# **EIC Detector-1 Software Decision**

**Topic:** Code Repository

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Discussion Date(s): May 25, 2022

Meeting Link: <a href="https://indico.bnl.gov/event/15639/">https://indico.bnl.gov/event/15639/</a>

#### Endorsed by:

David Lawrence (JLab)
Kolja Kauder (BNL)
Joe Osborn (BNL)
Torre Wenaus (BNL)
Markus Diefenthaler (Jefferson Lab)
Cristiano Fanelli (MIT)
Wenliang (Bill) Li (CFNS, SBU)
Shujie Li (LBL)
John Lajoie (ISU)

#### Overview:

Decide on the following issues:

- 1. Code repository technology to use (e.g. GitLab or GitHub or ...)
- 2. If the repository is not a commercial cloud service then the host institution must be identified.
- 3. Responsible points of contact within the collaboration need to be identified for maintaining/managing the repository
- 4. Identify if there will be direct financial costs and if so, estimate of those costs.

# Requirements:

- 1. Cloud service accessible from anywhere in the world
- 2. Does not require a paid account for each user
- 3. Top-level repositories can be configured with different access policies ranging from world-readable to private (with access only for select users)
- 4. Supports Continuous Integration (CI)
- Non-restrictive limits:

- a. >=1000 repositories
- b. >=10GB (w/ ability to increase as needed w/o significant additional cost)
- c. >=1TB/mo (w/ ability to increase as needed w/o significant additional cost)

## Options:

- GitLab
  - host location
- GitHub

#### Presenters:

- Whit Armstrong GitLab + ANL
- Jin Huang GitHub

### Discussion:

The meeting link at the top contains links to the presentations as well as the Live Notes used for the broader Community discussion. The conveners then moved over primarily to MatterMost where some further discussion was had, much of which focussed on developing a consensus solution (2022-05-29 to 2022-05-31). A meeting of the conveners was held on 2022-05-31 to finalize the consensus position. Please see those resources for a record of the discussions.

# Convener Summary:

- We will implement a hybrid solution that uses GitHub as the primary repository, while using the eicweb GitLab instance for CI/CD.
- An ad hoc committee of eicweb experts will investigate the best option for leveraging CI/CD at ANL using GitHub (e.g. GitHub runners, mirrors, webhooks, etc.
- The existing "eic" organization at GitHub established by the EICUG Software WG will be used.
  - Some admin privileges will need to be shared with the Detector-1 WG conveners
- The best practices model for the repository will include:
  - Repositories will be open and public unless there is a specific reason to make them private
  - External packages will not be forked/cloned to the eic organization and modified unless under extremely exceptional circumstances.