

# SFC OAM Framework

draft-aldrin-sfc-oam-framework-01

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# Authors and Contributors

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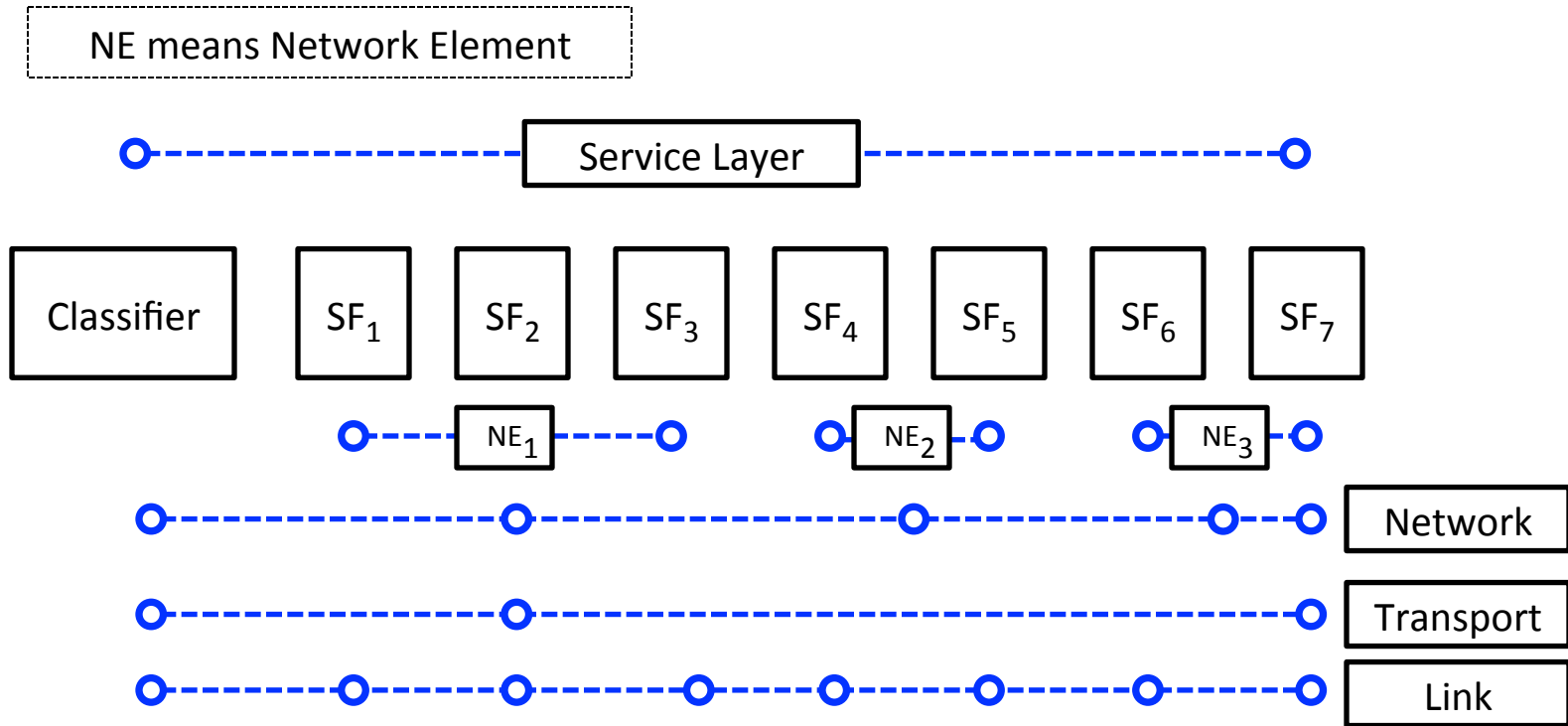
# Objectives

- To specify a framework for SFC OAM
- Cover various OAM aspects
  - Layering model and their relationship
  - OAM within SFC
  - OAM functions

