

CNTT Technical F2F Work Shop, Châtillon, France, July 23-25, 2019

July 23-25 Châtillon, France

- [General information](#)
 - [When](#)
 - [Where](#)
 - [Upon Arrival](#)
 - [Remote Attendees](#)
- [Overview](#)
- [Agendas](#)
 - [Agenda Day 1 - 23 Jul 2019](#)
 - [Agenda Day 2 - 24 Jul 2019](#)
 - [Agenda Day 3 - 25 Jul 2019](#)
- [Contacts](#)
 - [Agenda contacts](#)
 - [Site Contacts](#)
 - [A/V Contacts](#)
- [Background Materials](#)
- [Additional Info](#)
 - [Templates](#)
 - [Evidence](#)
 - [ToDo List](#)

General information

When

July 23rd - July 25th 0900 - 1800 CEST

Where

[Orange Gardens](#)

44 avenue de la République

Châtillon (South Paris)

[Public transport info](#)

[On site parking requires pre-approval](#)

Upon Arrival

A person will be available for your registration on-site. You need to be pre-registered.

Event registration can be found at this link: <https://www.linuxfoundation.org/calendar/cntt-f2f-meeting/>

The person will then guide you towards the meeting room: 3B Building on the 2nd floor. Follow the signs.

All sessions will be in the main room : November (ex Giant100) (unless otherwise specified) - Other breakout rooms: December and February

Remote Attendees

Please join the meeting on the zoom bridge: <https://zoom.us/j/999652583>

You will be muted on join. If you join by telephone use *6 to unmute. Joining by computer audio select the unmute option.

Remote presenters should use a headset when presenting as the built-in speaker/microphone on your laptop have horrible acoustics and are really hard to understand after going through the conference room PA system

Overview

This three day face-to-face will be a working session to bring the CNTT work announced at ONS North America to the broader technical community. It is meant to be a collaborative technical working session with the aim of progressing Release 1 of the CNTT Reference Model and Reference Architecture. Please come prepared to roll up your sleeves and dive into hands-on work. Attendees should [register](#) to make sure we have capacity correct for all the resources.

In preparation for the meeting, please see the following GitHub repositories for the current working drafts. Please note that these are working drafts. Please also hold off on submitting Pull Requests on these documents until we've all had a chance to level-set and discuss at this F2F meeting.

UPDATED: The CNTT working draft links below have been updated to represent the working draft version to be used during the meeting. Please review the updated drafts before the meeting.

Current CNTT Reference Model Working Draft: <https://github.com/cntt-n/CNTT/>

Rendered (i.e. formatted, more readable) version of the current CNTT Reference Model Working Draft: <https://cntt-n.github.io/CNTT/>

Working Draft Process Information: https://cntt-n.github.io/CNTT/logistics/#approval_process

Each of the sessions are assigned an [etherpad](#) that can be used by all attendees to take notes and collaborate on next steps. Link to the master Etherpad with links to the complete session set: https://etherpad.opnfv.org/p/CNTT_F2F_Meeting_Notes_July2019

Agendas

Agenda Day 1 - 23 Jul 2019

	notes	Day 1	Slides	Recordings
(09:00) 15 min Tue	Day 1 notes	Welcome Message Orange Housekeeping Orange Conference Bridge, WiFi, Breaks and Lunch, Room Access		 welcome.mp4 poor audio quality
(09:15) 10 min Tue	Day 1 notes	Agenda Review Jonathan Beltran, AT&T Brief overview of agenda and how organized	 CNTT_Par...iew.pptx	 agenda.mp4 poor audio quality

