POLICY MANAGEMENT IN NFV-MANO

Huawei
Policy management is a key enabler for improving the agility of network service orchestration in NFV-MANO.

Although its importance is well identified in Release 1 (MAN001), the feature work on policy management has to start from Release 3 (2016), due to intensive development on NFV interoperability specifications in Release 2.

Related work in other SDOs and open source community has been investigated at the beginning of study phase (IFA023), such as TMF ZOOM, IETF SUPA, 3GPP SON policy management and OpenStack Congress, BGP.
NFV-MANO policy is domain dependent, whose semantics associates with management functions in NFV-MANO reference architecture.

ISG NFV specifies a generic policy management framework in NFV-MANO. NFV-MANO policy is designed by the OSS/BSS or be pre-defined in the NSD/VNFD, and be distributed to NFV-MANO for enforcement.

An NFV-MANO entity can be mapped to either the PAP or the PF according to the context of applied policies.

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<th>Example of policy categories</th>
<th>Policy examples in IFA023</th>
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<td>NS LCM policies</td>
<td>NS healing policy (clause 5.8.4)</td>
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<td>Resource management policies</td>
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<td>Deployment policies</td>
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Add policy management interface to main NFV-MANO reference points.

Policy management interface includes:

a) Transfer policy
b) Delete policy
c) Query policy
d) Activate policy
e) De-active policy
f) Subscriptions/Notifications (policy conflict detection)
g) Associate/disassociate policy (applicable for Or-vnfm and Os-Ma)

Stage 3 solutions are converged in SOL012 GS (see next slide).
SOL012 GS specifies the RESTful implementation of the MANO policy management interface.

Define the URI, HTTP method, data models and describe the sequence diagrams

Align with the stage 2 design, provides functionalities for fulfilling interface operations of policy management.
In Release 4, new NFV features are proposed for enhancing policy management in NFV-MANO:

- NFV automation and autonomous management (FEAT20, IFA041), introduces intent based NS management in NFVO northbound.
- Policy model enhancement (FEAT26, IFA042), targets to specify policy information model and data model in NFV-MANO.