Plugtests Team

ETSI Team

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TAP

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Registration update (deadline July 15th)

- Accenture
- Adlink Technologies
- Canonical
- Cisco
- CNIT
- Litmus IS
- FSCOM
- Huawei
- Nextworks
- NTT Corporation
- Palo Alto Networks
- STC
- TATA Elxsi
- T-Mobile
- Ulak Haberlesme
- Vulk Coop
- Wind River
- xFlow Research

Supporting Open Source Communities:

NFV & MEC IOP Plugtests Scope

Multivendor Interoperability

- NFV Interop
- MEC & MEC-in-NFV Interop

During the Pre-Testing phase

- NFV API Conformance
- MEC API Conformance

Additional tracks

- NFV Automated Interop (based on NFV-SOL016)
- CNCF CNF Testing
- Or-Or Interop (based on NFV-SOL011)
- Multi-vendor NS & 5G demos (5G core, network slicing..)
Call for participation

- Virtual, Physical and Containerized Network Functions
- Management and Orchestration solutions: NFVO, VNFM
- Network Function Virtualisation Infrastructure and Virtual Infrastructure Managers
- Hardware and Labs
- MEC Platforms, Platform Managers and Orchestrators (MEO, MEAO, MEPM, MEPM-V)
- MEC Applications
- Operations and Business Support Systems: OSS, BSS, Slice Managers
- Test Tools and simulators implementing NFV or MEC APIs.
Main Plugtests Enablers: HIVE & TAP

**HIVE:** Hub for Interoperability and Validation at ETSI

- Interconnecting participants and solutions

**TAP:** Test Automation Platform

- Enabling participants to run automated API Conformance Test Suites autonomously
Scope – NFV Interop testing

✔ Based on NFV- TST007 Guidelines for NFV Interoperability Testing

✔ Several configurations
Scope – NFV Automated Interop Testing

- New experimental Robot Framework Test Suite
- Based on NFV- SOL016 MANO Stage 3 Procedures
  - VNF package on-boarding
  - NS instantiation
  - NS termination
  - NS scale VNF
  - NS update (external VNF connectivity)
- Triggers and checks based on NFV-SOL005, SOL003, SOL002
Scope – MEC Interop Testing

- Multi vendor Test Sessions
- Several configurations, testing for both MEC Standalone and MEC-in-NFV solutions
- Building on the MEC IOP Test Plan from the NFV&MEC Plugtests (2020)
  - MEC Application Lifecycle
  - Traffic rules management and enforcement
  - MEC Services and MEC APIs
Pre-testing – NFV & MEC API Conformance Testing

API Specifications

- NFV-SOL002, NFV-SOL003, NFV-SOL005 v2.4.1, v2.6.1, v2.7.1, v2.8.1 (dev), v3.3.1
- NFV-SOL009, NFV-SOL011, NFV-SOL012 v3.3.1
- MEC010-2, MEC011, MEC012, MEC013, MEC021, MEC029 v2.1.1
- MEC014, MEC015 v2.1.1, MEC016 v2.2.1

Descriptor Specifications

- NFV-SOL001, NFV-SOL006 v2.7.1, v3.3.1

Test Specifications

- NFV-TST010 v2.4.1, v2.6.1, v2.7.1, v3.3.1
- MEC-DEC032 v2.1.1

Robot Framework, Test Suites available in the ETSI Forge

- NFV TST010 Robot Test Suite
- MEC DEC032 Robot Test Suite
NFV&MEC Plugtests – 2021 Timeline

1 – 28 February 2021
NFV&MEC API Plugtests 2021

Registration
Remote Integration & Pre-Testing
Individual self-service Remote API Test Sessions
Plugtests Report
Regular conf-calls

1 – 15 October 2021
NFV&MEC IOP Plugtests 2021

Registration
Remote Integration & Pre-Testing
Remote Multi-vendor Interop Test Sessions
API Conformance Test Sessions
Regular conf-calls

Plugtests Report

Register for the NFV&MEC IOP Plugtests 2021
Registration – deadline July 15th

  ✔ As many delegates as needed

✔ Only Operators and Academia can register as observers
  ✔ Vendors are expected to provide components or tools for the Test Sessions and have an active participation

✔ Once registered
  ✔ The NFV Plugtests Programme NDA needs to be signed
    ✔ For new participants in the Programme only
    ✔ Same as for previous events, regular participants don’t need sign again
  ✔ You tell us how you plan to participate (component, tool…)
  ✔ You get access to the [NFV-PLUGETSTS Wiki](https://www.etsi.org), Slack and NFV_PLUGTESTS Mailing list
Remote integration & Pre-testing

