# Echo Request/Reply for Enabled In-situ OAM Capabilities

draft-xiao-ippm-ioam-conf-state-10

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## Updates from -08 to -10

- BIER was added into the scope of this draft
  - Bit Index Explicit Replication (BIER) [RFC8279] introduces a new multicast data plane
  - draft-xzInp-bier-ioam specifies BIER Encapsulation for IOAM Data
  - draft-ietf-bier-ping defines the Ping and Traceroute for BIER
- Will add SR as suggested during adoption poll
  - W.r.t. base Ping mechanism, SR-MPLS reuses LSP Ping, SRv6 reuses ICMPv6
- Separated Pre-allocated Tracing and Incremental Tracing more clearly
  - It's realized that mixed usage of the two tracing options is seldom

# Two more discussion points

- During the adoption poll two more discussion points were raised
  - Is the recommended feasible method of IOAM deployment to use PCE CC/SDN centralized controller?
    - Will clarify that in this draft centralized controller means a controller that owns the enabled IOAM capabilities of every IOAM device
    - This discussion point might be also relevant to draft-brockners-opsawg-ioamdeployment
  - Is it appropriate to use ISIS instance or OSPF transport mode to carry the metadata of enabled IOAM capabilities?
    - It looks a high requirement for all IOAM devices to support multiple IGP instances
    - This discussion point is more relevant to LSR WG

### The authors' plan

- Submit new drafts on specific extensions and considerations (e.g. security consideration) to Pings:
  - Extensions to IPv6 Ping (ICMPv6, RFC4443)
  - Extensions to MPLS Ping (LSP Ping, RFC8029)
  - Extensions to SFC Ping (draft-ietf-sfc-multi-layer-oam)
  - Extensions to BIER Ping (draft-ietf-bier-ping)
- These new drafts will be submitted to the WGs that own the relevant mechanisms

#### Next steps for this draft

- Already adopted as the IPPM WG draft
- Ask for more reviews and comments
- Revise this draft to improve it

Thank you!