

SPF_DELAY

draft-ietf-rtgwg-spf-uloop-pb-statement-01

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draft-ietf-rtgwg-backoff-algo-01

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■ Updates:

- 2015-05-04 draft-ietf-rtgwg-spf-uloop-pb-statement-00
- 2015-06-23 draft-ietf-rtgwg-spf-uloop-pb-statement-01

■ Changes:

- New co-authors
 - Martin Honegger, Bruno Decraene
- Editorial changes
 - e.g. improved readability
- Improved reference to earlier work
 - RFC6976: Framework for Loop-Free Convergence Using the Ordered Forwarding Information Base (oFIB) Approach
- No technical changes
 - Problem statement
 - A standardized SPF trigger strategy has the best benefit/cost

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- Updates:
 - 2015-05-04 draft-ietf-rtgwg-backoff-algo-00
 - 2015-06-19 draft-ietf-rtgwg-backoff-algo-01

- Changes:
 - New co-authors
 - Hannes Gredler, Acee Lindem, Pierre François, Stéphane Litkowski.
 - Many editorial improvements
 - grammar, clarity, technical accuracy
 - Comments received
 - in particular Mike Shand from the routing directorate
 - Explicitly stating that no default values are defined in the document
 - Values are expected to be very context dependent
 - Implementations are free to choose default value but they must be configurable.
 - New section “§6 Parameters”

SPF ??

- Terminology change: “SPF” changed to “routing table computation”
 - SPF was loosely defined and implementation dependent
 - e.g. does an IP prefix change triggers a SPF? or a PRC?
 - not a cosmetic point as this is the trigger of DELAY computation
 - hence influence the spec / interoperability
 - in line with OSPFv2 terminology
- Routing table computation:
 - computation of the routing table, by the IGP, using the IGP LSDB. No distinction is made between the type of computation performed. e.g., full SPF, incremental SPF, Partial Route Computation (PRC). The type of computation is a local consideration.

High level Goals

- P0: define one standard algorithm
 - so far so good: WG document.

- P1: the algorithm should be as good as possible
 - define “good”
 - please review §2 “High level goals” as this will influence choices
 - YMMV. “optimality” would
 - depend on your specific requirements, network topology, equipments/links behavior
 - require simulation based on historical data (i.e. past, not future)
 - Simplicity & robustness > “optimal”
 - especially for a STD/must implement algo

Next steps

- Now would be a good time to review draft-ietf-rtgwg-backoff-algo
 - P0: High level goals (§2 i.e. 1/3 page)
 - P1: SPF delay algorithm (§3, §4, §5 i.e. 2.5 pages)

Thank you