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Feedback from experiments On the transition to git

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Feedback from who already did it

SLAC

In the context of studying git use for Geant4

Interview some other experiments/groups with a community size similar to ours and ask feedback about:

- How was the switch to git (from svn) received from developers?
- Did you have to change anything of your development model?

Got an informal chat with: CDSM, LSST, LZ, single ATLAS people

- About 5 people
- I also got on an ATLAS "git working group" mailing list: it was clear since day one that ATLAS has manpower to work on issues that we cannot effort to

How was the switch to git perceived?

Initially it was not simple, mainly because the mental work-flow is different from typical central repository ones

- Gitlab seems more appealing than github because it *resembles* more the central repository paradigm

It's easier starting with a new project, but challenges arise mainly if you try to replicate a "tag based" model

- At the end the success in using git is to rething this model
- The role of repo admins is larger in git than e.g. svn

Changes in development model

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Abandon tag-based development work-flow

- Replace it with frequent branch/merge
- Use case for Geant4: "get tag EM-X and co-working tag HAD-Y". Is cherry-picking the solution to that? Could not understand how the people I talked with solved this issue :-)

Everybody, in a larger or lesser extend, use a git-flow model

- The simpler the more appreciated
- How the source tree is organized has strong implications on the model

Git submodules seems disliked because of the complexity introduced

In some cases tight integration with other tools (e.g. JIRA)

- Continuous integration
- Rely on community tools: use existing best practices and try not to re-invent the wheel (e.g. g4svn)