TSC Perspective
OSM Architecture

Vanessa Little (VMware)
OSM TSC
Agenda

- Architectural Principles
- Scope & Mapping to ETSI NFV
- OSM Architecture
- Release FOUR Architectural Goal/Themes
OSM Architectural Principles

Layering
Abstraction
Modularity
Simplicity

Architectural Principles
OSM Scope & Mapping to ETSI NFV MANO

Run-Time Scope

- Automated end-to-end Service Orchestration
- Superset of ETSI NFV MANO
- Plugin model for integrating multiple SDN controllers
- Plugin model for integrating multiple VIMs
- Plugin model for integrating monitoring tools
- Integrated Generic VNFM with support for integrating Specific VNFM
- Support for Physical Network Function integration
- Greenfield and brownfield deployments

Design-Time Scope

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

GUI & Design-Time Tools

VNF Configuration & Abstraction

Resource Orchestration (Includes VIM/SDN Connectors)

OpenVIM

Main NFV reference points

© ETSI 2017
Alignment of OSM NBI to SOL05 & SOL04 (or suggest improvements)
Release FOUR Highlights

• Consistent themes spanning releases – Release brings shift in focus
  • Service Assurance (e.g. updates to running services, VNF scaling, SFC, fault mgmt, policy)
  • Usability (e.g. consolidated logging, metrics correlation, platform updates)
  • Security (e.g. key management)
  • Resiliency (e.g. scalability and recovery of OSM)
  • CI/CD (e.g. expanded suite of tests, Installation to include Image, LXD, Docker, Snap)

• New Themes:
  • Ecosystem Development (catalogues of "validated" VNFs)
  • Documentation
  • Container based VNF deployments

• Note: Priority to be given to completion and stability
Information Models vs Data Models

IM               --> conceptual/abstract model
                  for designers and operators

+--------------------------+
|                           |
|                           |
+--------------------------+

DM        DM         DM  --> concrete/detailed model
                  for implementers
Information Vs Data Models (VNF & NS Focus)

- Officially Obsolete
- ETSI NFV
  - Phase 1
  - MANO
  - ETSI NFV
  - Phase 2
  - IFA011 & IFA014
  - YANG Models
    - (OSM, ONAP, Other Open Source, IETF, Proprietary, etc.)

- OASIS TOSCA
  - (Simple Profile for NFV)

- ETSI-NFV
  - SOL001*

*In Development

© ETSI 2017
MORE INFORMATION AT:

osm.etsi.org