#### C3 Project Charter

for

## SNAPS - SDN/NFV Application Development Platform and Stack

This Project Charter establishes the scope of the SNAPS Project ("The Project"), as well as conditions for participation, governance, and intellectual property terms. The Project will operate under the CableLabs C3 structure using the C3 platform. The Project may include any member of the C3 Community as determined by the Project. All Project Participants are bound by the terms of this Project Charter. Any change to this Project Charter shall require a Supermajority Vote of the Project Participants.

To participate in and make Contributions to the Project and any associated Working Groups, Project Participants must be approved by a Majority Vote of the Project Participants and execute the Project Participation Agreement. The Project Participation Agreement for SNAPS is available <a href="https://community.cablelabs.com/wiki/display/C3/SNAPS+Participation+Agreement">https://community.cablelabs.com/wiki/display/C3/SNAPS+Participation+Agreement</a>

- 1. Project Name. SNAPS SDN/NFV Application Development Platform and Stack
- 2. <u>Project Description</u>. SDN/NFV Application Development Platform and Stack (SNAPS) project objectives focus on collaborating with CableLabs members and vendors to assemble a cloud platform from open source software and off-the-shelf hardware that can be used by operators and CableLabs itself to speed cloud application development. It is anticipated that the work product of the Project may be migrated to the open source OPNFV project.
- 3. Project Chair or Co-Chairs. The Chair's responsibilities include identifying new Working Groups, appointing Working Group Chairs, tracking Working Group progress, ensuring Working Groups meet their goals, communicating working group plans with the Operator Advisory Group (see section 4.5), appointing Committers, ensuring all Participants have executed a Project Participation Agreement, organizing meetings, organizing voting, and any other activities authorized by a Supermajority of the Participants. Timing of elections to elect a new Chair will be determined upon a Supermajority Vote of the Project Participants. Vendors cannot be Project Chairs, but can be a Co-Chair. The initial chair for the Project will be:

### Randy Levensalor (R.Levensalor@CableLabs.com)

- 4. <u>Working Groups</u>. The Project may have multiple Working Groups, and each Working Group will operate as set forth in this Project Charter.
  - 4.1. Working Group Chair. Each Working Group will designate a chair or co-chairs for that Working Group by Supermajority Vote of the Working Group Participants. Vendors cannot be Working Group Chairs, but can be a Co-Chair. A Working Group may select a new chair upon a Supermajority Vote of the Working Group Participants of that Working Group.
  - 4.2. <u>Working Group Requirements</u>. Each Working Group must be comprised of at least 2 Participants. No Working Group Participant will be permitted to participate in a Working Group without first notifying the Project Chair in writing of its intent to participate in that Working Group and signing the Project Participation Agreement.
  - 4.3. Initial Working Group. Detailed Working Group Scope This working group is tasked with collecting requirements (use cases, configurations, hardware components, etc.) for the SNAPS platform from CableLabs members who are actively working in the SDN/NFV area and working to align those requirements into a cohesive baseline platform definition. Project Participants will develop tools for optimizing deployment of the baseline platform. The goal is for this baseline platform to achieve broad use as the starting point for OpenStack SDN/NVF application developments and deployments avoiding re-invention of the OpenStack "wheel" for future developments. The initial chair for the Working Group will be:

Randy Levensalor (R.Levensalor@CableLabs.com)

The initial Committers for the Project will be:

Randy Levensalor (R.Levensalor@CableLabs.com)

Steven Pisarski (s.pisarski@cablelabs.com)

Mufaddal Makati (m.makati@cablelabs.com)

- 4.4. <u>Additional Working Groups</u>. Other Working Groups may be established upon a Majority Vote of the Project Participants.
- 4.5. Operator Advisory Group. The Operator Advisory Group for SNAPS is composed of the members of the CableLabs Member SDN/NVF Business and Technical teams. While the work of the SNAPS project is principally defined and directed by the members of the SNAPS project Working Groups, the Operator Advisory Group has an oversight role on the project and may redirect SNAPS activities, by a majority vote of its members, to assure consistency with the business and technical requirements of the cable operator community.
- 5. Project Confidentiality. This is a confidential Project with the following terms applicable to all Participants:

Participant agrees that in the course of participating in the Project, certain proprietary and confidential information, including as embodied in software, may be disclosed to Participant ("Confidential Information"). Participant acknowledges that such Confidential Information is proprietary to C3 and/or the Discloser of the Confidential Information and agrees not to disclose the Confidential Information to a third party without the Project Chair's prior written consent. Participant agrees to exercise the same standard of care to preserve and safeguard the Confidential Information as they use to preserve and safeguard their own similar confidential information, but no less than a commercially reasonable level of care.

Confidential Information does not include information which: (i) is independently developed by Participant without any use of and/or access to the Confidential Information as established by appropriate documentation; (ii) information that is lawfully received by Participant free of restrictions on disclosure; (iii) information that is in the public domain at the time of disclosure or which becomes part of the public domain through no wrongful act of Participant; (iv) information that, at the time of disclosure, was known to Participant; and (v) information that the Parties agree in writing is free of such restrictions.

