Using Only Link-Local Addressing Inside an IPv6 Network

draft-ietf-opsec-lla-only-02

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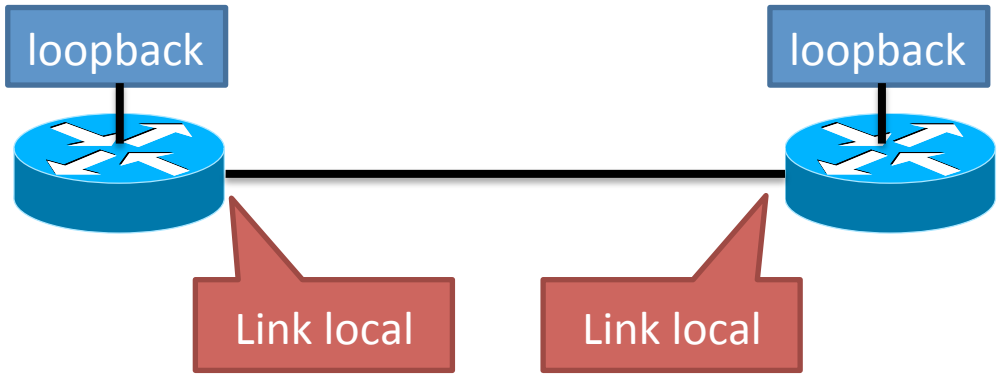
Summary



- Discussion: Neither global nor ULA addresses on infrastructure links, **just link-local**
- Describe pros and cons
- Goal: Help in decision process.
- Desired outcome: **Informational**

Changes in -02

- Added section on IXPs (see next slide)
- Clarification that “ICMP error message […] must not be sourced from link-local addresses when the destination is non link-local.”
- Clarification that network discovery based on the NDP cache will not work, must use RIB.
- Clearer phrasing that approach doesn’t work with RSVP-TE.
- Added reference to I-D.jdurand-bgp-security
- Minor edits

New Section on IXPs

- IXPs are important
- IXP prefixes are well known
- Two methods to protect:
  - Don't announce prefix: Not a good idea for IXPs
  - Filter packets: Depends on all operators to get it right.
- Advantages of link local on IXPs:
  - PMTU (etc) would be sourced from SP's loopback
  - Attacking SP space loopbacks is harder
- Disadvantage: Cannot do traffic engineering using the IXP prefix, need to do next-hop-self

Summary

- Goal: Document advantages and caveats, to let operators make a good choice whether to use LL or not.
- Pros and cons are not “weighed”. Network operator must decide how important to him.

- **Need reviews of IXP section**
- Rest mostly stable
- Can move to WGLC once IXP section reviewed