DetNet Controller Plane Framework

IETF 116 @ Yokohama
Relationship with other DetNet WG document

- RFC 8655: DetNet Architecture
  - RFC 8938: DetNet Data Plane Framework
    - A series of DetNet Data Plane Solutions
    - DetNet YANG Model
  - Potential Control Plane Extension
  - DetNet OAM Framework
    - A series of OAM mechanism for DetNet with different Data Plane
Contribution from Carlos:
A new section is added to support the collaboration of multiple controller plane function (CFP) among different DetNet domains

Consider to remove this part and leave it for potential controller plane extension document
Proposed Update 1: DetNet Control Plane for Enhanced DetNet

DetNet Control Plane for DetNet Mechanisms
- Explicit Paths
- Resource Reservation
- PREOF Support
- Data Plane specific considerations

DetNet Control Plane for DetNet Mechanisms
- DetNet Resource Collection
- DetNet Path Computation
- Path Allocation
- Path Establishment & Resource Reservation
- PREOF Support
- Data Plane specific considerations
Proposed Update 2: The Relationship between Control Plane & Management Plane

- **DetNet Control Plane**
  Set up DetNet Path with resource & parallel branches for bounded latency & reliability

- **DetNet Management Plane**
  Provide the result of performance monitoring, connectivity detection etc.

- **Possible Interaction between Control plane & Management**
  The Control Plane may be updated based on the feedback from management plane to satisfy the deterministic requirement
Next Step

• WG consensus with the update

• Ready for WG Last Call?
Thanks