SBFD for VCCV (draft-gp-pals-seamless-vccv, draft-gp-l2tpext-sbfd-discriminator)

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# Changes made in -01

- Clarified capability selection algorithm when the PW endpoints support either or both BFD and S-BFD:
  - BFD and SBFD sessions are supposed to run as ships-in-the-night mode.
  - Signaling triggers capability selection algorithm.
- The companion draft to advertise SBFD discriminators (draft-gp-l2tpextsbfd-discriminator) using L2TP has been accepted in the L2TP WG as WG document.
- Feedback is welcome on the capability selection matrix defined in -01 and the draft in general.

#### Problem Statement and Scope of work

- Define behavior of SBFD on the VCCV of signaled and static PWs
  - L2TP signaled PW
  - Static PW
  - MPLS LDP signaled PW not considered in this revision (future)
- Reuse encapsulations and protocol procedures of RFC5885 and define what is additionally needed for SBFD.
  - New CV types required for SBFD Async.
  - SBFD echo is not in scope.
  - SBFD provides VCCV based fault detection only.
  - VCCV based Fault detection and Status signaling is out of scope

## Next Steps

- Requesting comments from the WG.
- Submit a new revision implementing comments if any and ask for WG adoption.

### Details – 1/2

- SBFD discriminator advertisement options:
  - Use provisioned SBFD discriminators
  - Use Alert disciminator (draft-akiya-bfd-seamless-alert-discrim)
  - Use L2TP for advertisement (draft-gp-l2tpext-sbfd-discriminator)
- SBFD encapsulation:
  - IP/UDP based encapsulation:
    - Use IANA assigned SBFD Async UDP destination port
  - L2SS/ PW-ACH based encapsulation:
    - New IANA type requested for SBFD

### Details – 2/2

- SBFD Initiator operation:
  - Two new CV types requested for SBFD operation.
  - Option1: Use two reserved bits of the existing parameter defined by RFC 5885
  - Option2: Use bits from the VCCV extended CV parameter TLV (RFC7189)
- SBFD Reflector operation:
  - Reuse reflector operation from draft-ietf-bfd-seamless-base.
- Capability selection:
  - What should be the order of preference (if any) between SBFD and BFD:
    - Proposal is to make them independent, i.e. no order of preference specified between SBFD and BFD.