Some Notes on draft-ietf-rtgwg-segment-routing-ti-lfa

Stewart Bryant (stewart.Bryant@gmail.com)

draft-ietf-rtgwg-segment-routing-ti-lfa

- draft-ietf-rtgwg-segment-routing-ti-lfa underwent a series of area reviews prior to being sent to the IESG.
- Gyan Mishra's OPS review pointed out that it was unsafe to deploy TiLFA without a uloop convergence also being deployed.
- A couple of trivial pathological topologies were noted in the review and subsequent discussion on the RTGWG list.
- Observation of deployed networks noted that uloops do form unless a uloop strategy is deployed.

draft-bashandy-rtgwg-segment-routinguloop

- This is the companion uloop draft
- It has not progressed and arguably is not well developed.
- It needs review and development with an operational focus
- There is a strong case that this draft (or another approach) needs to be incorporated in or co-published with draft-ietfrtgwg-segment-routing-ti-lfa

Is Ti-LFA solution Over Constrained?

- Given that we have emerging evidence that Ti-LFA is operationally unsafe without a uloop strategy
- ... And noting that the post-convergence repair path congruence constraint was to avoid uloops
- ... And noting that ingress packets may not reach the PLR post convergence
- We have to ask whether the post convergence path constraint is REQUIRED or should be OPTIONAL
- Note that removing the constraint would not result in incompatibility with deployed draft-ietf-rtgwg-segment-routing-ti-lfa
- Note that choosing another uloop strategy would likely not be incompatible with pre-standard draft-bashandy-rtgwg-segmentrouting-uloop implementations

The Way Forward

- After years of almost silence, there has recently been considered discussion of the TiLFA work on the RTGWG list.
- I believe that the chairs are considering the best way to move the work forward.
- I would suggest that it needs a virtual interim meeting to focus on the issues.