

**Onboarding Tutorial (2020-01-15)** 

CNTT F2F Workshop LFN DDF, Prague, Czech Republic Jan. 13<sup>th</sup> – 16<sup>th</sup>, 2020

THE LINUX FOUNDATION



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## **CNTT** | Who We Are





Globe







**SPONSORS** 

GSMA"









STC الاتصالات السعودية













**ERICSSON** 









**MIRANTIS** 



Telstra









Bell

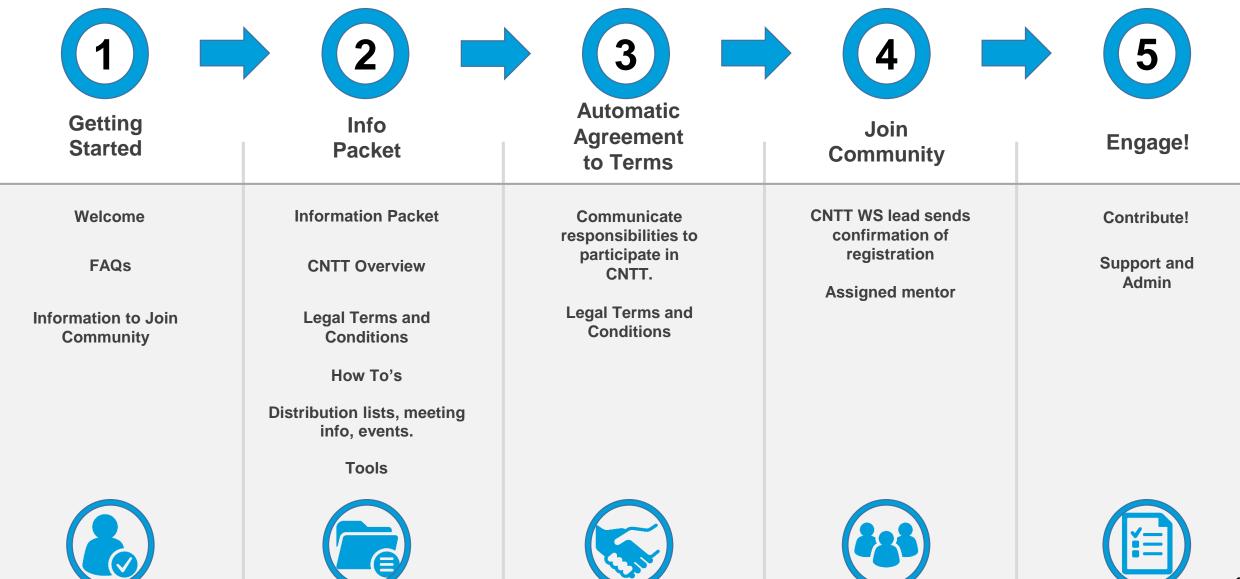








# **CNTT** | Participant Onboarding



### **CNTT** | Welcome To The CNTT Community



The following information is provided in this packet to help you get onboarded to CNTT as a contributing member.

- 1. An overview of CNTT
- 2. Legal Terms and Conditions
- 3. How to get engaged and begin contributing (what to do, who to contact, when to meet, tools, etc.)



### **CNTT** | Onboarding FAQs



Info Packet

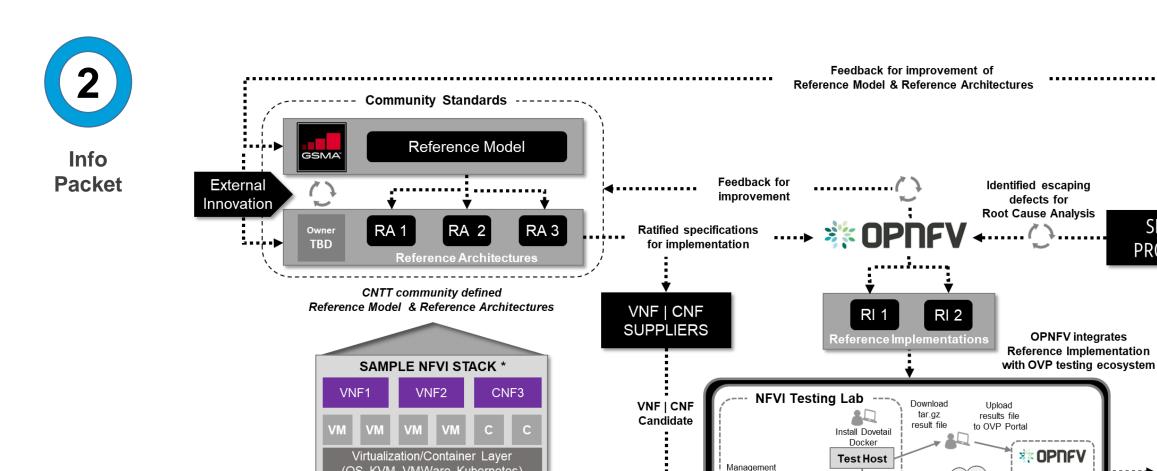
**How long will it take to review the info packet?** The basic onboarding info packet review will take approximately 1 hours of your time, initially. After that, your consistent engagement and contributions are based on your own commitment.

