Policy Jakarta-R10 Architecture Review

1- Project Overview

The Policy subsystem of ONAP maintains, distributes, and operates on the set of rules that underlie ONAP's control, orchestration, and management functions. See Policy Framework Project Proposal (5/11/17) for more information.

2- New component capabilities for Honolulu-R8

The following table lists the new functional requirements Policy is committing to support for the Honolulu Release:

Requirements	Notes
⚡ **REQ-429** - Use Case for ONAP-based SON for 5G networks `DONE`	stretch goal
⚡ **REQ-441** - LOGS MANAGEMENT - PHASE 1: COMMON PLACE FOR DATA `TO DO`	already done
⚡ **REQ-439** - CONTINUATION OF PACKAGES UPGRADES IN DIRECT DEPENDENCIES `IN PROGRESS`	
⚡ **REQ-437** - COMPLETION OF PYTHON LANGUAGE UPDATE (v2.7 v3.x) `IN PROGRESS`	already done
⚡ **REQ-398** - Deploy on demand ONAP through CI per use case `DONE`	support only
⚡ **REQ-396** - Clearly split ONAP code and use case code `TO DO`	already done
⚡ **REQ-473** - Merge CLAMP functionality into Policy Framework project `DONE`	POC
⚡ **REQ-478** - PoC - TOSCA Defined Control Loop on Honolulu Release `IN PROGRESS`	POC

The following epics are in scope for Honolulu, though are not required:

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
POLICY-2919	add into the policy-clamp UI the policy editor capabilities	⚡	Dec 10, 2020	Apr 13, 2023		Unassigned	None	=	`CLOSED`	Done
POLICY-2605	This epic covers technical debt left over from Guilin	⚡	Jun 03, 2020	Apr 13, 2023		Unassigned	None	=	`CLOSED`	Done

2 issues

⚡ **POLICY-2923** - use the policy-clamp ui to manage policy types `CLOSED` ,

⚡ **POLICY-2921** - use the policy-clamp ui to manage pdp groups `CLOSED` ,

⚡ **POLICY-2921** - use the policy-clamp ui to manage pdp groups `CLOSED` , and

⚡ **POLICY-2919** - add into the policy-clamp UI the policy editor capabilities `CLOSED` are extensions to the

⚡ **REQ-478** - PoC - TOSCA Defined Control Loop on Honolulu Release `IN PROGRESS` POC.

> ⚡ **POLICY-2484** - R8: This epic covers the work to remove the technical debt for SDNR actor interface with DCAE SON and SDNR controller. `CLOSED`

, 🔖 **POLICY-2715** - Allow underlying database to be configured: MariaDB or Postgres `CLOSED` ,

⚡ **POLICY-2352** - This epic covers the work to finish policy validation `CLOSED` are investigative.

⚡ **POLICY-2605** - This epic covers technical debt left over from Guilin `CLOSED` covers miscellaneous technical debt from Guilin and will be completed.

3- New or modified interfaces

The following changes will be made to the interfaces during the Honolulu release:

- Add new APIs to the PAP to query the deployment status of all PDP/policy pairs.
- Change return status from 200 to 202 in the PAP deployment APIs.
- In the health check API, include information about the availability of dependent systems (e.g., A&AI, DB, DMaaP)

These are described in the following page: PAP REST API changes for Honolulu release.

4- If they are modified, are they backwards compatible?

The PAP API deployment changes are not backwards compatible, nevertheless it is expected minimum impact as its main consumer, CLAMP, is being migrated under the Policy components umbrella.

6- Interface naming

See ARC Policy Framework Component Description - Honolulu-R8.

7- Consumed API from other projects

See ARC Policy Framework Component Description - Honolulu-R8.

8- Published API

See ARC Policy Framework Component Description - Honolulu-R8.

9- Reference to the interfaces.

See https://docs.onap.org/projects/onap-policy-parent/en/latest/offeredapis.html.

10- What are the system limits?

No more than one PAP may be run at a time.

11- Involved use cases, architectural capabilities or functional requirements.

Policy is used in the following use cases:

- vFW
- vDNS
- vCPE
- CCVPN
- 5G

12- Listing of new or impacted models used by the project

None

13-Test plan/Testing Strategy

1. Unit Testing

        a. Continue to use junit for java tests
        b. Continue to use jest for javascript tests
2. Dev-to-Dev Testing and
        a. Communication between Policy components will be tested via Policy-specific CSITs
        b. There are no plans for individual dev-to-dev testing with other ONAP projects. There are no facilities within Policy to test an interface independent of a use case, nor can other systems provide "sunny-day" responses without being pre-configured. As a result, dev-to-dev testing will take place as part of the integration testing of various use cases. This is unchanged from previous releases.
3. Integration
        a. Integration testing will be done using the integration labs with a full OOM installation

14- Any other details that are specific to this functional enhancement or UseCase.

None