# RMR

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# Now a WG Doc

- Thanks to all who commented, reviewed and helped in various ways!

- Thanks to Loa for driving!

# Forthcoming

- More details on ring signaling needed
  - Protocol independent aspects will be in the RMR draft
  - Protocol-specific details will be in accompanying drafts
- Some tweaks on auto-discovery
  - Again, protocol independent details in RMR draft; protocol-specific details in accompanying drafts
- Accompanying drafts:
  - IGP extensions (ISIS and OSPF)
  - Signaling extensions (RSVP-TE and LDP)

# "Half-Rings"

- In talking to Service Providers, we discovered that many deploy "half-rings" (or U-shapes or horseshoes)
  - These are rings with one link "missing" (or rather, not provisioned)
- We're looking at how these might be incorporated into the RMR suite
  - Feedback on the value of this would be highly appreciated …
  - … as would topologies

# Use of Bypass Links
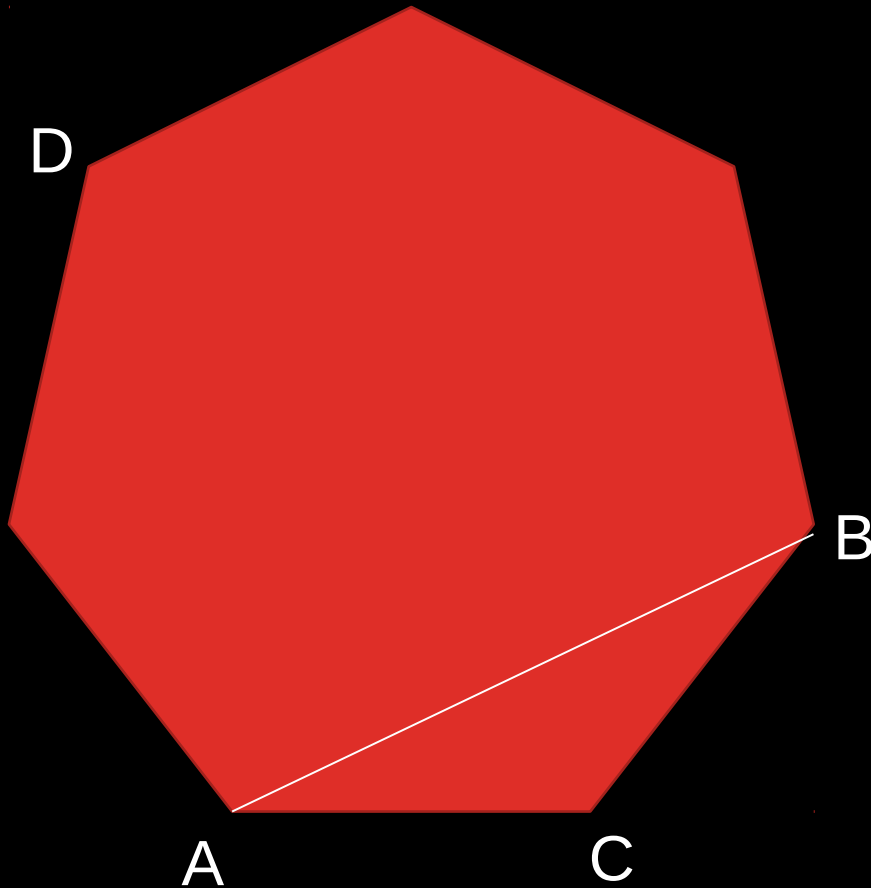
# Use of Bypass Links

- Bypass links are best used for optimizing traffic
  - Traffic from A to B can go directly, or via C (anticlockwise) or even clockwise (via D)
- Note that using only the shortest path is not the best use of ring resources

# Unnumbered Links

- Using unnumbered links makes auto-configuration much easier
    - Also makes node insertion and deletion much easier
- However, this poses some (perceived?) operational issues for IPv4
    - Time to brush off some old drafts on unnumbered (i.e., IPv4) ping and traceroute?
- IPv6 link locals solves this

# Next Steps

- Update addressing some of the above issues
- Will start discussions on the mailing list for other issues
- Initial versions of accompanying drafts to be submitted