(09:25) 35 min Tue	Day 1 notes	Opening Remarks David Hutton, GSMA, Heather Kirksey, Linux Foundation <i>Opening round table remarks to outline long-term expectations, perspectives</i>		 open_rem...arks.mp4 poor audio quality
		Current Status And Vision		
(10:00) 30 min Tue	Day 1 notes	Overview & Level Setting Mark Cottrell, AT&T, Rabi Abdel, Vodafone <i>Review and expand on global framework one pager, provide insight into longer term vision working with GSMA and LF, provide guidance on future release scope backlog.</i>	 Overview..._v2.pptx  CNTT_Par...del.pptx	 overview.mp4 Poor audio quality
(10:30) 30 min Tue		Break		

(11:00) 30 min Tue	Day 1 notes	Community Technology Update Facilitator: Rabi Abdel, Vodafone <i>Reference Model vs Reference Architecture vs Reference Implementation. MVP Concept.</i>	 CNTT_Par...del.pptx	 Comm_tech.mp4 Poor audio quality
---	------------------------------------	---	---	--

(11:30) 30 min Tue	Day 1 notes	Panel Discussion: Reference Model: Overall Concepts Facilitator: Beth Cohen, Verizon ETSI NFV ISG - Presented by Jorg Aelken, Ericsson Pankaj Goyal, AT&T Rabi Abdel, Vodafone Mehmet Toy, Verizon Community Input <i>Related concepts, i.e. ETSI. How does a Reference Model help achieve the community's objectives?, Agreeing on the CNTT concept. Feedback on CNTT concept.</i>	 CNTT_Par...nel.pptx	 panel_co...epts.mp4 First part of recording has bad audio
---	--------------------	--	---	---

(12:00) 30 Min Tue	Chap1 notes	Referen ce Model Chapter 1 Introduc tion (R1) – Status Review, Q&A Chapter Descripti on: Overvie w, problem stateme nt, scope, bogo- meter, & roadmap Intro: Jo nathan Beltran, AT&T Facilitat ors: Bet h Cohen, Verizon Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedbac k from Commun ity	 CNTT_Par..._01.pptx	 day1_chap1.mp4
(12:30) 60 min Tue		Lunch		

(13:30) 30 Min Tue	Chap2 notes	Reference Model Chapter 2 VNF Requirements and Analysis (R1) – Status Review, Q&A Chapter Description: Analysis of requirements & NFVi profiles Facilitator: Tom Kivlin, Vodafone Group <i>Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedback from Community</i>	 CNTT_Par...del.pptx	 day1_chap2.mp4 Recording truncated - equipment failure
---	------------------------------------	--	---	--

(14:00) 60 Min Tue	Chap3 notes	Reference Model Chapter 3 Infrastructure Abstraction – Status Review, Q&A Chapter Description: Model, exposed vs. internal, exposed & internal NFVi capabilities, metrics, & constraints Facilitators: Sabine Demel, DT; Mark Shostak, AT&T <i>Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedback from Community</i>	 Day-2_CN...0724.pdf  Day-1_CN...k_v2.pdf	 day1_chap3.mp4
(15:00) 15 min Tue		Break		

(15:15) 30 Min Tue	Chap4 notes	Reference Model Chapter 4 Catalog (R1) – Status Review, Q&A Chapter Description: Compute flavors, instance types, naming conventions Facilitator: Tom Kivlin, Vodafone Group <i>Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedback from Community</i>	 CNTT_Par...del.pptx	 day1_chap4.mp4
---	------------------------------------	---	--	--

(15:45) 30 Min Tue	Chap5 notes	Reference Model Chapter 5 Reference NFV/ SW Profiles and Configurations (R1) – Status Review, Q&A Chapter Description: Basic, Network, & Compute NFV reference software profiles configuration, & security Facilitator: Karine Sevilla, Orange <i>Review:</i> <i>Synopsis</i> + <i>Purpose</i> + <i>Goals</i> + <i>Maturity Status</i> + <i>Gaps</i> + <i>Feedback from Community</i>	 CNTT_Par...1_v2.pdf	 day1_chap5.mp4
---	------------------------------------	---	--	--