# Updates Since -00

- Merged 'draft-aldrin' and 'draft-krishnan'
- Published a new version as 'draft-aldrin-sfc-oam-framework-01'
- Aligned with 'draft-ietf-sfc-architecture' draft

# Example SFC Layering Model



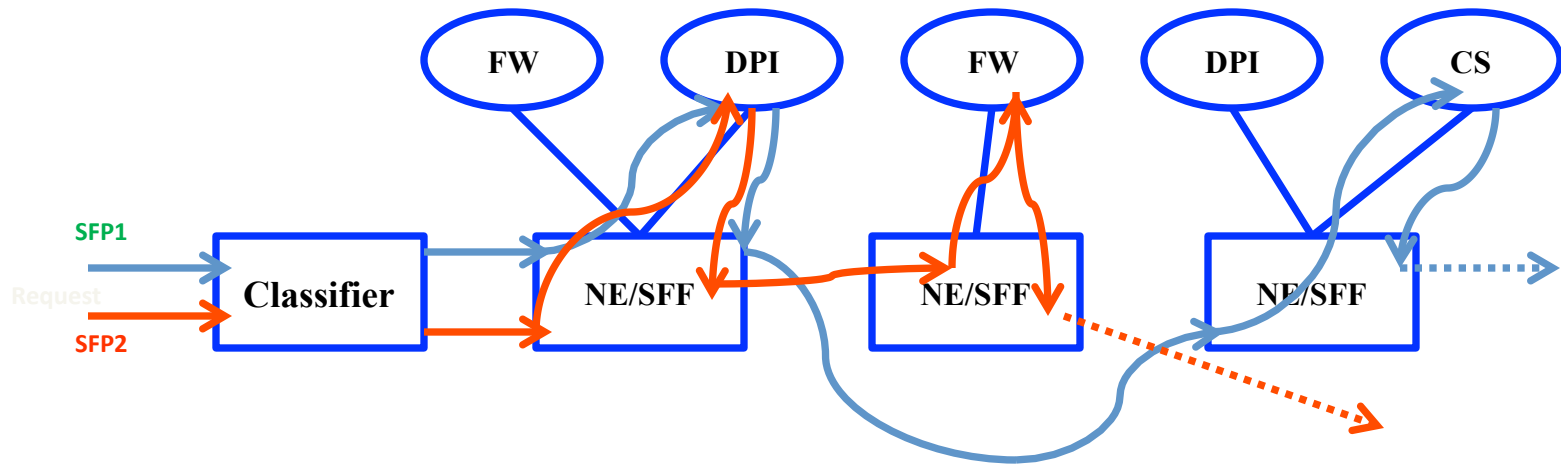
# SFC OAM components

- **Service Function** - To test the service functions from any SFC aware network devices (i.e. classifiers, other service function nodes)
- **Service Function Chain** - To test the service function chains and the service function paths
- **Classifier** - To test validity of the classifiers

# SFC OAM Functions

- Connectivity
- Continuity
- Trace
- Performance measurement

# Connectivity, Continuity & Trace



- Connectivity verification of an SFP
- Continuity check of an SFP
- Trace the SFP along the path and identify SFF's
- Verification and Validation of SFF's in a given SFC



# OAM Packets and Path Congruency

- OAM must be able to reliably verify the same path that data packets take
  - If there is ECMP at the service layer, then the OAM must be able to reliably verify each and all the ECMP paths that data packets take
  - The SFF load balancing logic applied to both types of packets (OAM and data) should be the same to preserve the in-band characteristics of OAM

# Open Items

- Recommended SFC architectural model to verify SF availability
  - Should OAM packets go through SFs or not?
  - Is verifying SFF sufficient or not?
  - Model MUST work for legacy and SFC-aware SFs
- What does performance measurement mean in the context of SFC?

# Next Steps and Questions

- Solicit more comments from WG
- Influence architecture where necessary
- Ready to be adopted as WG document?
- Questions?