

Closed Loop Automation with OPNFV - WG Proposal

OPNFV TSC WG Review:

May 21st 2019:

- Sunku shared the WG proposal (attached) to the TSC
- Questions from Catherine about overlap with ONAP CLA WG within CLAMP and DCAE.
 - The work here is independent of ONAP WGs and its complimentary
 - The CLA work here is at NFVI level that would leverage policies and interfaces from ONAP
- Question if WG's predefined outcome is to contribute code?
 - This is optional and based on individual project to contribute code to other communities
 - The WG itself doesn't necessitate having a code repository or mandatory contributions
- TSC had quorum and the proposal **passed**, resulting in official WG



Deck presented at TSC review is attached.

Tech-discuss Meeting Updates:

May 13th 2019:

- Sunku presented CLA WG scope & objectives as discussed on this page
- There werent many questions about creation of the WG
- Bin suggested to update the exact sub-groups/committees for communities of interest where work would coincide
- Example: Update Akraino community as part of Edge interest, CLAMP details as part of ONAP, etc.
- Calling out interested parties to update the details below

Objectives:

Various projects across OPNFV ecosystem are highly specialized on implementing solutions & toolsets focused on various parts of NFVI. The current project approach tests NFVI as various parts but do not focus on Day 2 operation models like closed loop automation. The closed loop automation working group aims to close an existing gap within OPNFV community to provide reference implementations of various closed loop use cases across NFVI.

Important objectives of the working group would be:

1. Common platform for interested projects & its members to create, discuss & solve closed loop implementations
2. Drive upstream adoption of closed loop use cases over NFVI layer
3. Support cloud native, appliance and virtualized infrastructure models with various types of closed loops – real time, near real time & offline processing models.

More details and architecture diagrams are found in the presentation below that was shared at OPNFV developer gathering before ONS-NA 2019.

Scope:

- Be the forum across all OPNFV projects to facilitate enhancements, methodologies, APIs, testing required for closed loop automation
- Be the place to discuss and inter-network among projects to provide feasible closed loop mechanisms among projects/products
- Be the place for driving common use cases and strategies for individual and/or combination of projects to achieve closed loop automation for corresponding use cases
- Be the bridge to ONAP, LFN, LF Edge & other relevant communities. Represent OPNFV to work with these communities
- Provide periodic updates to TSC

Work Items & Short Term Objectives:

- Initial work:
 - Identify closed loop use cases of interest across participant member companies
 - Catalog capabilities with in each of interested OPNFV projects that could fit in to closed loop automation implementations at NFVI level
 - Identify gaps necessary to implement CLA use cases of interest
- Produce reference solutions/implementations for initial set of use cases leveraging existing software capabilities & tool-sets within participating OPNFV projects
- Drive medium-long term changes required across participating OPNFV projects and/or in collaboration with open source orchestrators like OpenStack & Kubernetes communities to achieve closed loop implementations
- Establish strong connection with ONAP & LFN communities to achieve complimentary solutions/implementation

External Community Intercept:

The list of communities that are external to OPNFV, that would/might benefit from the work/discussions in the CLA WG.

- ONAP** - Closed Loop Automation Management Platform (CLAMP) project: <https://wiki.onap.org/display/DW/CLAMP+Project>
- Akraino** -
- OpenStack** - Self-Healing SIG: https://wiki.openstack.org/wiki/Self-healing_SIG
- ...

Next Steps:

Review the proposal at OPNFV TSC for its formal approval.

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Presentation presented at OPNFV developer gathering on April 2nd (just before ONS-NA) are attached:



ClosedLoopPlatf...tionWiOPNFV.pdf