

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)

```
network |-(-
terminal
               VIM--NFVI
XXX (1. attachment)
  +---2. Advertisement--
  <.....(3. VIM Registration)...+
```

VIM+NFVI advertisement

```
+-NFVI
terminal |-(
                              network |-
                                                   +-NFVI
XXX (1. attachment)
  +---2. Request-
  <----3. Advertisement---
 +...(4. VIM Registration).....>
```

Next steps

 Describe some solutions enabling networkbased discovery and advertisement of VIM and NFVO

Gather interest from the RG on this type of work

Comments are welcome!