



## LFN: ETSI NFV Release 4 updates (CNF)

Presented  
by:

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February 4, 2021

# Outline

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Overview status of ETSI NFV current work

Release 4, which includes Cloud-native VNFs and Container Infrastructure management

✓ Stage 3 specifications

✓ SOL001ed421: NFV descriptors based on TOSCA specification

✓ SOL018ed421: Profiling specification of protocol and data model solutions for OS Container management and orchestration

# ETSI NFV current work

## Release 2 (closed):

- ✔ Stage 2 maintenance is frozen after the completion of 1H2019 maintenance.
- ✔ Stage 3 maintenance also frozen after completion of the 1H2020 round (v2.8.1).

## Release 3 (frozen):

- ✔ Stage 2 is completed after delivering 1H2019 specifications (drop #3).
  - ✔ 10 new features completed at stage 2 level from 1H2018 (aka drop #1), 2H2018 (aka drop #2), and 1H2019 (aka drop #3).
- ✔ Stage 3 normative work is ongoing considering all completed stage 2. First “drop” of features completed in 1H2020 (v3.3.1), and next round will be 2H2020 (to be v3.5.1).

## Release 4 (open):

- ✔ Few informative work items started in May 2019. Additional work items (including normative) started at NFV#27 (Sep. 2019).
- ✔ Normative work of carried-over Rel. 3 studies is ongoing as part of Rel. 4.
- ✔ Published a first drop (Oct/Nov) with part of feature “cloud-native & container” and feature “security management”.



# Release 4: specification summary



## Published documents

Release 4, published documentation (5): 4 Group Specification (GS) and 1 Group Report (GR).

- ✔ 4 stage 2 specs:
  - ✔ 2 new stage 2 GS: NfV-IFA033/040.
  - ✔ 2 Propagated/evolved from Rel. 3: NfV-IFA010/011.
- ✔ 1 GR: NfV-REL011

## Active work items

Release 4, ongoing unpublished work items (refer to Release 4 Definition): 33 WI.

- ✔ 10 GR drafts (NfV-EVE018/019, NfV-IFA034/035/037/038/039/041/042, NfV-REL013).
- ✔ 1 stage 2 GS draft (NfV-IFA036).
- ✔ 1 stage 3 GS draft (NfV-SOL018).
- ✔ 4 GS drafts (NfV-SEC023/024/025/026) and 1 GR draft (NfV-SEC027) on security.
- ✔ Propagate/evolved Rel. 3 deliverables: 16 WI:
  - ✔ 12 stage 2 GS (NfV-IFA005/006/007/008/010/011/013/014/026/030/031/032),
  - ✔ 2 GR (NfV-IFA015/024),
  - ✔ 1 stage 3 GS (NfV-SOL001) and
  - ✔ 1 security GS (NfV-SEC012).

Release 4, ongoing “maintenance work”: 3 WI.

- ✔ 3 stage 2 GS (NfV-IFA010/011/040).

Refer to Release 4 Definition available on the [NFV Open Area](#).

## SOL001 ed421: NFV descriptors based on TOSCA specification

**Scope:** This revision of NFV-SOL001 continues the development of the specification as part of the NFV Release 4. This edition will add specification of descriptors to support the Release 4 features, conduct maintenance and may extend the scope of the former Release 3 edition summarized hereafter: NFV-SOL 001 develops a data model specification for NFV descriptors fulfilling the requirements specified in ETSI GS NFV-IFA 011 and ETSI GS NFV-IFA 014. The specification will be based on the OASIS TOSCA Simple profile in YAML specification.

<u>Milestone name</u>	<u>Target date</u>
TB adoption of WI	2020-12-15
Early Draft	2021-01-21
Stable Draft	2021-03-31
Draft for approval	2021-04-20
WG approval (delete if no WG)	2021-04-30
TB approval	2021-05-31
To be published as version	V 4.2.1

# SOL018 ed421: Profiling specification of protocol and data model solutions for OS Container management and orchestration



**Scope:** The present document provides a mapping of the NFV object model for OS container management and orchestration to managed objects of Kubernetes® and Helm™ as specified by the CNCF® along with a specification of a mapping between a common set of input parameters (e.g., derived from VNFD/NSD and/or NFV-MANO RESTful APIs) and output parameters associated to the management and orchestration of the referred managed objects. It profiles the reference Kubernetes® API as NFV protocol and data model solution for OS container management and orchestration. It profiles the reference Helm™ documentation as NFV protocol and data model solution for management of OS container workload based on an MCIOP. It profiles the reference Docker™ registry API as NFV protocol and data model solution for OS container image management. The latest published versions of the reference Kubernetes® API, Helm™ documentation and Docker™ registry API are profiled against the requirements on the functions and the management service interfaces of the Container Infrastructure Service Management (CISM) and Container Image Registry (CIR) functions as specified in ETSI GS NFV-IFA 040 [2] and ETSI GS NFV-IFA 010 [1]. The present document includes guidelines and rules on how the profiled and referenced solutions can be adopted in a way that facilitates their integration with NFV-MANO framework solutions.

<u>Milestone name</u>	<u>Target date</u>
TB adoption of WI	2020-12-15
Early Draft	2021-01-31
Stable Draft	2021-03-31
Draft for approval	2021-05-15
WG approval (delete if no WG)	2021-05-31
TB approval	2021-06-30
To be published as version	V 4.2.1

# More information

**NFV Technology Page**  
(information / main website)  
<http://www.etsi.org/nfv>

NFV Portal (working area)  
<http://portal.etsi.org/nfv>

NFV Proofs of Concept  
(information)  
<http://www.etsi.org/nfv-poc>

NFV Plugtest (information & registration)  
<http://www.etsi.org/nfvplugtest>

NFV Registries  
[https://nfvwiki.etsi.org/index.php?title=NFV\\_Registries](https://nfvwiki.etsi.org/index.php?title=NFV_Registries)

## Open Area and other tools:

- ✔ [Published Documents](#)
- ✔ [Working Drafts](#)
- ✔ [Issue tracker](#)
- ✔ Releases documentation: [Rel. 2 Description](#), [Rel. 3 Description](#), [Rel. Definition](#)
- ✔ Detailed [Release 3 and 4 specification progress wiki pages](#):
- ✔ [OpenAPI representations](#) of GS NFV-SOL NFV-MANO APIs
- ✔ [GS NFV-SOL 001/006 supporting files](#) on ETSI Forge
- ✔ [GS NFV-TST 010 Robot API test files](#)

