# draft-lucente-grow-bmp-offline-02

GROW @ IETF 124, November 2025, Montréal, Canada

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# 123 Madrid ⟶ 124 Montréal

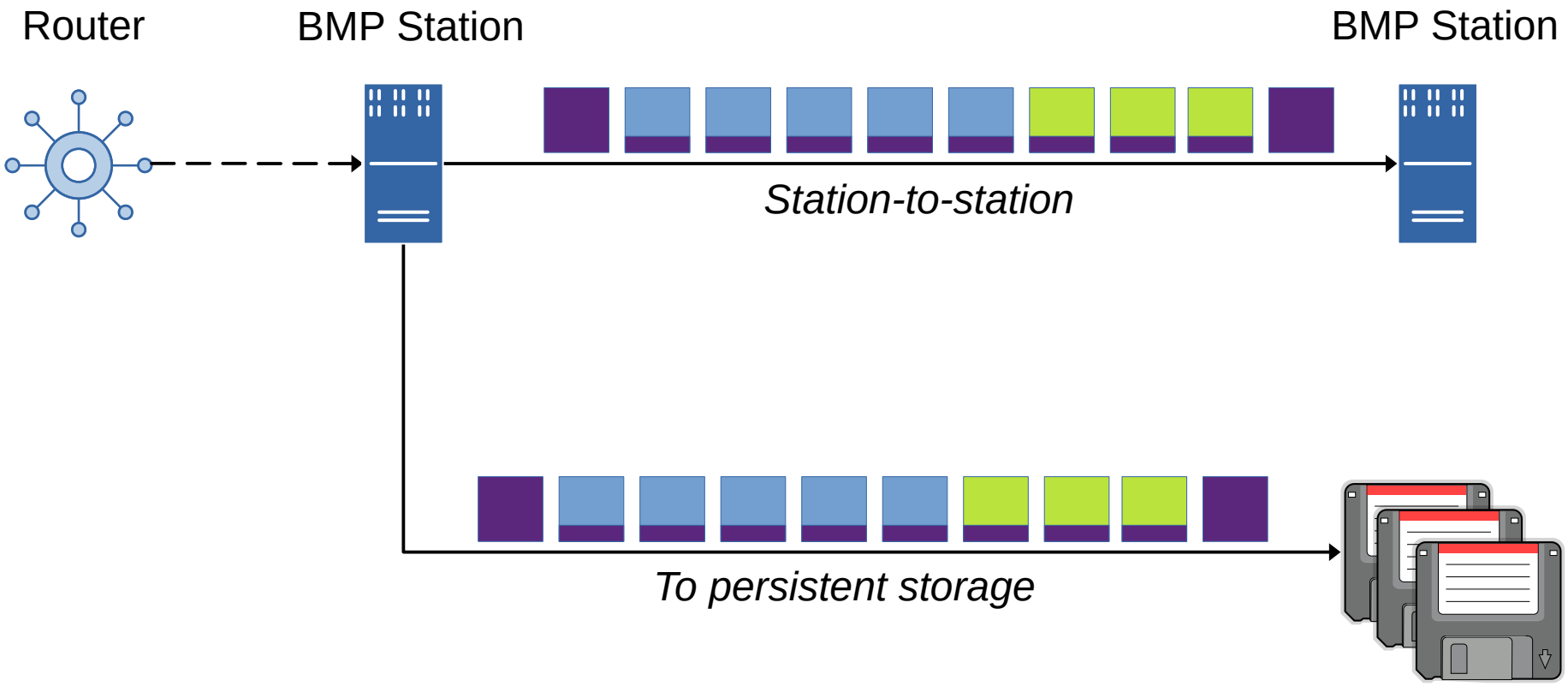
- **Retitled:**

  **~~BMP State Summaries~~ → BMP Snapshots**

- **Pivot away from router-to-station, focus on station → onwards**

# Recap

- **A BMP Snapshot is a collection of BMP messages**
  - Goal: represent the full state of both the session information and the RIB contents ‘mid-stream’, or in time-binned files
  - Think: the initial BMP synchronisation, but anywhere in the BMP session
  - Not: one large single (new) message type




BMP PeerUpNotification

BMP RouteMonitoring

BMP Snapshot Message (introduced in this draft)

BMP Snapshot Id TLV (introduced in this draft)

# Key characteristics of BMP Snapshots

- **In-protocol**
  - Keeping open the option for routers to generate snapshots
- **Flexible/extensible**
  - Any BMP message can be included, just attach a Snapshot Id TLV to it

# Open issue: backwards (in)compatibility

- **Without Snapshot support,** an implementation should **ignore the Snapshot Messages and all Snapshot Id TLVs.**
  So, it's reduced to a bunch of PeerUps+RouteMons.

- **Problem:**
  - A PeerUp for something that is already Up
  - 'duplicate' RouteMons (idempotent, but still)

# Open issue: backwards (in)compatibility

- **Possible workarounds:**
  - Dropping everything with a Snapshot Id TLV
    (still requires *some* support/recognition of Snapshots)
  - Introducing a flag in the Per Peer Header
    (requires recognition of that flag, and moreover,
    sacrificing a flag bit for this seems wasteful)

# The Error TLV

- **The End-of Snapshot message can contain an Error TLV, signalling the Snapshot is somehow broken/incomplete.**
  - Value: string. Should this be more structured?
  - Should we instead go for a **mandatory** TLV signalling Success-or-Failure, instead of the implicit ‘Success’ when no Error TLV is present?

# No EoRs in Snapshots

- **Current document does not prescribe EoRs within a Snapshot**
  - End-of-Snapshot Message signals completion of all {address families × rib views} anyway
  - This is however a discrepancy between Snapshots and initial sync
- **Should there be EoRs in Snapshots?**
  - The state of EoRs in the initial sync seems troublesome enough by itself. Is there value, or only additional confusion if we add them in Snapshots?

# WG Adoption?

- **Chairs, Adoption Call on the list?**
  - Any glaring omissions that need consideration first?

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