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
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• 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