Using Only Link-Local Addressing Inside an IPv6 Network
draft-ietf-opsec-lla-only-02

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Michael Behringer
Eric Vyncke
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