Service Models Explained

draft-wu-opsawg-service-model-explained-03

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Objectives of the Draft

Goal:

- Discuss the scope and purpose of service models within the IETF
- Clarify the role and position of the service model in the SDN architecture
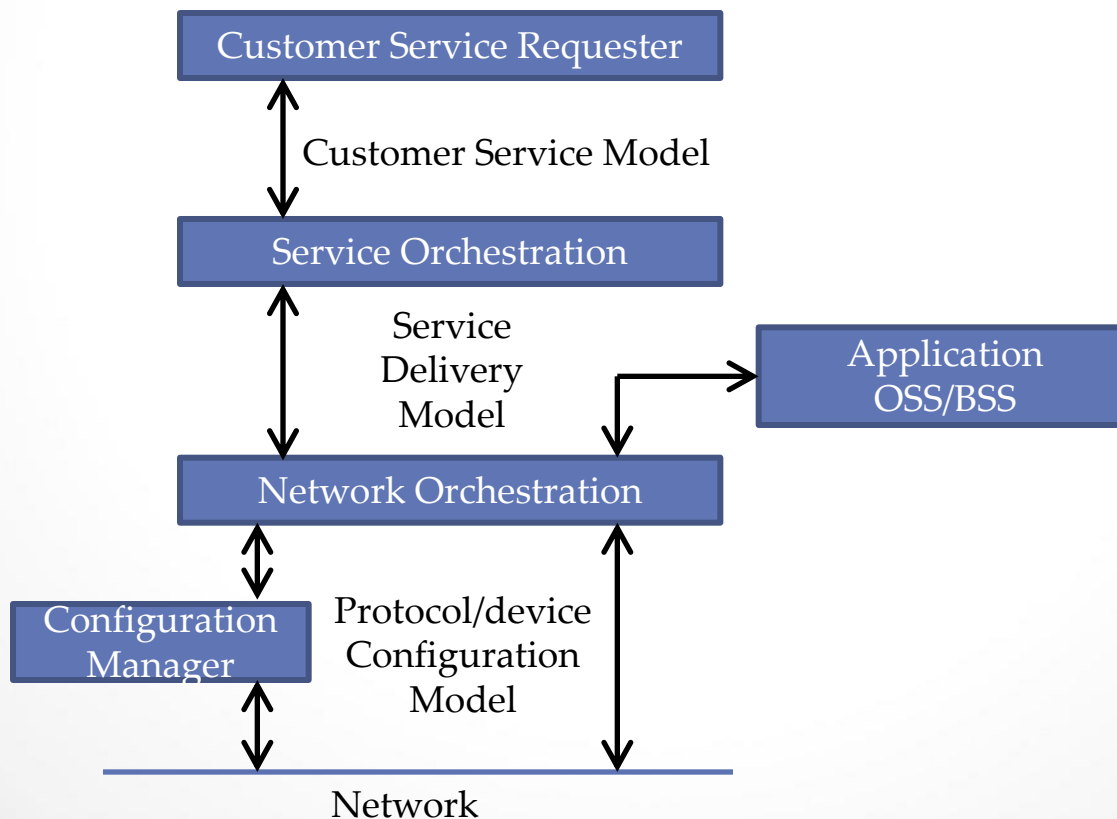
Motivation:

- Considerable number of YANG data models are used to model devices, e.g., configuration data and operation state
- A small number of YANG models are used to model services (for example, the L3VPN Service Model produced by the L3SM working group)
- Not everybody understand the difference between the device model and the service model
- This I-D aims to clarify what a service model is and is not, and to dispel some common misconceptions

Status

- We introduced this draft in Berlin
- Some discussion in the meeting and in private emails
- Updated twice since IETF-96
  - Typos
  - Minor clarifications
  - Better references to draft-ietf-netmod-yang-model-classification
    - Complementary work with no dependencies
  - Re-worked definition of "Service"
  - Split definition of "Service Model" into
    - Customer Service Model
    - Service Delivery Model
  - Improved figures
  - Added Section 6 "Comparison With Other Work"

Quick Summary

- Two types of Service Model
  - Customer Service Model
    - How an Operator talks with a Customer (e.g., L3SM and L2SM WGs)
  - Service Delivery Model
    - How an Operator managers their network (e.g., BESS WG)

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                   ┌──────────────────────────────┐
                   │  Customer Service Requester   │
                   └──────────────────────────────┘
                              ↕
                      Customer Service Model
                   ┌──────────────────────────────┐
                   │     Service Orchestration      │
                   └──────────────────────────────┘
                              ↕
                       Service                        ┌──────────────────┐
                       Delivery        ──────────────→│   Application     │
                       Model                           │    OSS/BSS        │
                                         ↓             └──────────────────┘
                   ┌──────────────────────────────┐
                   │     Network Orchestration      │
                   └──────────────────────────────┘
                              ↕              ↕
        ┌──────────────────┐  Protocol/device
        │  Configuration   │  Configuration
        │     Manager      │  Model
        └──────────────────┘
                    ↕                        ↕
        ─────────────────────────────────────────────
                          Network
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The Authors Have Some Questions

- Is there agreement on our separation of models into customer service models, service delivery models, and network/device configuration models?
  - We think that we have the right split of function
    - Opinion confirmed by L3SM/L2SM work
    - Anyone disagree?
  - But do we have the right names for the terms?
- Do we now have the right definition of "service"?
  - There was some discussion of this at the last meeting, and it led us to refine the language a bit, but it would be helpful to have more feedback.

The Authors Have Another Question

- Is this stuff "obvious" or is there value in publishing an RFC?
  - o Our experience working in L3SM has been confusion
    - Tension between protocol WGs (e.g., BESS) and operational WGs (e.g., L3SM)
    - Arises from the protocol work being about how services are delivered within a network (i.e., by configuring a set of devices in the network)
    - Our intention is to make a clear distinction between how services are delivered and how an operator presents a service for consumption by their customer
  - o If we pursue publication, in which WG?

The Authors Have One More Question

- Have we got the correlation with the MEF's LSO right?
    - We added this in Section 6 for context
    - We presented our view of how the MEF work maps to this draft
        - Some people way we are right
        - But we have heard a conflicting view to what we have written
    - Did we get it right?
    - Is this the right thing to talk about in this I-D?
        - Perhaps discussion of the MEF's model is out of scope for the IETF?

Q&A

Or talk to us on the mailing list

THANK YOU