

BGP LLGR

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PREVIOUSLY, IN SWINOG #31

- Presentation about BGP to the hypervisors
- No problem so far (quite reliable!)
- Except when we got DDoSed

WHY BGP LLGR?

- We want unreachable paths to be removed **fast** (eg. BFD with very low timers)
- We want **resilient** sessions (eg. no BFD, long hold timers)
- How to reconcile?

WHAT'S BGP LLGR

- BGP Long-Lived Graceful Restart
- <https://datatracker.ietf.org/doc/draft-uttaro-idr-bgp-persistence/>
- Extend BGP Graceful Restart with an additional timer
- **Stale routes** are retained as a **least-preferred alternative**
- Can be used with or without graceful restart

DEMO

- Complete setup on GitHub: github.com/vincentbernat/network-lab/tree/master/lab-bgp-llgr (additional information in README . md)

SUPPORT

- Juniper JunOS 15.1 (MX, vMX, vRR)
- Cisco IOS XR 5.2 (not tested)
- Nothing else?

MY MASTER PLAN

- Implement in ExaBGP
- Implement in BIRD
- Implement in FRR (or maybe someone else?)
- ???
- Profit