

Open Source MANO

OSM UPDATE TO MSDO WORKSHOP

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- Architectural Principles
- OSM Scope & Mapping to ETSI NFV
- Information and Data Model Feedback for SDO Consideration

Layering

Abstraction

Architectural Principles

Modularity

Simplicity

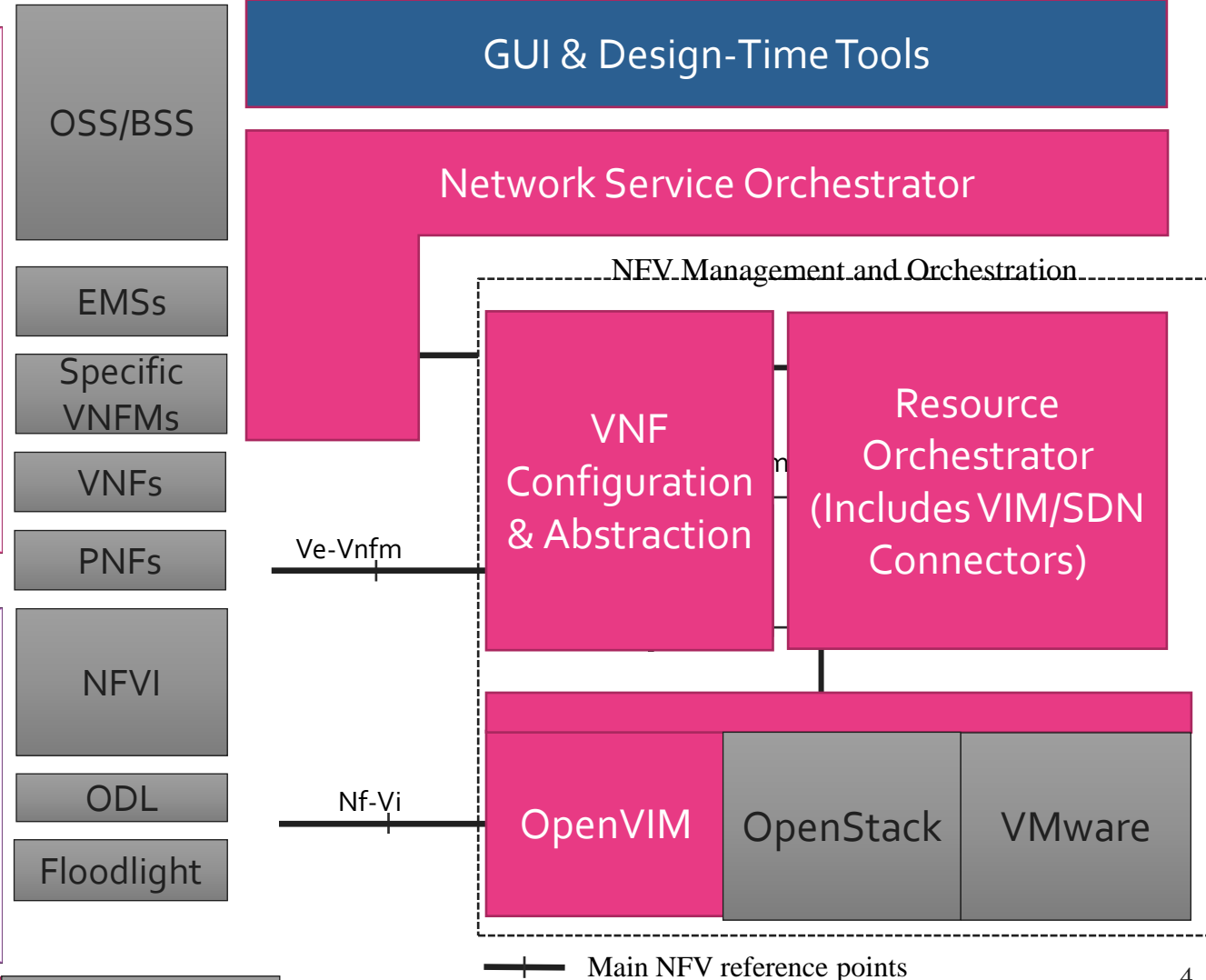
OSM SCOPE & MAPPING TO ETSI NFV MANO

Run-Time Scope

- Automated end-to-end Service Orchestration
- Superset of ETSI NFV MANO
- Plugin model for multiple VIMs/SDN Controllers
- Generic VNFM style functionality with support for integrating Specific VNFMs
- Physical Network Function integration
- Greenfield and brownfield deployments
- GUI

Design-Time Scope

- Network Service Definition (CRUD operations)
- Model-Driven Environment with Data Models aligned with ETSI NFV
- VNF Package Generation
- GUI



