ETSI NFV LIAISON ON MULTI-SITE CONNECTIVITY SERVICES

27.09.2019 To: TEAS & CCAMP

SETTING THE CONTEXT – IFA 022



ETSI GR NFV-IFA 022 (04-2018)

Concept of WIM (WAN infrastructure manager) role for Services over WAN

Transport network architecture mapping ACTN:

- Network controller = PNC
- WIM = MDSC
- NFVO = CNC

MULTI SITE CONNECTIVITY NETWORK FRAMEWORK AND CONCEPTS



ETSI GS NFV-IFA 032 V3.3.1 (2019-09)

Network Functions Virtualization (NFV) Release 3; Management and Orchestration; Interface and Information Model Specification for Multi-Site Connectivity Services

GS NFV-IFA 032 specifies the interfaces for management of multi-site connectivity services, produced by a WAN Infrastructure Manager (WIM). The specification also describes the operations and the information elements that are exchanged over these interfaces.

DGR/NFV-SOL017 "PROTOCOLS AND DATA MODELS"

ETSI ISG NFV would like to notify to the IETF TEAS WG about the start of the work in the ETSI NFV SOL working group of analysing protocol and data model solutions aiming at fulfilling the requirements and information model about "multi-site connectivity services" specified in the published ETSI GS NFV-IFA 032

In the work item, a number of existing (or in progress) protocol and data model solutions are being considered. The expectation is that the IETF Abstraction and Control of TE Networks (ACTN) will also be analysed. In our understanding, the scope of functionality of the interfaces exposed by the WIM in the GS NFV-IFA 032 can potentially map to the functionality offered by the ACTN framework.

Currently, the DGR/NFV-SOL017 is in an "early draft" status. Ongoing drafts of the DGR/NFV-SOL017 are available in the "NFV Open Area" accessible via https://docbox.etsi.org/ISG/NFV/Open/Drafts.

WIM INTERFACE BASICS

- MSCS Management interface
 - create/query/update/terminate
 - subscribe/notify/query sub/terminate sub
 - Create/query/update/terminate reservation
- Capacity Management interface
 - Capacity query, create/query/delete threshold
 - Topology/Node/link/Edge information Query
- Fault Management interface
 - Subscribe/Notify/Query Sub/Terminate Sub/Get alarm list/Ack alarms
- Performance Management interface
 - PMJob create/delete/query
 - Threshold create/query/delete
 - Subscrive/notify/terminate sub/query sub

MAPPING NFV WIM WITH ACTN

NFVO SouthBound Interface

Transport network architecture mapping ACTN:

- Network controller = PNC
- WIM = MDSC
- NFVO = CNC



IETF ACTN
Access link
Customer Node
Link
Node
Operator Node
Operator Node port
TE Topology
TE Tunnel
Access Point or VN Endpoint
(from IETF RFC 8454 [Error! Reference source not
found.])
Virtual Network (VN)
VN Access Point (VNAP)
t, but it maps to the NFVI-PoP network gateway or CE
that identifies an access link in between the customer
of the VN. Similarly, the Connectivity Service Endpoint
ctivity Service Endpoint also identifies the endpoint

Table A.2.2.1-1: Terminology mapping between the present document specification and IETF ACTN

NEXT STEPS AND ACTIONS REQUIRED

In order to determine the feasibility to analyse the IETF ACTN and the schedule of completion of the DGR/NFV-SOL017, the ETSI ISG NFV would welcome receiving more information about the:

- The relevant RFC and Internet Drafts for IETF ACTN.
- The status (completed, ongoing) of the specifications, and if ongoing, the expected dates of completion and/or stable draft.

AND:

In the eventuality in which the ETSI NFV ISG identifies additional requirements that are not currently
addressed in the ACTN framework and models, can you please provide us the information on the possible
options to inject these requirements in the current ACTN drafts work.

Date of next ETSI meetings:

02-06 Dec 2019 - NFV#28 17-21 Feb 2020 - NFV#29