

Transition from `git.cern.ch`

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Motivation

- You probably saw the following message

remote: ****

remote: *** git.cern.ch is being replaced by
GitLab. Please read <http://cern.ch/go/h9RV>

remote: ****

- We discussed the evolution of AliRoot in November 2015
- The same question concerns now AliPhysics

IT schedule

- February 2016: creation of new repositories disabled and empty repositories removed
- February 2016: email notifications sent to repository owners
- March 2016: banner about upcoming service discontinuation displayed on git push operations
- **July 1st, 2016: git.cern.ch becomes read-only; move to GitLab remains possible**
- September 26th, 2016: git.cern.ch is definitively stopped

From gitolite to GitLab

- Quick and straightforward migration to GitLab
 - But not automated: librarians need to decide on grouping and access levels to be granted
- Pay attention to :
 - ‘CERN Public’ visibility level not available
 - Use deploy keys instead: [KB0003129](#)
 - Git hooks: GitLab features cover >90% use cases
 - Web hooks and GitLab CI can be used for the rest
 - Fine grained permissions not supported
 - Instead a code review/Merge Request workflow is used in GitLab
 - **Please get in touch ASAP in case fine-grained permissions are important for your workflow. We'll find solutions.**

Different possibilities

- Do not move, ask for extension of the support until we are ready to move
- Ask for fine-grained permissions and move AliRoot/AliPhysics to GitLab
- Move AliRoot/AliPhysics to GitHub
- Move one of them to GitHub, the other to GitLab

“Do not move”

- We (Predrag) can try to negotiate extension of the Git service, the successful outcome is not guaranteed
- We (ALICE) still will have to move at the end
- There is no good time for this transition: we always have conferences, preparation for data taking and processing, data taking, data processing, etc.
- I think postponing the transition is bad option

“Move to GitLab” without change in the workflow

- The only change is the URL of the repository, all the rest stays the same
- Every user can do the transition with one command for each repository

`git remote set-url origin <new_url>`

- Depends on the possibility (IT) to provide fine-grained permission
- Gives us chance to introduce the new workflow (pull requests) gradually
- Looks like this is the “minimalistic” approach (we rely on IT). It is not even a migration...
- We still have to do the transition to the new workflow and to GitHub which might be affected by the GitLab experience

Move to GitHub - I

- We have now all the prerequisites:
 - Build system that supports many repositories and external sources
 - Validation cluster to run different tests: from compilation to simple simulation/reconstruction to complete cpass0/cpass1/ppass/AODfilter
 - Agreed workflow based on pull requests and feature branches
- The transition is more difficult, see next page

Move to GitHub - II

- Technical steps:
 - Strip out the external packages from AliRoot. Use the authoritative sources or populate separate ALICE repositories for those without real support
 - Get rid of the OCDB and binaries from AliRoot/AliPhysics. They can be hosted in separate reference repository if needed. This step is slow since it requires change in the history.
 - Move the remaining AliRoot/AliPhysics to GitHub
- Establish the (e)groups and the workflows

Move to GitHub - III

- This is the most direct way to the desired development
- It is difficult to change the way we are working in three months (by 01/07)
- I think the intermediate GitLab is easier option

Use both GitHub and GitLab

- We need good reasons to have for example AliRoot in GitHub and AliPhysics in GitLab.
- Our software is licensed under GPL license, therefore it is eligible for being publicly available on GitHub.
- In case someone wants to keep analysis code private, the license needs to be changed.
- I do not see any advantage in this complication

Proposal

- Ask IT for support of fine-grained permissions in GitLab
- Move the current AliRoot and AliPhysics to GitLab
- Continue with the old workflow for a while
- Prepare the transition to GitHub
- Move the code repositories to GitHub after the end of data taking
- For the data/binary repositories use whatever is most suitable (size, performance, etc. criteria)
- Use the new workflows with GitHub in 2017