

IETF-79

Beijing, PRC

draft-uttaro-idr-add-paths-guidelines-03

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Draft Status

- Informational or Standards Track?
 - Initial versions were Informational
 - Proposing change to Standards Track with -03, need WG feedback
 - Rationale: network operators need at least one mandatory path selection algorithm that is common between implementations

Mandatory Path Selection Mode

- Advertise N paths
 - The set of paths found by running the BGP decision process N times
 - After each iteration remove the best of the remaining paths and all other paths with the same NEXT_HOP or BGP identifier as the best path
 - N should be configurable, default value must be 2
- Why this mode?
 - Simple, can satisfy any requirement if N is configured properly (fast failover to optimal backup path, load-balancing, MED oscillation, etc.)

Optional Path Selection Modes

- All paths
 - useful for path monitoring
- AS-wide best paths
 - all paths up to the IGP tie-break, backup path not guaranteed
- AS-wide best paths and AS-wide second best paths
 - ensures availability of backup path

Historical Path Selection Modes

- Moved to Appendix, less broadly applicable
- Neighbor AS group best paths
- All paths with best and second best LOC PREF
- All paths at decisive step - 1

Other Changes from -02

- Deployment considerations related to
 - Configuring an upper bound on the number of advertised paths
 - The benefits of encapsulation to improve consistency between advertised paths and forwarding paths

Next Steps

- Interaction between Best-External and Add-Paths
 - Which takes precedence?
- Add-Paths for EBGP sessions
- WG adoption

Questions?