# **Project Proposal**

The Jenkins Acceptance Test Harness (ATH) is a great vehicle to test Jenkinsfiles and custom DSL libraries ahead of deploying them to production servers. However, it has couple of drawbacks.

- it can be quite slow as it needs to bootstrap an entire Jenkins instance for each test method.
- real production environments typically need to use a very specific plugin list of pre-defined plugins and plugin versions

Improving these two areas would make the ATH more efficient and easy to use for Jenkinsfile and custom DSL library testing.

For example, instead of dynamically creating a Jenkins instance for each test, an instance could be built as a docker image, loaded as a java <u>testcontainers</u>, and injected with the DSL to be tested.

There is also a discussion on <u>speeding up the ATH</u> on the developers mailing list which provides background information about the ATH.

### Expectations from the students

This is a wide-open project idea which may include various changes:

- Review the mailing list discussions about the Acceptance Test Harness future
- Try out ATH locally (e.g. Smoke Tests) and explore the codebase
  - o \$ ./run.sh firefox latest -PrunSmokeTests
  - Or do it <u>from container</u>.
- Come up with proposals how to improve ATH towards
  - Faster test execution
  - Increased stability

#### Skills to study/improve

- Java
- Docker
- Selenium

#### Newbie-friendly issues

• JIRA query

# Links

- Test suite documentation
- Speeding up the ATH mailing list discussion
- ATH Selenium testing and the future of LTS certification mailing list discussion
- <u>Testcontainers</u> on github
- Last year's (2017) discussion on the mailing list

## Project Metadata

**Created on**: April 2018 **Goal:** Improve performance of Jenkins Acceptance Test Harness - framework for WebUI and Integration testing

Champion: Martin d'Anjou Champion Github Id and link: <u>https://github.com/martinda</u> Champion Jenkins JIRA/LDAP id: deepchip

Champion Time Zone: UTC-4 Champion Role: I am making this proposal as a mentor

Project Category: Dev Tools SIG/Subproject: TBD Project Gitter chat room: <u>https://gitter.im/jenkinsci/acceptance-test-harness</u>

## **Potential Mentors**

The potential mentors are:

- 1) Martin d'Anjou (https://github.com/martinda)
- 2) Manuel Ramón León Jiménez (https://github.com/mramonleon/)
- 3) Oliver Gondža (https://github.com/olivergondza)