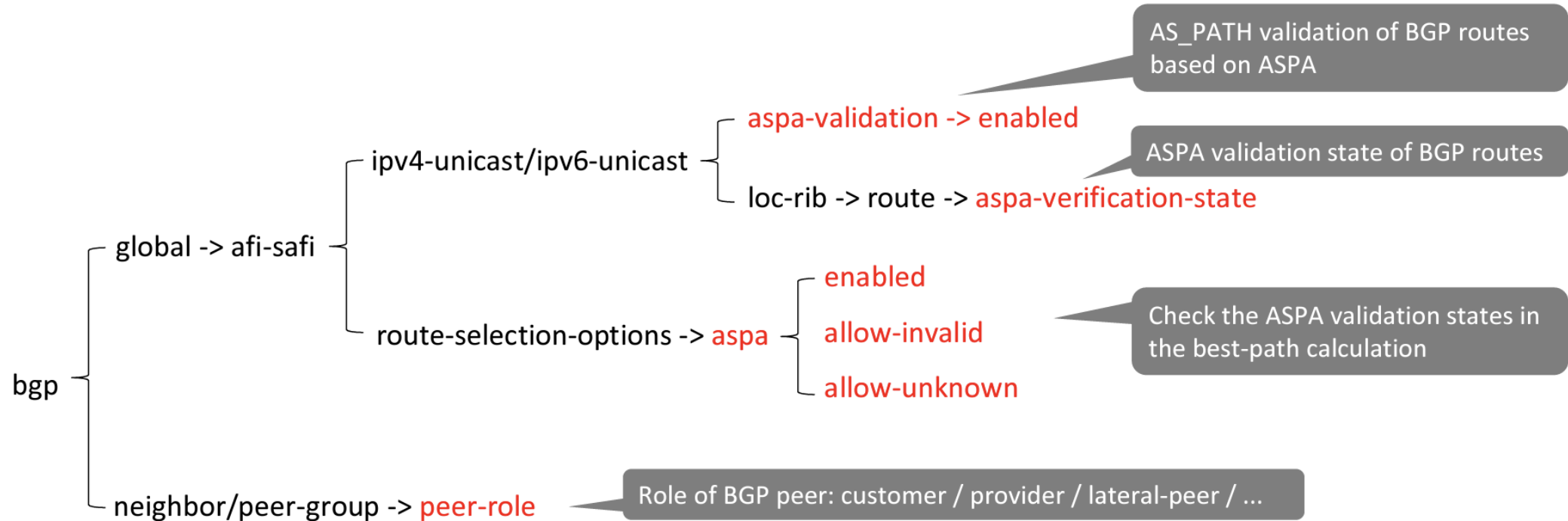
How BGP validates the BGPsec_PATH attribute [RFC 8205].

Added to draft-liu-idr-bgp-rpki-yang.



ietf-bgp-aspa.yang (Previous version)

How BGP validates the AS_PATH of BGP routes based on ASPA [draft-ietf-sidrops-aspa-verification].



Changes

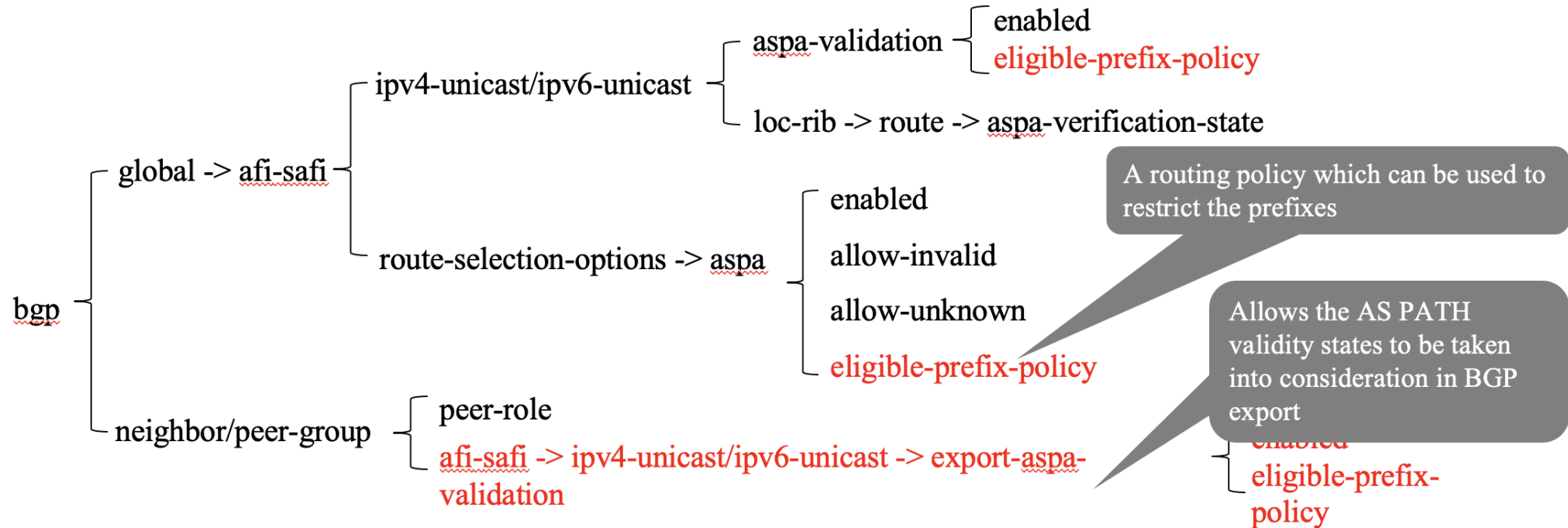
Leaves added :

- **“eligible-prefix-policy”** : To be used to restrict the prefixes for which BGP ASPA validation is enabled.

ietf-bgp-aspa.yang - Updates

How BGP validates the AS_PATH of BGP routes based on ASPA [draft-ietf-sidrops-aspa-verification].

Added to draft-liu-idr-bgp-rpki.yang.



Future prospect...

Queries ??

Thank You