What will I learn about during onboarding process? You'll get an overview of the scope of CNTT and the underlying technologies, solutions, development status and roadmaps. Additionally, you'll be made aware of participant responsibilities and legal obligations. Finally, you'll be provided with support and logistical information you'll need to get fully engaged with the CNTT developer community.

What help will I get throughout the onboarding process? During the onboarding process members are supported by the CNTT onboarding team members: (see Slide 19) indicated in your "Getting Started" email. Onboarding members are welcomed to reach out for assistance any time during the onboarding process.

What happens once I get onboarded? Once you have reviewed the CNTT onboarding information and have agreed to the perquisite terms and agreements associated with participating and contributing to the Task Force, and you have completed onboarding and now it will be your opportunity to join desired work streams. For an initial period after onboarding, you will be assigned a volunteer mentor from the Task Force to help you get up to speed and contributing quickly.

### **CNTT** | Common NFVI Lifecycle Framework



DMZ

Firewall

Interface to

public internet

Network

SUT

Install Data Path Network

**SERVICE** 

**PROVIDERS** 

**OPNFV** Certified

VNF | CNF

**GSMA** 

Server

**OVP Testing Ecosystem** 

OPNFV

Verified Program

\* For illustrative purposes only

(OS, KVM, VMWare, Kubernetes)

Network

Common

Node Setup

Compute

Bare Metal

Storage

Ceph Setup



#### **CNTT** | Initiative Characteristics



Info Packet

#### Scope

- Define an NFVI Reference Model and a finite set of NFVI Reference Architectures based on the Reference Model.
- Establish an VNF | CNF implementation & certification ecosystem
- Leverage Linux Foundation Verification and Open Source Projects

#### **Benefits**

- Enables of delivery of VNFs | CNFs to market efficiently and effectively.
- Lowers VNF | CNF on-boarding costs
- Accelerates innovation and time to market of next-generation cloud-native services.

#### **Key Components**

- Fully open-sourced structure, approach, and solutions
- Governance & Technology workstreams
- Close coordination and collaboration with LFN, OPNFV, OVP, CNCF, and other open-source organizations such as Kubernetes and OSF
- Continuous improvement and lifecycle management

#### **Metrics (Examples)**

- Content contributions by Company
- Content contributions by Individual
- # of Labs
- # of Badges Issued
- # of SP Adoptions



### **CNTT** | The Four Key Components of Framework

- 1. Reference Model (RM)
- 2. Reference Architecture (e.g. RA1, RA2, etc.)
- 3. Reference Implementation (e.g. RI1, RI2, etc.)
- 4. Reference Certification (e.g. RC1, RC2, etc.)



