Usage

• A path attribute to assist with network troubleshooting.
• It is attached to UPDATE messages.
• Can be attached to a withdrawal message.

• Checksum to narrow down corruption within a BGP speaker
• Timestamp to narrow down delays within and between BGP speakers
• Track the source of route oscillations
Elements

• The diagnostic attribute consists of a series of elements.
• As an NLRI propagates through a network, each BGP speaker may add an element.
• A speaker may also remove elements.
• Each element contains:
  • ASN and BGP Identifier of the speaker.
  • TLVs.
TLVs

• Timestamp.
  • Different timestamps for various processing stages.
• Checksum.
No Unintended Propagation

• Non-transitive.
  • Legacy speakers will not propagate.

• Configuration is required to propagate.

• Question: Should it propagate by default within an AS if implemented?