

End-to-end tasks

1. CLI
 - a. Checkout repo
 - b. Create bugfix branch
 - c. (other) Find (or make own) a gh extension creating skeletal framework like creating a new project, and we can use that to create a simple project.
 - i. Where extensions live
 - ii. What environment is needed
 - iii. Basic engineer and build system github action workflows
 - iv. ex: gh create-component <project_name>
 - v. Can create addition --type flag for like IOC, Matlab, Python etc.
2. GH Actions
 - a. Trigger workflow on check in to any branch
 - b. Call out to build system with repo/branch for the appropriate container (build environment)
 - i. Which calls the component database and checks out repos and builds the repos
 - c. Report
 - d. Run any tests
 - i. Installing build results to some place
 - ii. Run whatever tests available specific to component (Like unit tests, integration tests)
 - e. Record to the component databases
 - i. branches under development
 - ii. If testing passed, code review passed
 - iii. Preferred test location Maybe here?
 - f. Record to the deployment database
 - i. For each active branch under development or production
 - ii. Preferred test location Maybe here?.
 - g. Create a pull request
 - h. Handle approval of pull request
 - i. If require coordination with a PAMM, then schedule a job
 - ii. Deployment database recording of start stop success failure
 1. If successful, remove candidate tag, update issue
 2. if fails, remove entire tag, install the known good tag

Current:

1. While we wait for kubernetes cluster [\[EEDSWCM-79\] Self-hosted github actions runner - SLAC JIRA \(stanford.edu\)](#)