Motivation

BFD assumes low-latency and low-jitter links.

BUT,

• In trans-oceanic or satellite links, the link latency and jitter can be significant.

• In NGSO satellites (O3b, SpaceX, OneWeb) and mobile platforms, the latency can vary over time.

Continuous link performance measurement allows automation of tuning BFD intervals to optimize the detection interval.
OPERATION

Leverages the delay measurement method defined in RFC 6374
Requesting WG adoption

Key benefits:

• Study tuning of BFD intervals based on link characteristics.
• Self-contained mechanism since measurement is within BFD without using extra frames.
• Some WAN links (satellite, specifically) are sensitive to amount of non billable traffic.

Unresolved issues:

• Overloaded BFD Auth Type. BFD v1 is not extendible.
• How the measured performance is translated to BFD interval is implementation specific.
• 5880 does not define mechanisms for determining the intervals based on link characteristics.