ILFNETWORKING

OVP 2.0 | WS02 Requirement Team Initial Update

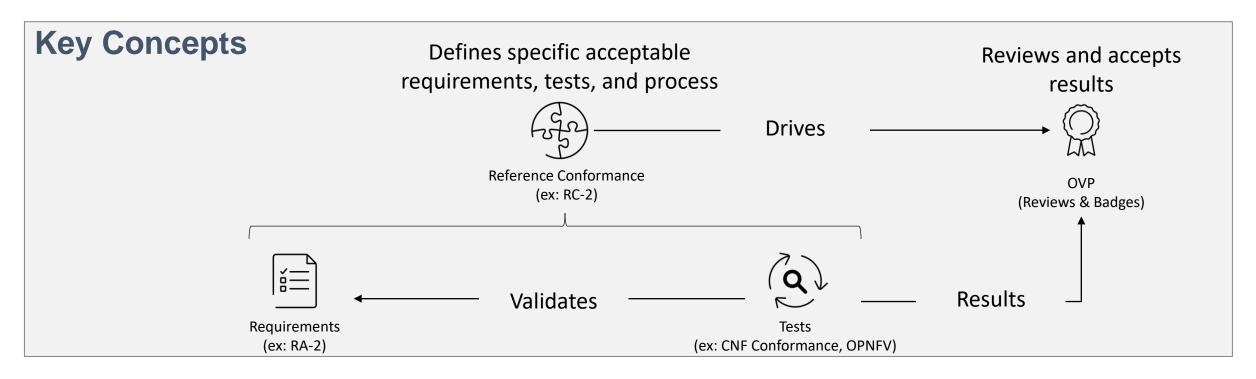
Trevor Lovett, Olivier Smith, Bill Mulligan, Ryan Hallahan, Fernando Oliveira

April 2020

Requirements Work Stream (WS02) Update

Initial Focus

- Identifying or establishing clear relationships between requirements, tests, and conformance specifications
- Establishing and promoting best practices for cross-project alignment
- Identifying potential gaps, concerns, and suggestions





THELINUX FOUNDATION **ILF**NETWORKING

Initial Assessment from WS02

• Establish "Sources of Truth" and linkages between reqt's, tests, and conformance

- No current project in the LFN umbrella is defining CNF requirements; suggest RA-2 or RC-2 but need CNTT buy-in
- Currently a lack of traceability between projects. Suggest adoption of best practices.
- Linkage between <u>CNF Conformance</u> and CNTT needs to be formalized. Looks like work is ongoing here, but suggest evolving to a mechanism where tracking and traceability is repeatable vs. current manual one-off assessment and mapping.
- Ensure the *minimum* requirements ensure functional operability (i.e. MUST requirements) must be the minimal set required for interop and functionality, and all badges at minimum ensure this threshold is met. If we have tiered badging (e.g. Bronze, Silver, Gold), then the minimum badge must satisfy mandatory requirements for the given scope.

• Streamline and clarify testing categories – Many categories with overlap. Some may be beyond our scope

- CNF Onboarding and CNF Conformance are still aspects of CNF Conformance and likely not distinct top-level categories. Move to 2 top level categories.
- Functional vs. Cloud Native delineation remains unclear and not based on source requirements (i.e. CNTT does not categorize requirements this way). Categories of testing should be aligned with the source requirement categories.
- Performance testing for arbitrary CNFs seems beyond our scope and current capabilities. Platform performance has fewer, but still substantial challenges. Suggest removing performance from CNF testing for now, and consider a different approach for platform performance if not removal.

• Clarify the Role of ONAP and CNFs in the OVP 2.0 MVP

- ONAP community is defining its role in CNF orchestration; requirements and tests to verify interoperability with ONAP will be critical
- However, ONAP is not required to leverage an RA-2 based NFVI so it does not make ONAP the ideal vehicle to document general CNF requirements or requirements specific to the NFVI
- We see VNF Requirements evolving as the source of requirements for ONAP-specific requirements for CNFs, but not a place to store CNF requirements driven by the CNTT RA, RI, or CNCF
- Given the evolving support of CNFs in ONAP, this may not be an area for the OVP 2.0 MVP

THELINUX FOUNDATION **DLF**NETWORKING



Proposed Categories [DRAFT]

| Category | Sub Category | Requirements | Conformance | Test Impl./Tools | Notes |
|-------------------------------|---|---------------------------|-------------|--|--|
| Cloud Platform Conformance | Performance/N on-Functional | ??? | ??? | ??? | Where are non-functional requirements documented? Are requirements for performance expected? Should benchmarking against ref. CNFs be it's own track? |
| | Functional | RA-2 | RC-2 | <u>CNCF Software</u> <u>Conformance</u> (K8S compatibility only) <u>CNF Conformance</u> | Current tools are not currently linked to RA-2, but CNF Conformance is analyzing alignment. Are there other tools/projects that will test specific requirements? CNF Conformance primary focus so far has been on testing the CNF itself, although I see some tests specific to the NFVI. Do we see this suite testing both NFVI and CNFs? |
| CNF Conformance | Artifact Compliance (images, descriptors, charts, etc.) | <u>CNF</u> Conformance | RC-2 | CNF Conformance | We would still need additional requirements specific to RA-2, and potentially more general purpose telco requirements. Where would those be documented? RA-2, RC- 2, or somewhere else? |
| | Functional | ??? | RC-2 | ??? | This testing would not cover the functional behavior of the CNF (e.g. is it a firewall), but rather can the CNF handle standard LCM operations or utilize capabilities of RA-2 based NFVI properly. There is no place in CNTT or any LFN project where such requirements are defined for CNFs |

NOTE: ONAP could be addressed as either a sub-category of CNF Conformance or it's own top-level category

THELINUX FOUNDATION **DLF**NETWORKING



Next Steps

- Refine MVP and Conformance Categories (if aligned)
- Initiate cross-project engagement (CNTT, CNF Conformance, CNCF TUG, ONAP, etc.) to drive appropriate alignment and linkages between projects
- Start analysis of source requirements