(16:15) 30 Min Tue	Chap6 notes	Reference Model Chapter 6 Reference NFVI HW Profiles and Configurations (R1) – Status Review, Q&A Chapter Description: Compute, Network, Storage, & Security configurations Facilitator: Pankaj Goyal, AT&T <i>Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedback from Community</i>	 CNTT_Par...6_R1.pdf	 day1_chap6.mp4
---	------------------------------------	--	---	---

(16:45) 30 Min Tue	Chap7 notes	Referen ce Model Chapter 7 APIs and Interfac es (R1 – NFVI APIs) – Status Review, Q&A Chapter Descripti on: NFVi APIs, supporti ng service APIs, accelera tion interface s & APIs, tool function alities needed Facilitat or: Pank aj Goyal, AT&T, M ark Shostak, AT&T Review: Synopsis + Purpose + Goals + Maturity Status + Gaps + Feedbac k from Commun ity	? Unknown Attachment	 day1_chap7.mp4
---	------------------------	--	---------------------------------	--

(17:30) 30 Min Tue	Day 1 notes	Day 1 – Wrap Up Facilitator: Jonathan Beltran, AT&T Accomplishments <i>What did we get done?</i> <i>What did we gain alignment/agreement on?</i> <i>What did we hear and do we need to adjust?</i> <i>What do we need to collaborate further on?</i> <i>Next steps</i>	
---	------------------------------------	---	--

Agenda Day 2 - 24 Jul 2019

	notes	Day 2	Slides	Recordings
		Technology (Reference Model)		
(09:00) 15 Mins Wed		Opening – Recap and Day Ahead Facilitator: Jonathan Beltran, AT&T		 recap.mp4

(09:15) 90 Mins Wed	Backlog Day 2 notes Security notes Operations notes	Reference Model: Release 2 Scope Facilitator: Walter Kozłowski, Telstra, Rabi Abdel, Vodafone, Mark Shostak, AT&T <i>Reference Model Updates:</i> <i>Refine 1-7 based on 'maturity level' (Incl. backlog from Day 1)</i> <i>Finalize 8-11 Scope</i> <i>Meaningful targets – how to manage from R1, what is backlog from R3, R4?</i> <i>Detailed Release Timeline – Feedback / Doability / Issues / Concerns / Gaps</i>	 CNTT_Par...del.pptx	 rel2scope.mp4  day2_chap8.mp4  day2_chap9.mp4  day2_chap10.mp4
(10:45) 15 min Tue		Break		

(11:00) 90 Mins Wed	Day 2 notes	Technology WG overview Facilitator: Rabi Abdel, Vodafone <i>Document Structure, Current Contributions framework, How to get involved</i>	 CNTT_Par...del.pptx	 TechWG.mp4
(12:30) 60 Mins Wed		Lunch		
(13:30) 30 Mins Wed	Chap8 notes	Chapter 8 (R1) – NFVI Security Facilitator: Beth Cohen, Verizon This section needs to be expanded in Release 2. How much is this specific to NFVI? How much can we base this on existing security standards and best practices? Which standards apply?		 security.mp4

		• 8.1 Comm on standa rds. ◦ 8 . 1 . 1 P o t e n t i a l a t t a c k v e c t o r s ◦ 8 . 1 . 2 T e s t i n g d e m o a r c a t i o n p o i n t s. • 8.2 Operat or respon sibility. • 8.3 VNF Vendor s respon sibility. • 8.4 NFVI Vendor s respon sibility.		
(14:00) 60 Mins Wed	Chap9 notes	Chapter 9 (R1) - Reference Model Development Facilitator: Mark Shostak, AT&T <i>Infra OA&M</i>	 Day-2_CN...0724.pdf	 OAM.mp4

