

BFD Directed Return Path

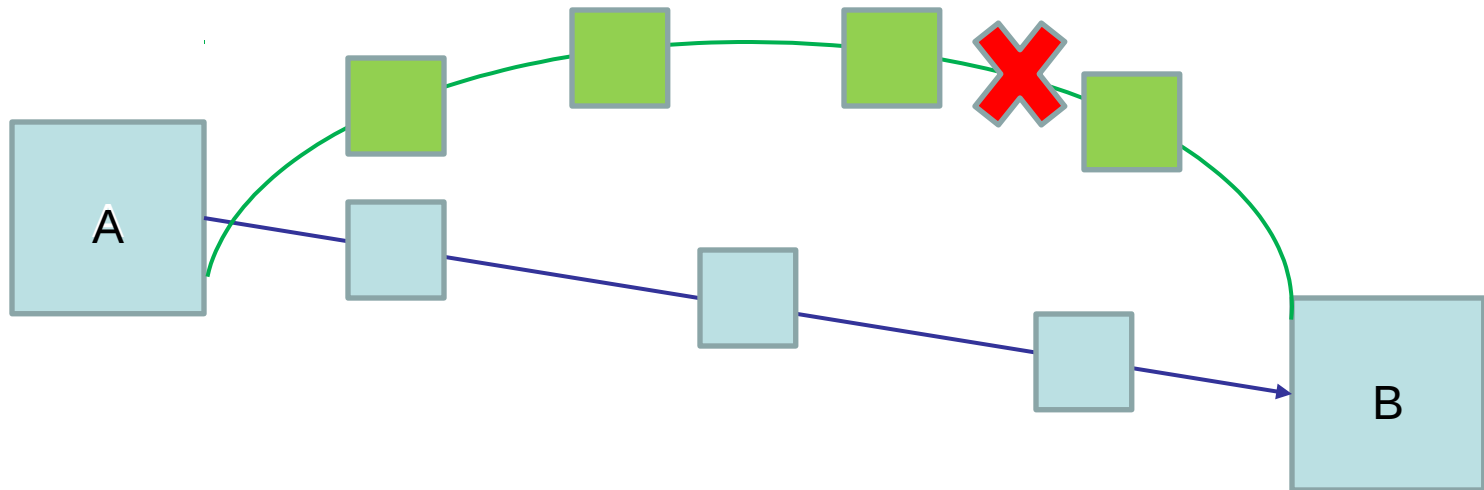
draft-ietf-mpls-bfd-directed-07

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IETF-99 July 2017, Prague

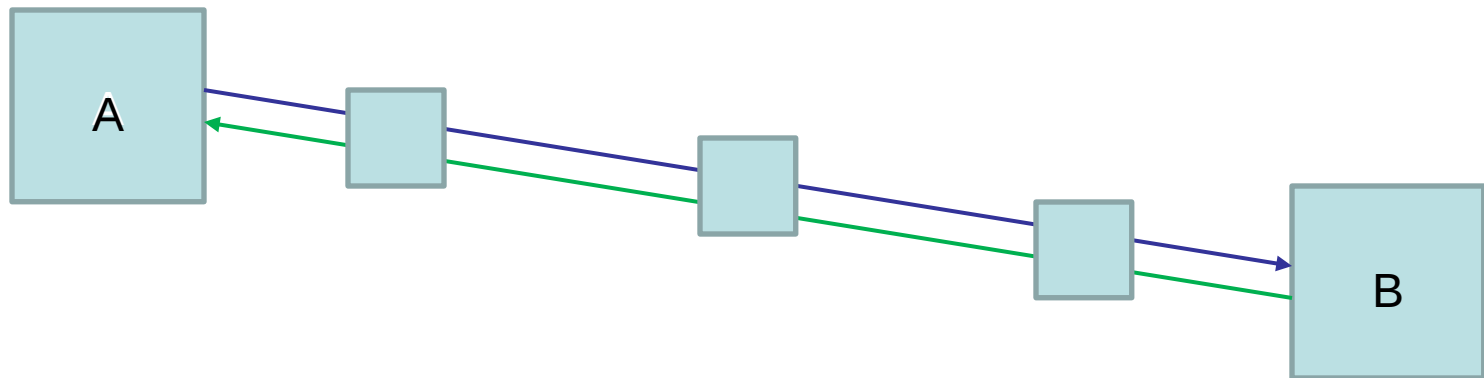
Problem statement

- RFC 5884 has defined use of BFD Asynchronous mode over MPLS LSP
- Ingress LER A periodically transmits BFD control messages over MPLS LSP
- Egress LER B periodically transmits BFD control messages over IP network
- Failure in the reverse path of the BFD session may be interpreted as LSP failure



Proposed mechanism

- New optional BFD Reverse Path TLV
- Used with BFD Discriminator TLV
- Instructs egress BFD to transmit BFD control packets over the specified MPLS LSP
- Re-use sub-TLVs defined in RFC 7110
- New LSP Ping return code “The specified reverse path not found” defined
- BFD Reverse Path TLV may contain none, one or more sub-TLVs
- If none sub-TLV has been found in the BFD Reverse Path TLV, then the egress BFD MUST transmit BFD control packets over IP network



Thank you

- Sincere thanks to Ross, Loa, Nick, Eric and Carlos for their comments and time