#### CNTT 1. Reference Model (RM), 2. Reference Architectures (RA)

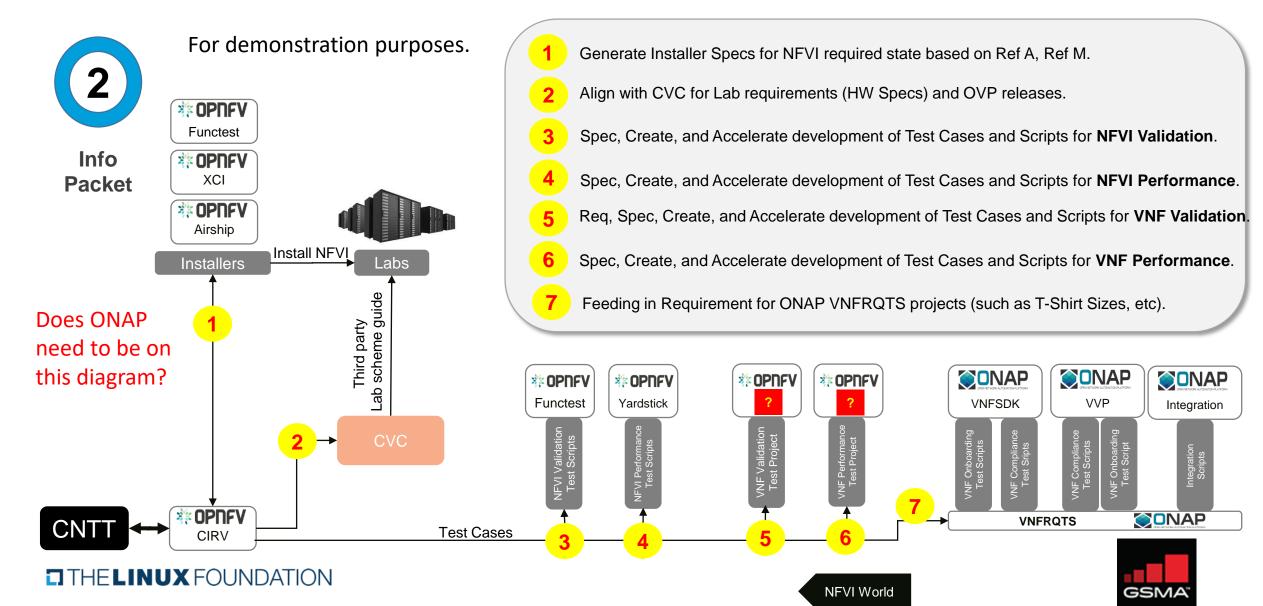


To understand the work being done to lead the industry to adopt Common NFVI standard Reference Model and Reference Architectures, one needs to first understand the two core tenets underlying all efforts to develop the Reference Model and Reference Architectures. That is...

- 1. VNF abstraction as a goal requires the VNF to not be particularly dependent on NFVI.
- 2. The realization of value delivered into the VNF supply chain is dependent upon the ability of the CNTT community to coalesce on a Common Reference Model and discrete number of Reference Architectures.

Therefore, the entire CNTT approach is rooted in and built upon these tenets as core beliefs.

### CNTT | 3. Reference Implementation



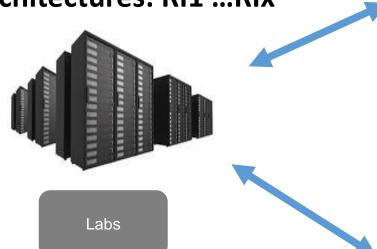
#### **CNTT** | 4. Reference Certification



Info

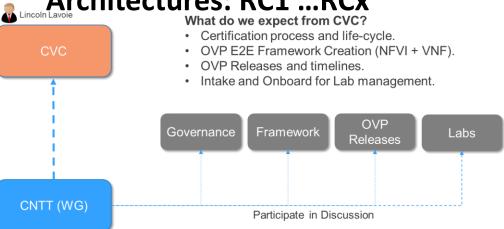
**Packet** 

**Instantiated Reference Architectures: RI1 ...RIx** 

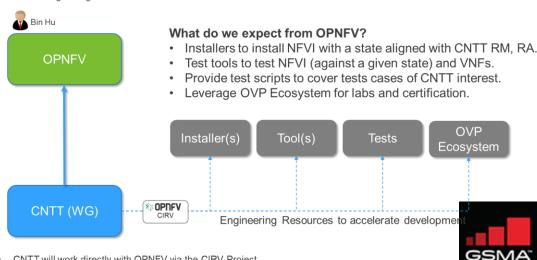


#### **Operationalized Reference**





- CNTT will work directly with CVC to align with governance
- Output of CNTT will be input to release scope, labs needs, and augment governance where needed



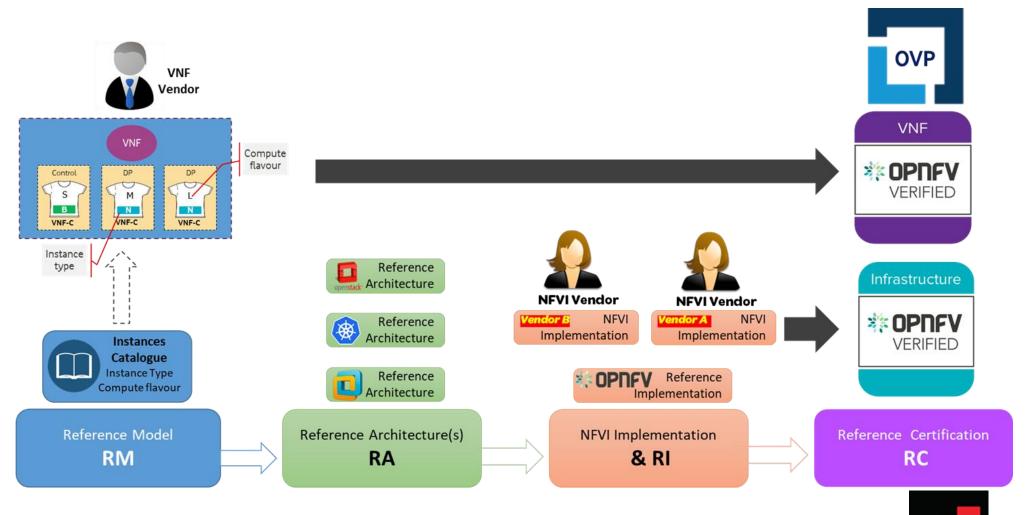
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- CNTT will work directly with OPNFV via the CIRV Project
- Output of CIRV will be RI requirements and test cases

