

Akraino Blueprint Validation Framework: Mandatory Tests Proposal

July 18, 2019



Background

- As part of the process to become “mature,” Akraino projects need to
 - Participate in at least two releases
 - Demonstrate that the software is mature
 - Pass the TSC review, which includes documentation and security reviews
- The Process subcommittee has discussed the definition of “mature SW”, the notes are on the following page
- In practice, the aim is to have the Blueprint Validation requirement in place for Akraino Release 2

Feb 19, 2019 Process sub-committee proposal

- “The SW quality will be assessed as reaching beta according to :
 - Passing the mandatory set of test cases for all deployed layers using the tools and test set for each layer as defined by the Akraino Validation Framework Validation feature project (Akraino Blueprint Validation Framework) (after TSC approval). This will define minimum mandatory set of test that must be passed for each layer included in BP, plus
 - Passing any additional test cases defined by the specific BP project as mandatory, plus
 - Achieving the minimum Security requirements as defined by the Security subcommittee [Note : the mechanism of security testing / review has not been proposed / agreed]

Drivers

- The success of Akraino will depend on (also) an active user community
- An Akraino user has some reasonable assumptions about the code they find on the Akraino download page, for example that it passes some basic tests related to its use cases
- The mandatory tests should cover the functionality that is common to many blueprints, but not all tests will be mandatory to all blueprints
- There should be an exception process to account for differences between the blueprints

Notes

- › Want to leverage well-known, widely used upstream projects
- › The tests should not define low-level implementation
- › Test “what” and not “how” unless “what” requires knowledge of “how”

To decide: Release 2 requirements

- › All Release 2 projects will (by default) run all test of a given layer if it deploys that layer
- › The passed tests per blueprint will be collected and shown on the Akraino wiki
- › The content of the tests is described later

	HW	OS	k8s	OpenStack
Blueprint A	✓	✓	✓	✓
Blueprint B		✓	✓	

To decide: Maturity review

- › The test results are checked
- › Test coverage will be verified
- › If the Blueprint is missing an obvious test case, or does not pass all the tests for some reason, it should be noted in the Process committee and it should be noted as an exception

HW

- › dmidecode works
- › Redfish Test Framework passes Usecase Checkers tests

Operating System

- › Linux Test Project (ltp) passes

Kubernetes

- › Kubernetes conformance tests pass

Proposal is all tests defined above are mandatory for x86

ARM support has a subset of x86 tests (TBD)

OpenStack

- › Tempest Refstack subset is passed (to be implemented)

Refstack test list is customizable (blacklist)

Blacklist file should be provided by PTL with tech argument why

Only these remaining will run

UI will only display tests that were run