

# **Path Computation Element Communication Protocol (PCEP) Extensions to Enable IFIT**

**draft-ietf-pce-pcep-ifit-01**

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# Background and Motivation

- ❑ In-situ Flow Information Telemetry (**IFIT**) refers to dataplane on-path telemetry techniques, including **IOAM** (RFC9197) and **Alternate Marking** (RFC8321bis, RFC8889bis)
- ❑ The **PCEP extension** defined in this document allows to distribute paths carrying IFIT information. In this way IFIT methods are automatically activated and running when the path is instantiated.
  - ❑ A PCC can indicate which IFIT features it supports
  - ❑ A PCE can configure IFIT behavior at a PCC for a specific path in the stateful PCE model.

The IFIT attributes can be generalized and included as **TLVs** carried inside the **LSPA (LSP Attributes) object** in order to be applied for all path types, as long as they support the relevant data plane telemetry method



# Changes from -00

Main comments addressed after the adoption:

- Clarification on the headend support of IFIT capability. It is supposed that there are at least two nodes (e.g. starting and ending node) which support it
- IFIT methods (IOAM and Alternate Marking) are more mature for SRv6 and compared to SR-MPLS.
  - For SRv6, the references are [draft-ietf-6man-ipv6-alt-mark](#) (RFC Ed Queue) and [draft-ietf-ippm-ioam-ipv6-options](#) (IESG review)
  - For SR-MPLS, there are different proposals and references are not included in the current draft version
- Relation with [draft-ietf-idr-sr-policy-ifat](#): both PCEP and BGP can be used to instantiate SR Policies, so it is reasonable to have the same IFIT mechanism for PCEP and BGP.
- Clarification about the IFIT terminology and framework ([draft-song-opsawg-ifit-framework](#))
- Editorial comments

# Next Steps

- Relevant document to enable IFIT (IOAM and AltMark) control mechanisms
- Welcome questions, comments

Thank you