Remote Computing Enablement - Continuous Integration
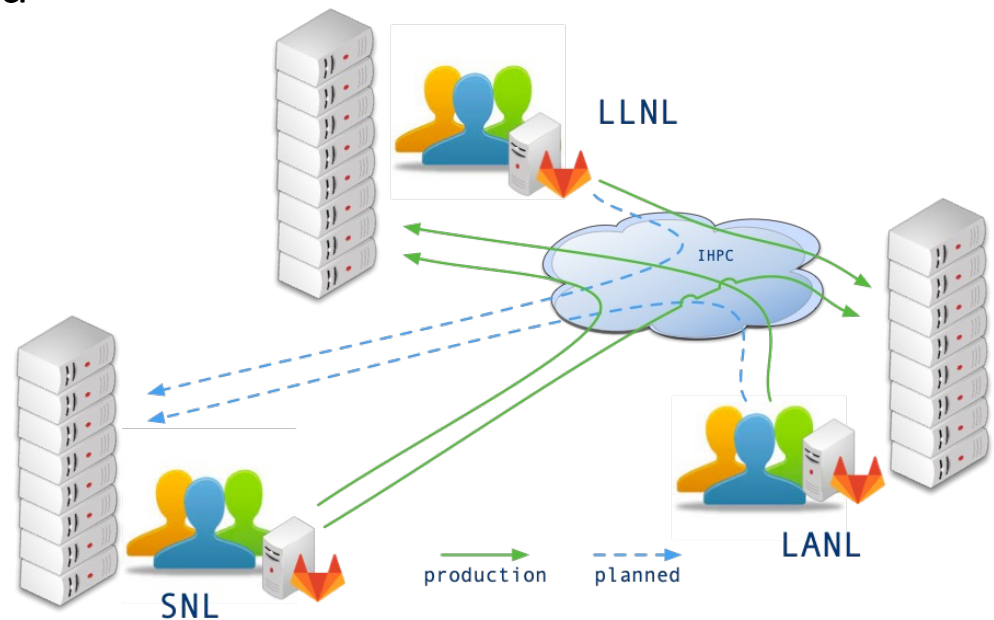
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Cross-Site Runners - Overview

- Enables users to interact solely with their home site GitLab and run CI at a remote site

- Available in the restricted unclassified space, with the following clusters available:
  - rzAnsel (LLNL)
  - rzVernal (LLNL)
  - trinitite (LANL)
  - rocinante (LANL)

- Additional runners are forthcoming:
  - ihpccluster (SNL)
  - lux (SNL)

Cross-Site Runners - Usage

- Ensure you have accounts on the remote cluster via SARAPE
  - https://sarape.sandia.gov

- Tagged similarly to local LLNL runners; just choose appropriate tags in your gitlab-ci.yml file

- Tech Bulletin #558 https://hpc.llnl.gov/technical-bulletins/bulletin-558

Shared runners

These runners are available to all groups and projects.

Enable shared runners for this project

Available shared runners: 49

● #85 (JqsP-ynsq)
tt-rfe1-batch

`batch` `lanl` `rce` `slurm` `trinitite` `tt-rfe1`

```
25       tags:
26         - lanl
27         - batch
```

GitLab & Flux Clusters

Tag	Current Meaning	New Meaning (as of 6/1/2023)
batch	Slurm wrappers	Flux executor
batch-secondary	n/a	Slurm wrappers or slurm executor, if cluster is running both Flux and Slurm
flux	n/a	Flux executor
slurm	Slurm executor or slurm wrappers	Slurm executor or slurm wrappers
shell	Shell on a login node	Shell on a login node

- On clusters that have Flux installed, it will be considered the "primary" scheduler from GitLab's perspective

- Tech Bulletin #559 - https://hpc.llnl.gov/technical-bulletins/bulletin-559

- Follow link for GitLab Documentation at: https://hpc.llnl.gov/services

Miscellaneous GitLab Improvements

- GitLab Pages has been enabled on CZ & RZ instances, which allows publication of static webpages from a repo
  - Good use cases include (but aren't limited to) publishing build artifacts or project information
  - Shares access control with the repository

- Merge train API expansion to allow full programmatic management

- In progress
  - Improving merge request UX with really large MRs
  - Adding user-defined URLs to the job result UI
    - To integrate with external tools, such as CDash