In-situ OAM Direct Exporting

draft-ioamteam-ippm-ioam-direct-export-00

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The History of This Draft

• This draft combines two somewhat similar approaches:
  • The PBT-I concept from draft-song-ippm-postcard-based-telemetry
  • The Immediate Export flag from draft-mizrahi-ippm-ioam-flags

• The decision in IETF 105 was to combine them.

• This draft is the product of a design team that worked on combining the two concepts.

• October 2019 - draft 00.
Direct Exporting (DEX) – Overview

• IOAM data is exported without modifying data packets.
• Simplifies transit node processing.
• Reduces the data plane on-the-wire overhead of IOAM.

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The Direct Exporting (DEX) Option

• A new IOAM option that indicates that IOAM data is exported to a collector.
• IOAM-Trace-Type indicates which data fields are exported.
• Two optional fields.
Example: The DEX Option as an IPv6 Extension Header

• The IOAM IPv6 extension header is defined in: draft-ietf-ippm-ioam-ipv6-options-00 (work in progress).

• IOAM Type indicates this is a DEX option.

• Opt Data Len indicates whether the optional fields are present.

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Summary and Next Steps

• Based on the input from the working group, this draft presents a consolidated approach.
• The draft is stable.
• Ready for working group adoption.