(15:00) 15 min Wed		Break		
(15:15) 30 Mins Wed	Chap7 notes	Chapter 7 (R1) – Reference Model Development Facilitator: Mark Shostak, AT&T <i>API Interfaces</i>	 Day-2_CN...724b.pdf	 APIs.mp4
(15:45) 45 Mins Wed	Chap3 notes	Chapter 3 (R1) - Reference Model Development Facilitator: Sabine Demel, DT; Mark Shostak, AT&T <i>(Description TBD)</i>	 Day-2_CN...0724.pdf	 day2_chap3.mp4
(16:30) 30 Mins Wed	Chap5 notes	Chapter 5 (R1) - Reference Model Development Facilitator: Karine Sevilla, Orange <i>(Description TBD)</i>		 day2_chap5.mp4
(17:00) 30 Mins Wed	Chap6 notes	Chapter 6 (R1) - Reference Model Development Facilitator: Pankaj Goyal, AT&T <i>(Description TBD)</i>		 day2_chap6.mp4

(17:30) 30 Mins Wed	Chap1 notes Chap2 notes Chap4 notes	Chapter 1, 2, 4 (R1) – Reference Model Development Facilitator: Beth Cohen, Verizon, Tom Kivlin, Vodafone Group A guided discussion of what needs to be in the introduction (Chapter 1), based on the content of the other chapters. Chapters 2 and 4 are both well along in the development of the content, the objective in this discussion is to validate the approach that the initial team created. Does this match with the understanding of the requirements by the vendor community? Are there missing pieces that need to be added?	 chap4.mp4
(18:00) 15 Mins Wed	Day 2 notes	Day 2 – Wrap Up Facilitator: Jonathan Beltran, AT&T	

Agenda Day 3 - 25 Jul 2019

	notes	Day 3	Slides	Recordings
--	-------	-------	--------	------------

(09:00) 15 Mins Thu		Opening – Recap and Day Ahead Facilitator: Jonathan Beltran, AT&T		 day3_recap.mp4
		Technology (Reference Architecture)		
(09:15) 90 Mins Thu	Straw proposal	Panel Discussion: Reference Architecture: Principles Facilitator: Walter Kozlowski, Telstra Panel: Karine Sevilla, Pankaj Goyal, Rabi Abdel <i>How to Engage and Create</i> <i>Role of Reference Model and Reference Architectures</i> <i>Reference Architectures Principles</i>	 CNTT_Par...v1.0.pdf	 ref_arch...incp.mp4
(10:45) 15 min Tue		Break		
(11:00) 90 Mins Thu	Straw proposal	Reference Architecture #1: Straw-man Proposal Facilitator: Rabi Abdel, Vodafone; Mark Shostak, AT&T <i>Create ToC for Reference Architecture R1</i> <i>Setting meaningful targets, backlog</i> <i>Detailed Release Timeline – Feedback / Doability / Issues / Concerns / Gap</i> <i>Including adoption of OVP VNF Certification and NFVi verification</i> <i>(align this with other open source bodies also)</i> <i>How to cooperate on and create when we leave here.</i>	 CNTT_Par...del.pptx	 ref_arch...traw.mp4
(12:30) 60 Mins Thu		Lunch		
		Support and Sponsorship		