#### **CNTT** | The References (Rx) and Expected Outcomes



Info Packet



GSMA



#### **CNTT** | Latest Status



Info Packet

#### **VALUE STREAMS | STATUS**

#### GLOBAL NEVI LIFECYCLE FRAMEWORK

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

Status: In-Progress (Target Delivery - 4/30/20)

#### REFERENCE MODEL

Develop a framework to drive continuity of Reference Architectures for NFVI

RM v2.0 (Botrange) Complete – 9/19/19) RM v3.0 In-Progress (Jan '20)

#### REFERENCE ARCHITECTURES

Design number of discrete NFVI specifications based on the Reference Model

RA # 1 (OpenStack), v1.0 (Botrange) Complete - 9/19/19

RA # 1 (OpenStack), v2.0 In-Progress (Jan '20)

RA # 2 (K8 | Containerized), v1.0 In-Progress (Jan '20)

#### REFERENCE IMPLEMENTATIONS

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

RI v1.0 In-Progress (Jan '20)

#### REFERENCE CERTIFICATION

Deliver community certified NFVI | VNFs | CNFs to the Service Provider Marketplace

Status: In-Progress (Target Delivery – March 2020)





### **CNTT** | Agreement To Terms



"...CNTT is open to participation by any individual or organization that agrees to comply with these ToR(each such participant, a "Participant")...Only individuals that are self-employed may participate as a Participant (in the case of an employed individual, their employer will need to agree to be a Participant)..."

- CNTT <u>Terms of Reference</u>



#### **CNTT** | Detailed Policies and Terms



Legal Terms and Conditions CNTT Members need to abide by:

- Linux Foundation Networking (LFN)
  - Anti-Trust Policy
  - Code of Conduct
  - Trademark Policy
- GSMA
  - Anti-Trust Policy
- Joint GSMA / LFN
  - Terms of Reference
  - Creative Commons Attribution

- Terms of Use
- Privacy Policy
- Cookie Policy



### CNTT | Links



The following links include all the contacts and information you'll need to signup for workstreams, email distribution lists, find and schedule meeting, register for events, and use the CNTT tools for community engagement.

- CNTT LF Networking Wiki Page (Confluence)
- CNTT Technology Specifications Main Page (GitHub)
- CNTT Organizational Structure
- <u>CNTT Meeting Schedules</u>(with Zoom Conference Bridge Links)
- CNTT Workstream Signups
- CNTT Quick Reference info doc
- GitHub Tutorial
- Main CNTT Governance Group Email list <a href="mailto:cntt-gov@lists.opnfv.org">cntt-gov@lists.opnfv.org</a> (please do not hesitate to use)

### **CNTT** | Onboarding Checklist



Here is a recommended checklist of items participants should have completed to join the community.

- ✓ Review (this) CNTT Information Packet
- ✓ Review all legal policy and terms (See Slide 15)
- ✓ Signup for an LFN ID
- ✓ <u>Signup for a GitHub ID</u> (then email <u>Rabi Abdel</u> your Github ID)
- ✓ Signup for workstream participation
- Schedule to attend workstream(s), Governance Steering, and or Technology Steering meeting(s)
- **✓** Start engaging!



### CNTT | THANK YOU



Thanks for engaging with CNTT. For further support and ongoing engagement information, you may reach out to the following folks for further administrative help any time:

Jonathan Beltran, jonathan.beltran@att.com

Rick Tennant, <a href="mailto:rick.tennant@att.com">rick.tennant@att.com</a>

Jim Baker, jbaker@linuxfoundation.org



# Common NFVI Telco Taskforce

**End** 

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