



# Build System

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# Build system move to SLAC

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- Currently components run at AWS, GCP, and NCSA (DMTN-218 is starting to describe this).

- Jenkins manager node
  - Owned by SQuaRE
  - Ridiculously out of date
  - Stand up a brand new one at SLAC
  - Need firewall access from SLAC to Tucson lab Macs — or ship the Macs to SLAC
- "snowflake" special builder node
  - Designate a particular worker node at SLAC

- eups.lsst.codes
  - Replicated from AWS S3 bucket
  - Replace with GCS bucket
- Google Artifact Registry
  - All releases now published there for PanDA
  - Could use for other internal purposes
  - Still need [hub.docker.com](https://hub.docker.com) for external purposes (don't want to pay egress)
  - GitHub Packages doesn't seem as useful

- Workers
  - Move to SLAC K8s
- SQuaSH
  - Owned by SQuaRE
  - Move to SLAC K8s

# Transition

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- Build in both places for a while, but only publish from one? Or publish from both to different places?
- Can history be thrown away or does it need to be kept?

# Simplifications

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- The sciplat-lab container build migrated from a Jenkins pipeline to a GHA triggered by Jenkins. Can others do the same? build-stack is an obvious candidate, but other "triggered" jobs like documenteer, ap\_verify, and verify\_drp\_metrics could be as well. Size may be a problem for the latter two, however.
- Can we move some things to Jenkinsfiles in repos? This might limit sharing of common code in the `jenkins-dm-jobs` repo.
- The `nightly_release`, `lsst_distrib`, `ci_imsim`, and `ci_hsc` pipelines all rebuild (most of) the stack. Can this be optimized?
- Can we eliminate some of the layers from this?

The `stack-os-matrix` pipeline, via several layers of library code [...], invokes two layers of scripts [...] in `lsstsqre/ci-scripts` which in turn invoke the [...] `lsst/lsstsw` build tool which in turn uses the [...] `lsst/lsst_build` tool to invoke `eupspkg` on each repository which, for LSST Science Pipelines packages, invokes `scons` and the `sconsUtils` library to actually do the build and test of each package.

# Additions

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- Outputs from CI runs need to go into a Butler repo? Perhaps we can use code from the OODS to clean up old RUN collections.
- Anything else?