(13:30) 60 Mins Thu	OVP CVC	Enhancements to Test projects / OVP & CVC ecosystem Facilitators: Rabi Abdel, Vodafone, Heather Kirksey, Linux Foundation <i>Vision:</i> <i>Describe current OVP/CVC vision and relation to CNTT, impact on OPNFV, ONAP, etc.</i> <i>Understanding the ecosystem (who, what, where, how?):</i> <i>Existing Test project / OVP ecosystem. CI/CD processes and procedures, security, etc. What in-flight projects are impacted? Which does CNTT feed? Which feed CNTT? Which are obsoleted? Where are there opportunities for improvement? What else does CNTT need to consider?</i> <i>Realization:</i> <i>What are the real steps in the journey? How do we reveal the reference platform profiles and architectures into OPNFV code? How do we go from model to arch to implementation to various project code update? How could/should it work from a practical perspective?</i> <i>What will help us facilitate release management?</i> OPNFV Project Plan: <i>What shall be our approach? What are the key components?</i>	 CNTT OVP v2.pptx	 ovp_cvc.mp4
(14:30) 60 Mins Thu	OVP CVC	Reference Implementation / OVP & CVC ecosystem Facilitator: Jim Baker - Linux Foundation, Bin Hu - AT&T, Fu Qiao - China Mobile <i>OVP Infrastructure:</i> <i>What enables smooth transitions? Where and how do reference models, architectures, implementations get hosted? How to make seamless translations between GSMA OPNFV addressable works? Demarcations with other bodies?</i> <i>Potential topic list:</i> 1. OPNFV plans (leveraging CVC, TAC and OPNFV TSC) to ingest CNTT deliverables in terms of reference architecture implementations from CNTT, enhancements to certification entrance / exit criteria from CNTT and/or test case contributions from CNTT as it relates to NFVI VNF certification. 2. OPNFV request of CNTT to support, aid, contribute, etc. to #1 above <i>'Project Management':</i> <i>What needs to be aligned to ensure all workloads come up and all work (so that VNF certification testing can begin?); Tasks? Deliverables? Processes? Release Timetables</i>	 CNTT_Ref...019.pptx	 ovp_cvc_impl.mp4

(15:30) 15 min Tue		Break		
		Where Do We Go From Here		
(15:45) 90 Mins Thu	Next Steps	Panel Discussion: Adoption Strategy / Membership Facilitator: Mark Cottrell, AT&T, Rabi Abdel, Vodafone, David Hutton, GSMA, Heather Kirksey, Linux Foundation, Jeff Collins, Ericsson, Jonne Soininen, Nokia <i>Establish metric targets as part of value propositions:</i> <i>VNF Operational efficiency & Innovation acceleration, Cut amount of internal testing to be done by SPs, Accelerate Time To Market, Improve Quality, Reduce Costs, Reduce Barriers To Entry</i> <i>Examples:</i> <i>Reduction in testing and integration costs, Reduction in certification time, Reduction in defects, Reduction in operational costs...</i> <i>What is overall message:</i> <i>"This is a GSMA OPNFV jointly supported activity...", Adoption of Ref Model and Architectures (as part of RFQ process), Collaborative Marketing</i> <i>Leveraging Media Relationships:</i> <i>Telecom TV, SM alliances. SDX Central articles. Talking to analysts. Meetup Groups.</i>		 adopt_strat.mp4

(17:15) 45 Mins Thu	Next Steps	Closing Session & Next Steps Facilitator: Jonathan Beltran, AT&T <i>Accomplishments:</i> <i>What did we get done? What did we gain alignment/agreement on? What did we sign-off on?</i> <i>What still needs work?</i> <i>Follow ups:</i> <i>What do we need follow up on? Who are they assigned to?</i> <i>Next steps:</i> <i>What are our next steps? With OPNFV / OVP / CVC? With GSMA? With Task Force? With other stakeholders?</i> <i>Calendar and Schedule:</i> <i>Review and confirm remote meetings. Review and confirm face-to-face meetings</i> <i>Session Review:</i> <i>Give everyone an opportunity to speak into all the topics of the day: What went well? What didn't go so well? What should we change?</i> Closing Round Table Remarks: David Hutton, GSMA, Heather Kirksey, Linux Foundation		
--	--------------------------	--	--	--

Contacts

Agenda contacts

Mark Cottrell (mark.cottrell@att.com)

Jonathan Beltran (jonathan.beltran@att.com).

Rabi Abdel (abdel.rabi@vodafone.com)

Jim Baker (jbaker@linuxfoundation.org)

Site Contacts

Vincent Danno (vincent.danno@orange.com)

Karine Sevilla (karine.sevilla@orange.com)

A/V Contacts

Benoit Philoppot (bphilippot.ext@orange.com) Tel : +33 01 57 39 77 77

Background Materials

Additional Info

Templates



CNTT_Par...1.1.pptx

Evidence



ToDo List

- Travel safely!
- Engage in active listening/note taking

