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

Stewart Bryant (stewart.Bryant@gmail.com)
• 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.
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-ietf-rtgwg-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-segment-routing-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.