OSM EUAG PERSPECTIVE
Serge Manning, Sprint
OPERATOR LED AND REQUIREMENTS DRIVEN

- EUAG gives vision and direction for OSM
- EUAG sets out release requirements
  - Release requirements have strong practical focus
  - 6 month release cycle
- MANO is about automation of network operator service/network design and build processes
- Need open source to build a platform that supports all vendor’s VNFs
- Two interrelated objectives for OSM
  - Open ‘industrial strength’ implementation
  - Open learning by doing
- Seeking to avoid the “all things to all people”
LONG TERM VISION – AUTOMATION

- Automation across the different timeframes
  - Design and development - On-boarding
    - Full automation here is still some way off
    - Assisting and easing the process
  - Instance life-cycle
    - What can be changed in-life and what is immutable
    - Especially important when considering impact on higher layers
  - In-life
    - Performance – auto scaling etc
    - Resilience – fault tolerant load sharing
    - Service monitoring, assurance, and reporting

- And across all layers
  - NS in NS, NS, VNF, VM, VL
  - Looking for flexible, robust, recursive framework
  - All this automation is policy driven
    - Policy must be executable
  - Heterogeneous
    - Multi-VIM and multi SDN controller
    - Flexible, robust, recursive framework
    - Plug-in architecture
LEARNING BY DOING
SUPPORT OF NFV INTERFACES BY OSM

- Network Service Descriptor (NSD) Management
  - On-board NSD
  - Network Service (NS) Lifecycle Management
  - NS Performance Management
  - NS Fault Management
  - VNF Package Management
    - On-board VNF Package
    - On-Board VNFD

- Virtualised Resources Information Management
- Virtualised Resources Capacity Management
- Virtualised Resources Management
- Virtualised Resources Change Notification
- Virtualised Resource Quota Management
- Virtualised Resources Performance Management
- Virtualised Resources Fault Management
- NFP Management

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    - On-board VNF Package
    - On-Board VNFD

- Interfaces offered by OSM
- Interfaces consumed by OSM
- Data structures consumed or created by OSM

- OSS/BSS
  - NSD
  - VNF Package VNFD
  - VNF Lifecycle Management
  - VNF Performance Management
  - VNF Fault Management
  - VNF Indicator

- Interfaces consumed by OSM
- Interfaces offered by OSM
- Data structures consumed or created by OSM

- VNF Indicator

- VNF Configuration

- NFV Orchestrator (NFVO)
  - Or-Vfsm

- VNF Manager (VNFM)
  - Ve-Vfsm-em
  - Ve-Vfsm-vnf

- NFVI
  - Vn-Nf
  - Ni-Vi
  - Execution reference points
  - Other reference points
  - Main NFV reference

- VNFD
  - VNF Indicator

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OSM RELEASE THREE

• Improved useability including simplifying on-boarding and upgrade processes and improved UI functionality
• Security including role based access control
• Multi-VIM support including different generations and versions of Openstack, VMWare, and AWS
• EPA, affinity/anti-affinity, and scaling support
• Multi-site support
• Service assurance and monitoring
OSM ACTIVITIES ARE END USER FOCUSED

• Many OSM architectural aspects driven by practicality for end users
  • Use of Generic VNFM
  • Restructure of NFVO and VNFM into SO/RO/VCA

• End users requested feeding back technical issues from OSM to ETSI NFV
  • To align standards with OSM’s implementation experience.
  • Keep open source and standards aligned to fight against industry fragmentation
Thank You