✔ Regular preparation calls, Mondays 3-4 pm CET
  • July 5th – Open Kick-off call (today!)
  • July 19th
  • August 2nd
  • August 23rd
  • September 6th
  • September 13th
  • September 20th
  • September 27th

✔ Main goals
  ✔ Get your implementation / lab connected to HIVE (Instructions in the WIKI)
  ✔ Get familiar with test specifications and ask questions
  ✔ Get your Function Under Test documented on the wiki
  ✔ Prepare, validate and share descriptors, packages …
  ✔ Start (pre-)testing with 3rd parties
  ✔ Run API Conformance on TAP

Pre-testing: start as soon as ready, be proactive!
Contact 3rd parties on Slack, book pre-testing session, and ask questions!!
How API Conformance Test Sessions are run

- During remote integration phase
  - Participants get HIVE (VPN) and TAP access
  - All FUTs are deployed and expose their APIs on HIVE, so that TAP can connect to them
- During the pre-testing phase (September), participants can test any API anytime:
  - Connect to Slack to interact with their team, partners, observers and Plugtests team, launch video call if needed
  - Open a session on TAP
  - Enter configuration information and run the tests for the selected API
  - Validate or discard results
- Participants, Observers and Plugtests Team **meet regularly** to sync, discuss and gather feedback
  - Issues on specs, APIs, Test Specs, ..
  - Practical issues on TAP or other tools / arrangements
- At the end of the event, ETSI freezes results and builds **statistics with overall aggregated data** that is be published in the **Plugtests Report**
  - Detailed results belong to each participating organisation.
How IOP Test Sessions are run

- Before Plugtests start
  - Participants make their implementations available in HIVE
    - Connect their lab, deploy in a 3rd party lab, or
    - Upload images to NF Repository / Docker Registry
  - ETSI publishes an IOP Test Schedule proposal
    - Featuring different combinations of FUTs
- During the Plugtests, participants follow the IOP Test Schedule:
  - Connect to Slack to interact with other teams and observers, launch a video call
  - Run IOP testing collaboratively according to the Test Plan
  - Enter and validate results in the TRT
  - Participants, Observers and Plugtests Team meet daily to sync, discuss and gather feedback
    - Issues on Specs, Test Specs, ..
    - Practical issues / arrangements for the Test Sessions
  - At the end of the event, ETSI freezes results and builds statistics with overall aggregated data that is be published in the Plugtests Report
    - Detailed results belong to each participating organisation.
# IOP Test Session Schedule

**Monday 3 - 18:30**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:30</td>
<td>60 SETUP</td>
</tr>
<tr>
<td>19:00</td>
<td>60 WELCOME</td>
</tr>
<tr>
<td>20:30</td>
<td>30 COFFEE BREAK</td>
</tr>
<tr>
<td>22:00</td>
<td>60 LUNCH BREAK</td>
</tr>
<tr>
<td>14:30</td>
<td>30 COFFEE BREAK</td>
</tr>
<tr>
<td>16:30</td>
<td>30 WAP UP</td>
</tr>
</tbody>
</table>

### AARNA (ONAP)
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- S-VNFVM (120/120)

### CISCO
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- S-VNFVM (120/120)

### ERICSSON
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)

### HUAWEI
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)

### LUNSOFT
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)

### RIFT
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)

### UBIQUE
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)

### WHITESTACK (OSM)
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)

### API (T)
- Single Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
- Multi Vendor NS (120/120)
IOP Test Session Reports

- trt.plugtests.net
- Instructions in the WIKI
Guidelines for Comms

You are invited to communicate on your participation to Plugtests:

- PRs, blog posts, social media...
- Note: If you are to mention other participants, please make sure they are OK with it
- The event might be recorded only for ETSI use and related promotional purposes. By attending our event, you are hereby made aware that you may be photographed and/or video recorded and that your consent is presumed.

Some guidelines when communicating on Plugtests Results:

- Please wait for the Plugtests Report to be published before communicating on Plugtests Results
- You can communicate on your own company's (/project) results
- Do not mention other companies results if you do not have a written agreement with them
- Do not compare to other participants, i.e: "we are the first", “the only ones”, etc....

ETSI acknowledges participation, but does not endorse or certify companies, products or results

- In case of doubt, check the RoE and NDA, or ask ETSI
Questions?
Thank you 😊

plugtests@etsi.org