

RMR – draft-ietf-mpls-rmr-02

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POINTS TO PONDER

1. Should the RMR TLVs be part of the TE TLVs?
2. What more information should be auto-discovered?

RMR IGP AUTO-DISCOVERY TLVS

There are two types of IGP auto-discovery TLVs

- “Node TLVs” – node-wide information
- “Link TLVs” – information specific to a link

Node TLVs have two parts – capabilities/generic values and decisions

Link TLVs have decisions

NODE TLVS

Capabilities: Supported OAM, Supported Signaling Protocols

Generic Values: Mastership Value, Clocking

Decisions: Elected Master

LINK TLVS

Decisions: Link Direction; OAM to use

WHERE TO PUT NODE AND LINK TLVS

Initial thought: make these part of the TE TLVs

Second thought: separate these TLVs

- Node TLVs are part of ring bring up; need to identify node only
- Link TLVs need to identify node+link

Current thinking

- These TLVs should be independent of TE TLVs
 - RMR can be signaled with LDP
- These TLVs can be merged
 - More efficient for IS-IS (limited space in a TLV)
 - TLV needs to be reissued when decisions are made

NEW ASPECTS TO AUTO-DISCOVER

Rings are most common in access/aggregation networks

- This is where mobile backhaul occurs
- Mobile backhaul typically needs timing (IEEE 1588, SyncE)

If that follows, making this automatic makes RMR much more useful

- Q: what does it take to do this?

First stab is in the document

- A more refined version is upcoming pending review by our timing experts