Multisession BGP extensions without new TCP ports

draft-varlashkin-idr-multisession-same-port-00

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IDR WG, Maastricht, July 2010

Motivation

- Operational concern w. other drafts
  - dynamic ports – problem with filters
  - static ports – needs may change later
- Desired functionality possible with less protocol modification

Proposed solution

- No new TCP ports
- Session handover between processes
  - local implementation business
  - no protocol cooperation required
- Modified session collision handling
  - IP + AFI/SAFI list (also overlapping)
- AFI/SAFI grouping
  - supported without protocol changes
  - implementation-time fixed grouping discouraged, but permitted if trivial grouping supported

Comparison to other drafts

- Flexible AFI/SAFI grouping
  - allows re-grouping without outage
- More operation-friendly
  - (e.g. control-plane) filters don't change
- Does not sacrifice speed/reliability
  - same level of reliability as other proposals
  - same or faster as dynamic port negotiation
  - not slower to recover crashed AFI/SAFI than fixed AFI-to-session binding

Looking forward

- More feedback encouraged
- Capability handling in OPEN
  - modify existing vs. use dedicated
- Connection collision handling
  - single behaviour per case vs. multiple alternatives
  - which alternatives to keep
- WG adoption?