Common NFVI Telco Taskforce

Frequently Asked Questions (FAQ)

Q: What is the CNTT and why is the project important to the community?
A: Initially organized early in 2019, the Common Network Function Virtualisation Infrastructure Telecom Taskforce (CNTT) was initially created in response to rapid changes in how networking applications are being designed, built and managed, plus a growing recognition of a perceived functional gap between the previous standard infrastructure models and the architectures needed to support Network Function Virtualization (NFV) applications.

Q: Who in the community should get involved and what can they do to make an impact?
A: Since it is sponsored by several open communities -- LFN and GSMA, it is open to anyone, but we encourage Vendors that service and support the Telecom industry, Telecoms, large and small, and of course other Open Source groups

Q: What is the best way to for me and my company to get involved in this effort?
A: The CNTT community has a number of ways to engage, for those who want the intense dialog of a F2F meeting, these meetings are scheduled regularly. The final cadence is still to be determined, but it will definitely be tied to relevant conferences and other meetings going forward. For those who are unable to travel or participate F2F, there are regular project meetings over Zoom and also opportunities to contribute directly to the documents and lab testing efforts.

Q: When are your next release(s)? What is the Release Cadence for RM, RA, and RI?
A: We are trying to get a release cadence of 3 months in order to keep the momentum going and to allow for a dynamic way to get feedback and input from various communities without having to wait for long before seeing the result. We expect the cadence to slow down as the systems mature and stabilize. Some of the reference architectures will map to the release cadence of their respective base projects.

Q: What is the scope of each release? For R2 Scope | Post Botrange | Beyond?
A: The current Release (Botrange) is focusing on:
- o   Maturing the Reference Model to a relatively stable point.
- o   Complete the initial release of the first Reference Architecture based on OpenStack.

Post Botrange we expect the focus to be:
- o   Continue to mature the Reference Model (the expectation is to have it mostly stable by the next release)
- o   Continue to mature the OpenStack Reference Architecture.
- o   Complete the first initial OpenStack Reference Implementation.
- o   Identify the initial set of test criteria for the certification
- o   Start a second Reference Architecture based on the support for containers and containerized applications

Beyond:
- o   Establish the Common NFVI to be used for NFVI Compliance and Verification as well as VNF Compliance and Verification.
  - •   The initial availability of NFVI Certification using Common NFVI is targeted for April 2020.

Q: What's the difference been CNTTs NFVI testing vs. ONAP testing & certification? Testing & Certification Expectations / Value ONAP vs. NFVI?

A: CNTT is concerned with the NFVI model and architecture itself, while ONAP focuses on the VNF on-boarding and LCM processes. The intention is for the CNTT NFVI testing to leverage the existing suite of OPNFV tests and only add additional test if gaps are found in the existing suite. Ultimately, testing will be used to build certification programs. This will reside under the OVP programme, which will cover both the NFVI certification, and the VNF certification suites. The Testing suites will be relatively stable over time, but the platforms that will be tested will change as new reference architectures and implementations are added.

Q: Who owns the specifications (RM, RA) & reference implementations - where do I go to begin verification?

A: For the short term, all CNTT artefacts are located in a single repository hosted by CNTT under the sponsorship of LFN to make sure we stay aligned on the project objectives, and minimize the potential for fragmentation and project dilution. In the long term, we expect GSMA to maintain the Reference Model and Architectures, while OPNFV will maintain the Reference Implementations and test beds. A hackfest is planned for early next year for hands on work to review the toolings, tests used and the process needed to get through the certification programme. The programme currently does not use the CNTT artefacts, but the intention is to make those artifact ready as soon as practical, so we encourage all vendors to get familiar with the existing tooling and process.

Q: When will I be able to start using the NFVI and NFV Certification programmes?

A: Both the NFVI Certification programme and VNF Certification programmes were already launched by LFN through their OVP programme, so vendors can start certifying their NFVI and VNFs today via this programme today.

Q: How do the different CNTT documents interrelate with each other?

A: Within the framework of the Common Telecom NFVI vision, there are three levels of documents needed to document the components and allow the practical application of the systems. The Reference Model represents the most abstract level and was created first. It is an umbrella document that will likely change little over the life of the project. The intention is to take the Reference Model, which is purposely designed to be able to be applied to a number of technologies, and apply it to a discrete number of concrete and ultimately deployable Reference Architecture platforms. Given the rapidly changing nature of this technology, the reference architecture documents once they are created will be relatively stable, but it is anticipated that there will be new ones created and new technologies are developed. The practical details required to deploy a production environment will be found in the Reference Implementation documents. There will be at least one for each of the Reference Architectures. These documents will likely change more frequently as new hardware becomes available and components change over time.

