

# DetNet Flow Information Model

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# Introduction

- Current draft: [draft-ietf-detnet-flow-information-model-02](#)
- This presentation
  - summarizes the changes from draft: [draft-ietf-detnet-flow-information-model-01](#)
  - lists further items to do in order to bring the draft up-to-date
  - (additional changes may be needed)
- Background
  - Architecture is getting done
  - MPLS and IP data plane solution are getting close to be finalized

# Summary of Email Discussion

- Updates to [draft-ietf-detnet-flow-information-model-01](#) have been discussed on the DetNet WG email list in this [thread](#)
- The main discussion topics were related to Section 5.2 Service parameters
  - Delay parameters
  - Misordering
- The [changes from v01 to v02](#) aim to capture the discussion items

# Summary of The Changes to Section 5.2

- The introductory text of the section has been updated to bring it in-line with the architecture draft
- Restructuring
  - The description of the service parameters have been moved into the body of the bullet list of the service parameters (it was separate list and description in v01)
- No changes to the text to these service parameters
  - Connectivity type
  - Service rank
- Changes to these parameters explained in detail in the following slides
  - Bandwidth
  - Delay parameters
  - Loss parameters
  - Misordering / In order delivery

# Service Parameters: Bandwidth

- The bandwidth guaranteed for the DetNet service

# Service Parameters: Delay Parameters

- Two delay parameters:
- Maximum latency
  - Maximum end-to-end one-way latency for the DetNet service between the edges of the DetNet network
- Packet Delay Variation (PDV)
  - The difference between the minimum and the maximum end-to-end one-way latency

# Service Parameters: Loss Parameters

- Two loss parameters:
- Maximum Packet Loss Ratio (PLR)
  - Maximum packet loss ratio for the DetNet service between the edges of the DetNet network
- Maximum consecutive loss tolerance
  - The maximum number of consecutive packets whose loss can be tolerated

# Service Parameters: Maximum Allowed Misordering

- Maximum allowed misordering describes the tolerable maximum number of packets that can be received out of order
- Can be measured based on sequence number
- The value zero = in order delivery is required, misordering cannot be tolerated



# To Do

- Update further the service parameters as needed based on WG discussion
  - Enrich service parameters (Section 5.2) with DetNet Flow Traffic Specification (Section 7.2)
  - Do we want time-based DetNet service establishment and tear down?  
(see RFC 8413)
- Double check DetNet flow related parameters (sections 7, 13, and 14) and update as needed according to [architecture](#) and data plane solutions for [MPLS](#) and [IP](#)
- Double check DetNet Domain, End System, and UNI (sections 8, 9, 10, 13) and update as needed according to [architecture](#)
- Double check consistency between [information model](#) and [YANG data model](#)
- Fill-in or remove placeholders (sections 11, 12, 15)
- Update summary, IANA, and security consideration sections
- **Contributions are welcome!**