Policy Architecture and Framework for NFV Infrastructures

NFVRG WG
(IETF 94, Yokohama, Nov 4th)

draft-irtf-nfvrn-lg-fv-policy-arch-02
(replaces draft-norival-nfvrn-lg-fv-policy-arch)

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Main Topics

- Policy Intent Statement vs. Subsystem Actions and Configurations
- Global vs. Local Policies
- Static vs. Dynamic vs. Autonomic Policies
- Hierarchical Policy Framework
- Policy Conflicts and Resolution
  - Soft vs. Hard Policy Constraints
- Policy Pub/Sub Bus
  - Pub/Sub Bus Name Space
- Examples
  - Establishment of a Multipoint Ethernet Service
  - Policy-Based NFV Placement
IETF 93 Recap

• New with draft-norival-nfvr-g-nf-v-policy-arch-04
  • “Commit Group” added to Section 5 (“Policy Conflicts and Resolution”)
    • Commit Group = a set of policies in which the whole set must be committed for a desired result to be obtained
    • Discussed Commit Group conflict detection mechanism and avoidance of potential multiple writers issues

• Draft adopted as NFVRG document
  • draft-irtf-nfvr-g-nf-v-policy-arch
New with Current Draft

Added after IETF 93

• Updated Section 8.1 “Establishment of a Multipoint Ethernet Service”
  • Thanks to Bruno Chatras (Orange) for pointing out some inconsistencies in this section!
  • Added that the OSS/BSS would translate the requested service to an appropriate policy using the name space defined between the OSS/BSS and NFVO
  • “The OSS/BSS subsystem would communicate the service request and requirements as a policy to a global NFV Orchestrator (NFVO) subsystem using the name space of the pub/sub bus between these two subsystems (see Section 7.1). For example, the OSS/BSS could translate "Silver" service level into a policy defined using a Network Service (NS) Flavor ID, as defined by the name space of pub/sub bus between the OSS/BSS and the NFVO.”
New with Current Draft
Added after IETF 93

- Updated Section 8.1 “Establishment of a Multipoint Ethernet Service” (cont.)
  - Added a Local NFVO to each vPoP in the example

- Added Section 7.1 “Pub/Sub Bus Name Space”
  - Name Space discussion was part of Section 8.1 above
  - Moved it to a separate subsection (7.1)

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Next Steps

• Alignment with ETSI NFV on policy?
  • There seems to be no specific activity at ETSI NFV on policy-based components at this time
  • Opportunity for this RG to transfer points of view to ETSI NFV?
• Other?