In the event that Participant is required by a legislative, administrative or judicial governmental authority to disclose any Confidential Information, Participant agrees to promptly deliver notice to the Project Chair and assist C3 in seeking a protective order or other similar remedy to protect the Confidential Information from disclosure.

- 6. IP Policy. Any change to these terms requires a Supermajority Vote of the Project.
  - 6.1. <u>Joint Copyright</u>. In order to create a homogenous ownership of the collective work of the Project, all Participants grant a joint ownership interest in any Contributions made to the Project. This facilitates the migration of the Project work product to other communities, open source projects, and standards development organizations. With respect to any worldwide copyrights, or copyright applications and registrations, in a Contribution submitted to the Project:
    - Participant hereby assigns to CableLabs joint ownership, and to the extent that such assignment is or becomes invalid, ineffective or unenforceable, Participant hereby grants to CableLabs a perpetual, irrevocable, non-exclusive, worldwide, no-charge, royalty-free, unrestricted license to exercise all rights under those copyrights. This includes the right to sublicense these same rights to third parties through multiple levels of sublicensees or other licensing arrangements;
    - Participant agrees that both Participant and CableLabs can do all things in relation to Participant's
      Contribution as if both of Participant and CableLabs were the sole owners, and if one of Participant or
      CableLabs makes a derivative work of Participant's Contribution, the one who makes the derivative work (or
      has it made) will be the sole owner of that derivative work;
    - Participant agrees not to assert any moral rights in Participant's Contribution against CableLabs, or licensee or transferee of CableLabs;
    - Participant agrees that CableLabs may register a copyright in Participant's Contribution and exercise all ownership rights associated with it; and

- Participant agrees that neither of Participant or CableLabs has any duty to consult with, obtain the consent of, pay or render an accounting to the other for any use or distribution of Participant's Contribution.
- By participating in a Project, the Participant agrees that all copyright created in the collective work belongs to CableLabs. CableLabs will hold all copyright rights granted under this agreement on behalf of the Project and will exercise those copyright rights only in accordance with the Project's instructions.
- 6.2. <u>Contribution Licensing</u>. All Contributions made to the Project, and all of the IP rights therein (including but not limited to all applicable patent rights), that are not assigned to the Project under Section 6.1 above, shall be licensed to the Project under the terms of the Apache 2.0 license<sup>1</sup>.
- 6.3. <u>Final Deliverable Licensing</u>. Final deliverables of the Project, and all of the copyright and patent rights therein, shall be licensed under the terms of the Apache 2.0 license<sup>1</sup>.

# 7. Decision Making.

7.1. Voting. The Project and each Working Group will endeavor to make all decisions by consensus. Except where a Supermajority Vote is specifically required by this Charter, when the Project or a Working Group cannot reach consensus with respect to a particular decision to be made, the decision shall be made by a Majority Vote. Each Project Participant shall only receive 1 vote on any given decision, regardless of how many individuals from the Project Participant organization are present. Where a successful affirmative vote is not achieved, the Project may consult the C3 Board for resolution.

Notifications and Electronic Voting. The Project Chair is responsible for issuing all notifications of meetings and votes of the Participants, and each Working Group Chair is responsible for issuing all notifications of meetings and votes of the Working Group for which he or she is the chair, in each case subject to the following minimum criteria: (i) in-person meetings require at least 30 days prior written notice; (ii) teleconference meetings require at least 5 working days prior written notice (this requirement only applies to the notification of the first meeting of automatically recurring teleconference meetings); (iii) electronic votes require no advance notice but must be made pursuant to a clear and unambiguous ballot with only "yes" and "no" options, and the voting must remain open for no less than 5 working days. These notification requirements with respect to the Project or that particular Working Group may be changed or amended by a Supermajority Vote.

- 8. <u>Project Participants</u>. Only Project Participants shall be permitted to participate in and make Contributions to the Project and any associated Working Groups. To become a Project Participant, a party must be approved in accordance with this Section 8 and execute the Project Participation Agreement. Initial Participants and Additional Participants who have been approved will not be granted Project Participant status until that party executes the Project Participation Agreement.
  - 8.1. Initial Participants. The initial Project Participants are posted on the SNAPS wiki <a href="https://community.cablelabs.com/wiki/display/C3/SNAPS+Project+Participants">https://community.cablelabs.com/wiki/display/C3/SNAPS+Project+Participants</a>.
  - 8.2. <u>Additional Participants</u>. Other parties may become Project Participants if approved by a Majority Vote of the current Project Participants.
- 9. Contributions. All Participants must execute a Project Participation Agreement in order to make Contributions to the Project. All Contributions to the Project or to any of its Working Groups are made under the terms of Section 6 above. A Participant may not make any Contribution unless that Participant is the exclusive owner of the Contribution or has sufficient intellectual property rights from the owners to make the Contribution under the terms of Sections 6 above. Participants must disclose the identities of all known copyright owners in the Contribution and the terms of any licenses not listed in section 6. It shall be the responsibility of the Participant making a Contribution to ensure, to the satisfaction of the Committers, that the Contribution complies with the requirements of Section 6 above and this Section 9. Committers shall have the right to review all Contributions before committing any code into the Project, including performing code scans or other due diligence on the Contribution as needed, and Participants agree to fully cooperate

<sup>&</sup>lt;sup>1</sup> Available at http://www.apache.org/licenses/LICENSE-2.0.html

with all such review. In no event shall any code be committed unless it is compatible with the open source license terms identified in Section 6.

