Return to the land of living
draft-llsyang-rtgwg-dst-src-routing
previously known as
draft-ietf-rtgwg-dst-src-routing

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Document History

- July 2019: the authors asked for WGLC on draft-ietf-rtgwg-dst-src-routing
- WGLC never happened
- Draft Expired
- We still need to take source into account while making routing decision
- July 2022: draft-ietf-rtgwg-dst-src-routing-07 resubmitted as draft-llsyang-rtgwg-dst-src-routing
Use Cases

IPv6 multihoming using PA space

Traffic Engineering/Traffic Segmentation

Walled-Garden and limiting access to specific sources only

...and a few others...
Key Principles

The document defines expected behaviour, not exact algorithm

The source prefix is matched after the destination prefix.

Difference in behaviour between routes with a source prefix of ::/0 and routes without source prefix MUST NOT be visible.
Route Lookup (Simplified)

1. Select all routes with the most specific destination
   - 2001:db8:2::/64, source 2001:db8:1::/48 via fe80::4
   - 2001:db8:2::/64, source 2001:db8:1::/64 via fe80::5

2. Select all routes with the most specific source
   No route matching the source

3. Select less specific destination

4. Select all routes with the most specific source
   - 2001:db8:2::/48, source 2001:db8::/32 via fe80::3
   - 2001:db8:2::/48, source 2001:db8:f00::/48 via fe80::33

   - 2001:db8:2::/48, source 2001:db8:f00::/48 via fe80::33
Adoption Call?