

QLF NETWORKING

OVP 2.0 | WS02 Requirement Team Initial Update

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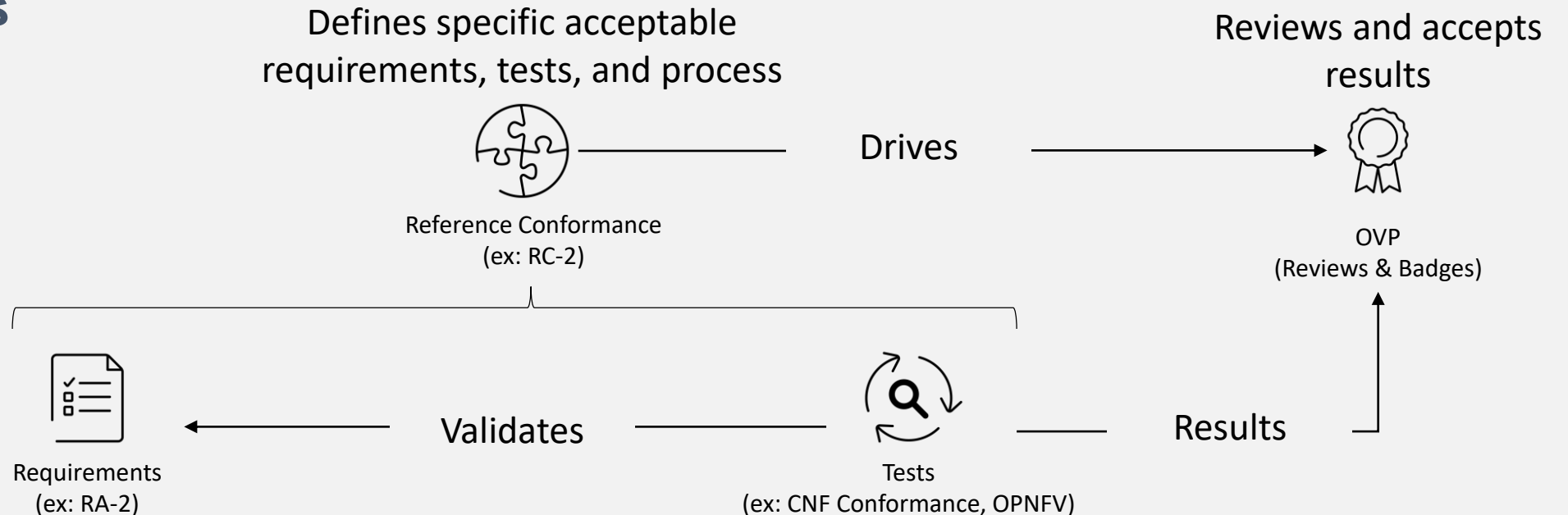
April 2020

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](#)

Key Concepts



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 [CNF Conformance](#) 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

Key Decisions from April F2F

NOTE: These are the items Requirements sub-team believe reached rough consensus during the various April F2F. They are presented here in the joint OVP forum to ensure agreement, and align on next actions.

- CNTT's RA-2 will be the location and hub for CNF Requirements
 - RA-2 can reference requirements in other projects (ex: CNF Conformance)
- NFVi Performance Testing will move out of the badging program, and move to a benchmarking initiative
 - Do we feel benchmarking should be in the scope of OVP?
- Performance testing of CNFs should be out of scope for OVP
- The minimum badge (if tiers are offered) must insure the SUT meets mandatory requirements

Proposed Categories

Category	Sub Category	Requirements	Conformance	Test Impl./Tools	Notes
Cloud Platform Conformance	Functional	RA-2	RC-2	<ul style="list-style-type: none"> CNCF Software Conformance (K8S compatibility only) CNF Conformance Others? 	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	Artifact Compliance (images, descriptors, charts, etc.)	RA-2 CNF Conformance	RC-2	<ul style="list-style-type: none"> CNF Conformance Others? 	RA-2 will be the source for CNF requirements, and reference requirements in other projects and communities where relevant.
	Functional	RA-2	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.
Cloud Platform Benchmarking (tentative)	Performance	N/A	???	???	Focus is on using reference CNF workloads to measure agreed upon key performance metrics relevant for NFVi evaluation

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

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- Do we need an overarching test framework, and if so, what will it be? Depends on number of test frameworks used and need to integrate results.
 - Projects mentioned: OPNFV xTesting, VNFSDK VTP
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- What is the role of OPNFV testing for RA-2, and how does it relate to the work CNF Conformance is doing?
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- Will badges be binary or tiered? If tiered, then what is the mechanism?
 - If scored, there was an open question of how results are tracked and published.
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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