# 10. Deliverable Development Process.

- 10.1. <u>Pre-Draft</u>. Any Working Group Participant may submit a proposed initial draft document as a candidate Draft Deliverable of that Working Group. The Working Group chair will designate each submission as a "Pre-Draft" document.
- 10.2. <u>Draft</u>. Each Pre-Draft document of a Working Group must first be approved by a Majority Vote of the Working Group Participants of that Working Group in order to become a Draft Deliverable. Once the Working Group approves a document as a Draft Deliverable, the Draft Deliverable becomes the basis for all going forward work on that deliverable.
- 10.3. <u>Working Group Approval</u>. Once a Working Group believes it has achieved the objectives for its deliverable as described in the Scope, it will progress its Draft Deliverable to "Working Group Approved" status by a Majority Vote of the Participants of that Working Group.
- 10.4. Final Approval. Upon a Draft Deliverable reaching Working Group Approved status, the Project Chair or his/her designee will present that Working Group Approved Draft Deliverable to all Project Participants for approval. Upon a Supermajority Vote of the Project Participants, that Draft Deliverable will be designated a "Final Deliverable."
- 10.5. <u>Publication and Submission</u>. Upon the designation of a Draft Deliverable as a Final Deliverable, the Project Chair will publish the Final Deliverable in a manner agreed upon by a Supermajority Vote of the Working Group Participants (*i.e.*, Project Member only location, publically available location, Project maintained website, Project member website, etc.). The publication of a Final Deliverable in a publically accessible manner must include the terms under which the Final Deliverable and/or source code is being made available under. See Section 6 above.
- 10.6. <u>Submissions to Other Communities and Standards Bodies</u>. Upon the Supermajority Vote of the Project Participants, the Project Chair will coordinate the submission the applicable Final Deliverable to other communities and standards development organizations, and the Project Participants agree to grant the intellectual property rights necessary to make such submissions.

#### 11. Withdrawal and Termination.

- 11.1. <u>Withdrawal</u>. A Participant may withdraw from a Project or a Working Group at any time by notifying the Project Chair, and that withdrawal is effective upon receipt of the notice.
- 11.2. <u>Termination</u>. A Project Participant may be terminated from the Project and/or any Working Group upon a Supermajority Vote of all current Project Participants (calculated without the vote of the Participant in question). Any Working Group or The Project itself may also be terminated upon a Supermajority Vote of the Project Participants. The Project Chair will coordinate with the C3 Board to facilitate any termination pursuant to this Section 11.2.
- 11.3. Effect of Withdrawal or Termination. Upon a Project Participant's withdrawal or termination, or termination of a Working Group or the Project, all existing commitments and obligations up to the effective date of withdrawal or termination will remain in effect, but no new obligations will be incurred. Notwithstanding anything to contrary, Section 6 of this Charter shall survive any withdrawal or termination.

### 12. Definitions.

- 12.1. "Affiliate" means an entity that directly or indirectly controls, is controlled by, or is under common control of that Member. Where control means direct or indirect control of more than 50% of the voting stock or decision-making authority.
- 12.2. "Contribution" means any work of authorship, including any modifications or additions to an existing work, that

- a Project Participant submits to The Project for inclusion in a Draft Deliverable or Final Deliverable. For the purposes of this definition, "submit" means any form of electronic, oral, or written communication for the purpose of discussing and improving a Draft Deliverable or Final Deliverable, but excluding communication that the Member conspicuously designate in writing as not a contribution.
- 12.3. "<u>Draft Deliverable</u>" means all versions of a document (except a Final Deliverable) developed by the Project or any a Working Group for the purpose of creating, commenting on, revising, updating, modifying, or adding to any document that is to be considered for inclusion in the Final Deliverable.
- 12.4. "Final Deliverable" means the final version and contents of any Draft Deliverable approved as a Final Deliverable as set forth in Section 10.4.
- 12.5. "Project Participant" or "Participant" means a party that (i) has been approved by the Project as set forth in Section 8.2 and (ii) has executed a Project Participation Agreement, and that party's Affiliates, unless that party has previously withdrawn or been terminated from the Project.
- 12.6. "Project" means the SNAPS Project that is established under this Project Charter.
- 12.7. "Majority Vote" means an affirmative vote of no less than 1/2 of Project or Working Group Participants, as applicable, that have attended at least 50% of the last 4 meetings of the group conducting the vote<sup>2</sup>.
- 12.8. "Supermajority Vote" means an affirmative vote of no less than 3/4 of Project Participants or Working Group Participants, as applicable, that have attended at least 50% of the last 4 meetings of the group conducting the vote<sup>2</sup>.

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<sup>&</sup>lt;sup>2</sup> To ensure the group is capable of making decisions, the voting requirement for attendance at least 50% of the last 4 meetings shall be waived if there has not yet been 4 meetings.