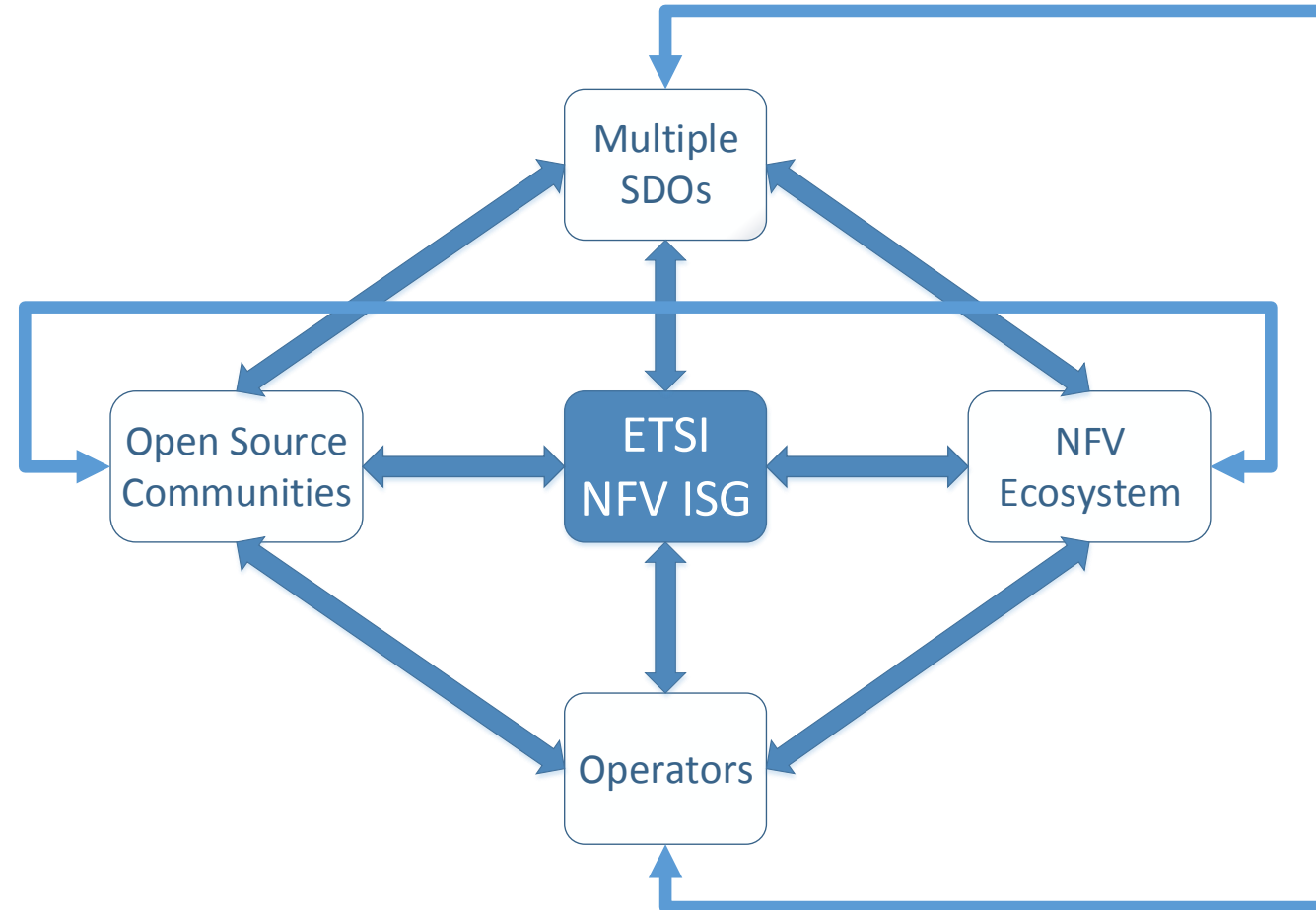
Aligned with ETSI NFV ISG Phase 1 Information Models

- Data Modelled Language: YANG
- Format Encoding: YAML, JSON, XML
- **Note:** Data Model Translator included in the architecture to optionally decouple OSM internals from the user input formats.
- OSM open to supporting multiple input formats to align with industry directions

Analysis underway on ETSI NFV ISG Phase 2 Information Models

- Will work with the ETSI NFV ISG community for clarifications, bug fixes (sightings) and feature advances.
- Possible intersect with OSM Release THREE

- Complex set of inter-dependent relationships
- Divergence a considerable risk
- Agile, iterative development model needed to mature models
- Fast feedback loops vital
- Open Source offers a marvellous mechanism for fast learning & feedback



OSM committed to a per-release feedback loop with ETSI NFV ISG

MODELLING CHALLENGES

Service layer(s)

- Multiple views of a "service"
- Multiple actors

Application layer

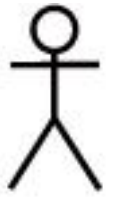
- Includes lifecycle configuration at different stages of the lifecycle

Resource layer

- Declarative and imperative infrastructural requests



Network Service Designer



Network Service Operator

Authoritative Decomposition.
Why is this blue?