Q: What is the vision for the intended outcome for the project? What are CNTT's goals & value proposition?

A: The goal of the task force is to develop a robust infrastructure model and a limited discrete set of architectures built on that model that can be tested and validated for use across the entire member community. The community, which is made up of a cross section of global operators and supporting vendors alike, was created to support the development, deployment and management of NFV applications faster and more easily.

Q: Why do we need CNTT? A: Identify Defend Known Arguments to CNTT)?

A: The industry has an opportunity related to NFV infrastructure to standardize and innovate on how network virtualization technologies are designed and delivered to enable more efficient Telco operations. With 5G on the horizon, pressure is building for more agility in the design and deployment of VNFs to support the expected growth in network service driven business models. Developing a common NFVI addresses a portion of the business model.

Q: What are CNTT's future plans?

A: The final make-up of the CNTT will be determined as the work progresses, but the intention is for the process, artifacts, and management to remain under the auspices of the GSMA & LFN organizations to continue the enhancement and management of the NFVI framework established by CNTT. Target date for transition is still under discussion.

Q: As a third=party / integrator, can I get a NFVI certification?

A: There is an existing NFVI certification, under the OPNFV Verified Programme. The current requirement level is very low at this stage. CNTT will contribute to an improved and expanded certification. This is in the CNTT backlog and discussion with OPNFV has started already.

Q: What is your roadmap for VM's, for containerization, etc.?

A: The Reference Model is purposely high level enough so it is neutral and will not differentiate between them, however, the intention is to create reference architectures to support both VMs and Containers. We have already launched the first release of the OpenStack based Reference Architecture for VM workloads. The decision to complete this one first was based on the member community's requirements and immediate needs. In the coming months, the second Reference Architecture will be focused on Containers. We are closely engaged with CNCF Telco User Group (TUG) to make sure we address the requirements and influence the development of the container technologies. In addition, we will also be looking at a transitional Reference Architecture for a hybrid model of VM and Containerization to allow a smooth migration from VM to full containerization within Telco's environment without having to go through a painful flash cutover. In regards to ONAP vs OSM: CNTT is MANO agnostic and our artefacts are not coupled or targeting a named MANO solution. CNTT is applicable to ONAP, OSM, or any other MANO solutions.

Q: How do I get more information on CNTT?
A: See information listed below for: Tracks | Repositories | Mailing Lists | Meeting Schedules | Contacts

Common NFVI Telco Taskforce (CNTT)

Home Page: **CNTT Home**

Common NFVI Meeting Schedules | Zoom Bridge | Minutes: **Common NFVI Meeting Information**

Governance

Communications, Budgets, Marketing, Recruiting, Adoption, and Release Planning

Repository: **Governance**

Mailing List: **Join Governance Mailing List**

Contacts: **Mark Cottrell**, **Jonathan Beltran**, **Rick Tennant**

Reference Model

Framework to drive continuity of Reference Architectures for NFVI

Repository: **Reference Model**

Mailing List: **Join Reference Model Mailing List**

Mailing List: **Join Technical Steering Committee Mailing List**

Contacts: **Rabi Abdel**, **Walter Kozlowski**

Reference Architecture

Discrete NFVI specifications based on the Reference Model

Repository: **Reference Architecture**

Mailing List: **Join Reference Architecture Mailing List**

Contacts: **Rabi Abdel**, **Walter Kozlowski**

Reference Implementation

Implement & deploy based on the design & configurations of each Reference Architecture

Repository: **Reference Implementation**

Project Proposal: **CNTT RI OPNFV Project (Approved)**

Mailing List: **Join Reference Implementation Mailing List**

Contacts: **Fu Qiao**, **Mike Fix**, **Mark Shostak**, **Kyle Greenwell**

Verification & Validation

Deliver compliant NFVI against a physical manifestation of Reference Architectures

Strategy & Vision: Reference Model **Chapter 8** + **Chapter 8 Annex**

Mailing List: **FUTURE**

Contacts: **Mike Fix**, **Fu Qiao**, **Kyle Greenwell**

Common NFVI Lifecycle

Establish an open-sourced end-to-end ecosystem to deliver, maintain & continually improve the infrastructure delivery lifecycle.

FUTURE

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