

# S-BFD Update

IETF 91, Honolulu, USA

**Authors/Contributors/Contributions-by:**

Many BFDers ... (too many to list here)

Thanks to those contributed!!

**Presenter:**

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# Agenda

- Since IETF90
- Where we are
- S-BFD SR document
- S-BFD Alert Discriminator document

# Since IETF90 ...

When	What	Details
Aug 2014	S-BFD Base & IP & SR documents restructured	<ul style="list-style-type: none"><li>• Base doc describes the S-BFD protocol</li><li>• IP doc describes UDP + IP procedures</li><li>• SR doc describes UDP + IP procedures <i>(more on SR doc later)</i></li></ul>
Sept-Oct 2014	WG adoptions	<ul style="list-style-type: none"><li>• S-BFD IP document adopted by BFD WG</li><li>• S-BFD OSPF adv doc adopted by OSPF WG</li><li>• S-BFD ISIS adv doc adopted by ISIS WG</li></ul>
Oct 2014	S-BFD Alert Discriminator document updated	<ul style="list-style-type: none"><li>• Proposes zero(0) as the Alert Discriminator <i>(more on Alert Discriminator later)</i></li></ul>
Oct 2014	S-BFD UDP port allocation	<ul style="list-style-type: none"><li>• Expert review process requested</li></ul>

# Where we are ...

Document Type	Documents	Next Steps
WG Documents	<ul style="list-style-type: none"><li>• <a href="#">draft-ietf-bfd-seamless-use-case</a></li><li>• <a href="#">draft-ietf-bfd-seamless-base</a></li><li>• <a href="#">draft-ietf-bfd-seamless-ip</a></li><li>• <a href="#">draft-ietf-ospf-sbfd-discriminator</a></li><li>• <a href="#">draft-ietf-isis-sbfd-discriminator</a></li></ul>	<ul style="list-style-type: none"><li>• Seeking reviews and comments</li><li>• Implementation underway, waiting to validate technical accuracy</li><li>• Progress use case doc.</li><li>• Progress base/ip docs soon.</li></ul>
Individual Documents	<ul style="list-style-type: none"><li>• <a href="#">draft-akiya-bfd-seamless-sr</a></li><li>• <a href="#">draft-akiya-bfd-seamless-alert-discrim</a></li></ul>	<ul style="list-style-type: none"><li>• Described in next few slides</li></ul>

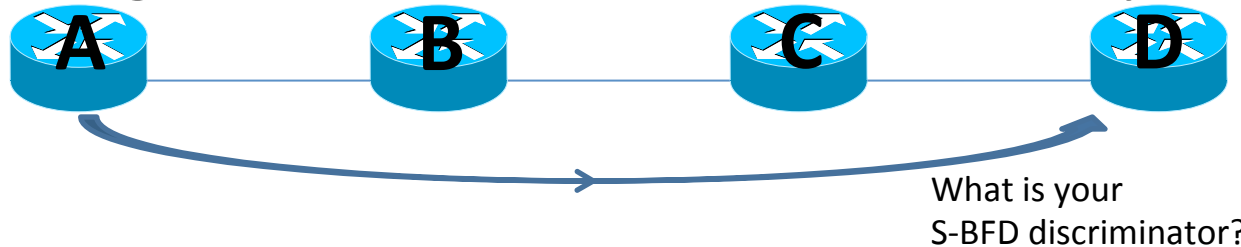
# draft-akiya-bfd-seamless-sr

- Simple document. Points to S-BFD IP doc for following points:
  - UDP ports (ctrl and echo)
  - Packet demuxing
  - Initiator & responder procedures
- Half of the doc describes S-BFD echo on SR:
  - semi-controlled return path
  - fully controlled return path
- (1) seeking comments, (2) present in SPRING in Dallas and (3) request for WG adoption

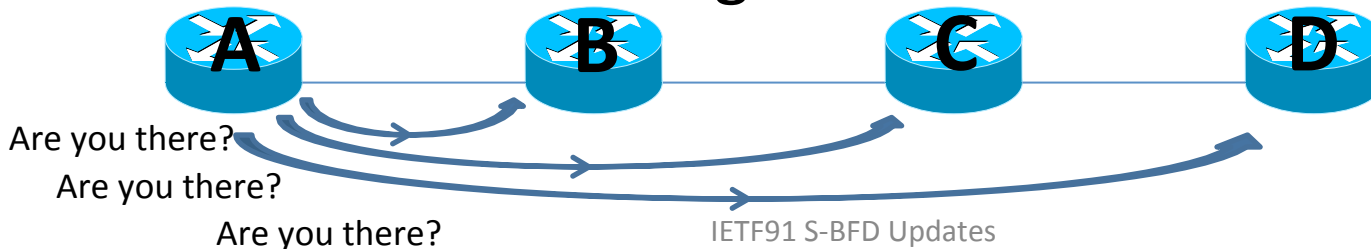
# draft-akiya-bfd-seamless-alert-discrim

- Alert discriminator basic idea:
  - Have one S-BFD discrim which all devices support
  - Use diagnostic code to suggest instructions
- Why? Two extended S-BFD use cases:

## 1. Target S-BFD Discriminator Discovery



## 2. S-BFD Path Tracing



# draft-akiya-bfd-seamless-alert-discrim

- Proposes to reserve S-BFD discriminator zero(0) as the alert discriminator.
- Diagnostic code within the alert discriminator contains instructions.

Value	Alert Discriminator Diagnostic Code Name	Reference
0-7	Experimental	This document
8-28	Reserved	This document
29	Target S-BFD Discriminator Discovery	This document
30	S-BFD Path Trace	This document
31	Not Supported	This document

# draft-akiya-bfd-seamless-alert-discrim

- Seeking reviews and comments
- In particular:
  - Should the extended S-BFD use cases move to draft-ietf-bfd-seamless-use-case?
  - Should the alert discriminator proposal remain in this doc or move to draft-ietf-bfd-seamless-base?
  - What are additional security concerns and how do we mitigate?



Thank you!

Questions/Comments?