

On the migration of the analysis software to the new framework

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Beware of an opinionated talk

You say « migration » ?

Of what ?

- ❑ The analysis software, so typically the projects Phys, Analysis, DaVinci & Stripping
 - Also LoKi & Bender, obviously

Why ?

- ❑ We are upgrading, remember!
- ❑ Gaudi, reconstruction software under intense uplifting. The analysis software should tag along !

Who does it ?

- ❑ That's a one-million-dollar question @ LHCb, I'm afraid ...

It's all about choices ...

Do we have alternatives?

- Do nothing(-ish) ← NOT an option !
- Adapt the code to modern C++ & modern Gaudi framework ← minimum we can/should do

Want to be more adventurous and potentially rewarding?

- Do we at all need this stack in the same form/sequence/packaging as now?
- Need a serious discussion of how our future analysis software packages will sit in the wider landscape given how analysis flows will happen in the upgrade time !
- BTW this still requires compliance with modern C++ and alike

First things first

- ❑ Neither of the possible routes are minor tasks
- ❑ Imagine the “uplifting” route:
 - Remember, the analysis stack is used for standard analysis jobs, stripping and Tesla
 - Each have conflicting requirements for each usecase
 - E.g. analyses typically use the latest version, stripping sticks to some older (patched) version
 - More importantly, we won’t be doing analysis in 5-10 years as we do today !
- ❑ First need to discuss and decide which route to take, so either “uplift” or “redesign in C++17” (yeah, aware C++17 is not yet out ;-))
- ❑ Then make the endeavour an integral part of the upgrade
- ❑ We need people whichever direction we take. Things won’t happen magically

My gut feeling?

- ***A simple uplift is not going to help us reach the highest physics reach we envisage !***
- ***We need to rethink our analysis software at the same time as our analysis model !***

Open discussion

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Remember: the future is now !