

NOPEER Route Attribute

- Propose a well-known transitive advisory scope attribute
- Applied by originating AS to route prefixes
- Interpretable as advice to limit the scope of propagation of the prefix so that the prefix is not advertised across bilateral SKA peer inter-AS connections

Intended Usage

- Address the TE usage of BGP where specific routes are selectively advertised and a covering aggregate is more generally announced
- NOPEER would be applied to the more specific advertisements
- The more specifics would be propagated to the extent that the originating AS has direct and indirect upstream service relationships

Potential Benefits

- Reduce the unbounded propagation of more specific entries to a scope limited to:
 - the originating AS funding
 - the effective TE scope where the originator's policy has some leverage
- Quantification:
 - Some 53% of table entries are more specific prefixes of enclosing aggregates
 - Of these:
 - 36% share a common origin AS with the immediately enclosing aggregate
 - 21% share a common AS path with the immediately enclosing aggregate
- NOPEER could reduce the unbounded propagation of TE-based more specifics to a logical boundary of "funded agent" AS's