Real risk of divergence at the model attribute level

SDO release cadences

Feedback loops from implementations

SDO modelling scope vs. scope needed to align attributes

- Attributions for KPIs, metrics, requirements, EPA, policies, etc.

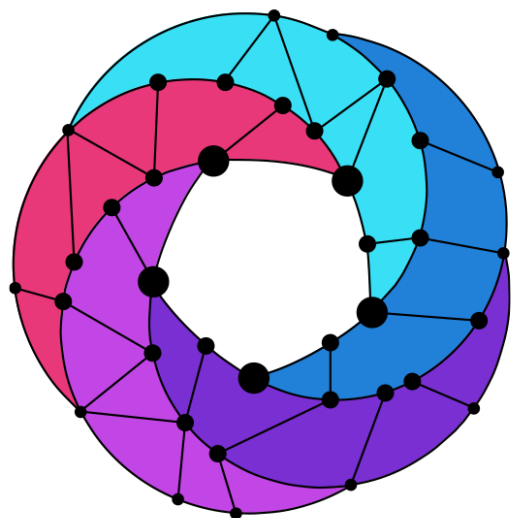
Uncertainty on recommended Mix n Match (federated) options for SDOs

Packaging variations

Composition and Deployment models not sufficiently described

Run-Time vs Design Time definitions

Do all of this without curbing innovation!

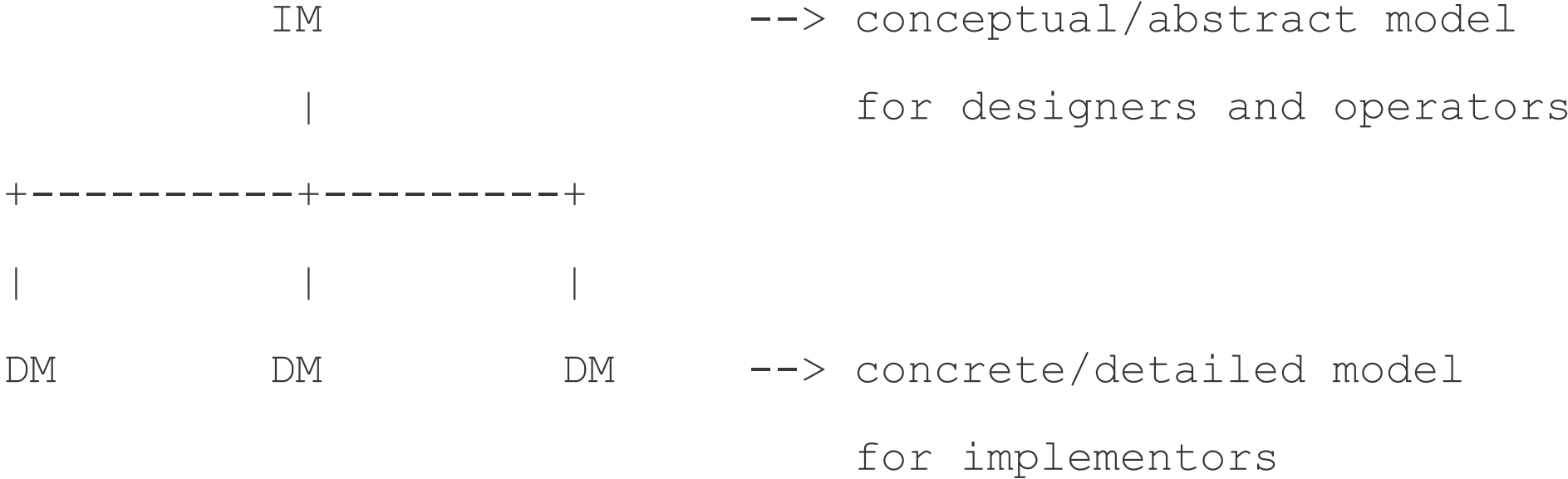


Open Source MANO

MORE INFORMATION AT:

osm.etsi.org
osm.etsi.org/wikipub

INFORMATION VS DATA MODELS



*Extracted from: <https://tools.ietf.org/html/rfc3444>

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