IPv6-based discovery and association of Virtualization Infrastructure Manager (VIM) and Network Function Virtualization Orchestrator (NFVO)
draft-bernardos-nfvrg-vim-discovery-00

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Motivation

• Virtualization is becoming pervasive to all domains of E2E networking
• The edge virtualization substrate has been largely assumed to be fixed or stationary
  • But it is now being extended to scenarios where the edge computing substrate is on the move & distributed
  • This is referred to as the fog
• Mechanisms to discover and advertise virtualized fog resources are required
  • The relationship between an NFVO and the resources it is capable to orchestrate through a VIM is statically defined according to current ETSI NFV specifications (IFA005)
  • Or-Vi interface does not include any discovery and automatic registration of (mobile) VIMs from a (mobile) NFV
Advertisement and discovery of mobile resources (VIM+NFVI)

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<table>
<thead>
<tr>
<th>terminal</th>
<th>- (VIM--NFVI)</th>
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<tbody>
<tr>
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<td>- (NFVO)</td>
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XXX (1. attachment)

+----2. Advertisement-------->

<........ (3. VIM Registration) ...

VIM+NFVI advertisement

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XXX (1. attachment)

+----2. Request------------------>

<---------------- 3. Advertisement---

+...(4. VIM Registration)......>

VIM+NFVI discovery
Next steps

• Describe some solutions enabling network-based discovery and advertisement of VIM and NFVO

• Gather interest from the RG on this type of work

• Comments are welcome!