draft-merged-sfc-architecture

Prepared by Joel Halpern and Carlos Pignataro A starting point at a converged "SFC Architecture" document, to drive the Milestone and progress forward.

Goal

- Try to provide a proposed document for the working group
- Strawman, pulling elements from draft-quinn, draftboucadair, list, and other sources
- And then fix it to match WG goals
- The architecture should reflect our WG agreements on basic elements
 - But should be more general than, and enable discussion of, the solutions we want

Basic Structure

- Introduction
 - With Scope, Assumptions, and Definitions
- Architectural Concepts
 - Chains, Symmetry, Paths
 - (Need to capture WG discussion on "Paths")
- Architectural Principles
- Core Components
- Policy and Additional Architectural Concepts
 - Loop Prevention, LB, MTU, OAM

Agreed additions for -01

- We will add a discussion of robustness and scaling points
 - Aligned with whatever resolution is reached on the base architecture for this
- We will add more clear description of the scope, entry, and exit points
- We will add a section on "Open Issues"
 - Which should become smaller over time

Architectural Components

- The document defines the architectural components and their relationship
 - These are logical components,
 - Which may be delivered separately or together
- Service Function Chains
- Service Function Paths
 - We need to capture WG discussion on this one
- Service Function Forwarders
- Service Functions
- Network Forwarders
 - We have been asked to remove this one
- Proxies

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Key discussion Points

- Difference between Service Function Chain and Service Function Path (see next slide)
- Where is instance selection done
- How is scaling handled
 - And what is mandated by the architecture
- A need to further clarify many of the definitions and roles

Proposed Wording

- New proposed wording, from "[sfc] SFC Terminology / Concepts" http://www.ietf.org/mail-archive/web/sfc/current/msg02451.html
- "The SFP provides a level of indirection between the fully abstract notion of service path as a sequence of functions to be delivered, and the fully specified notion of exactly what instances of SFFs the packet will visit when it actually traverses the network. By allowing the control components to specify the use of this level of indirection, the deployment may choose the degree of SFF instance selection authority that is delegated to the network."
- Does this new wording (or its concepts) work for terminology?

Next Steps

- We need to resolve some of the key open discussion items
 - In particular, where key path decisions are made
- We need to create the "Open Issues" section
- As soon as that is done, we would like the WG to adopt this document as a working base
- And then we will resolve the remaining open or raised issues with the working group.

Questions

- Have we identified the one sfc-architecture document we will focus on going forward?
- Does the proposed wording work?
- Can we ask for WG adoption of this document after a new revision?

Thank you!