Brainstorm: integrate testing in EESSI software deployment

https://github.com/EESSI/software-layer/issues/149

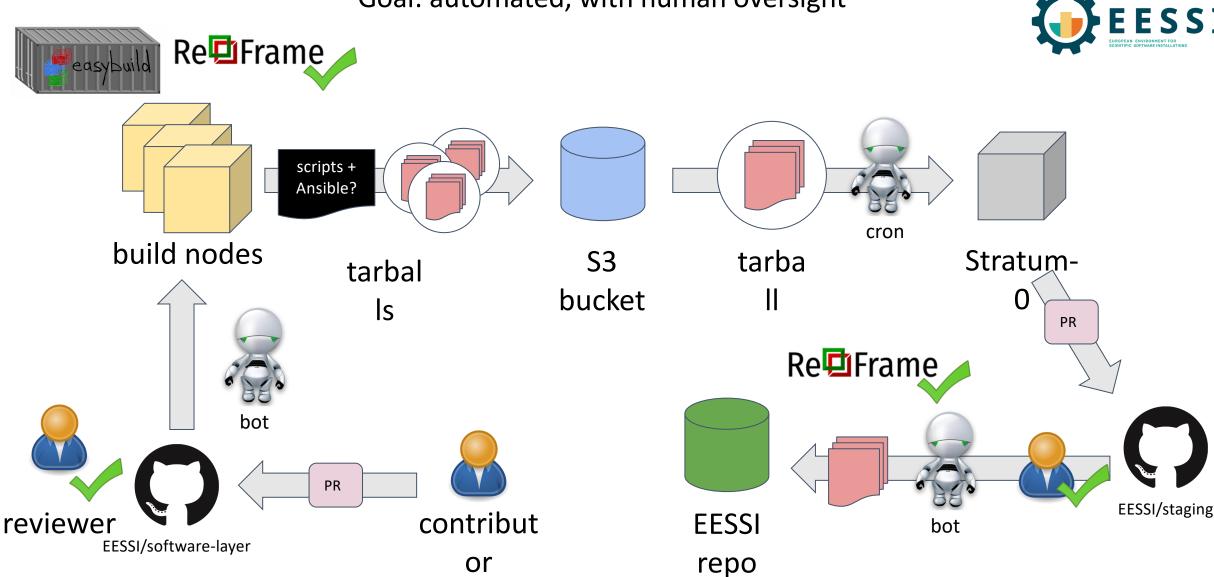
Software tests

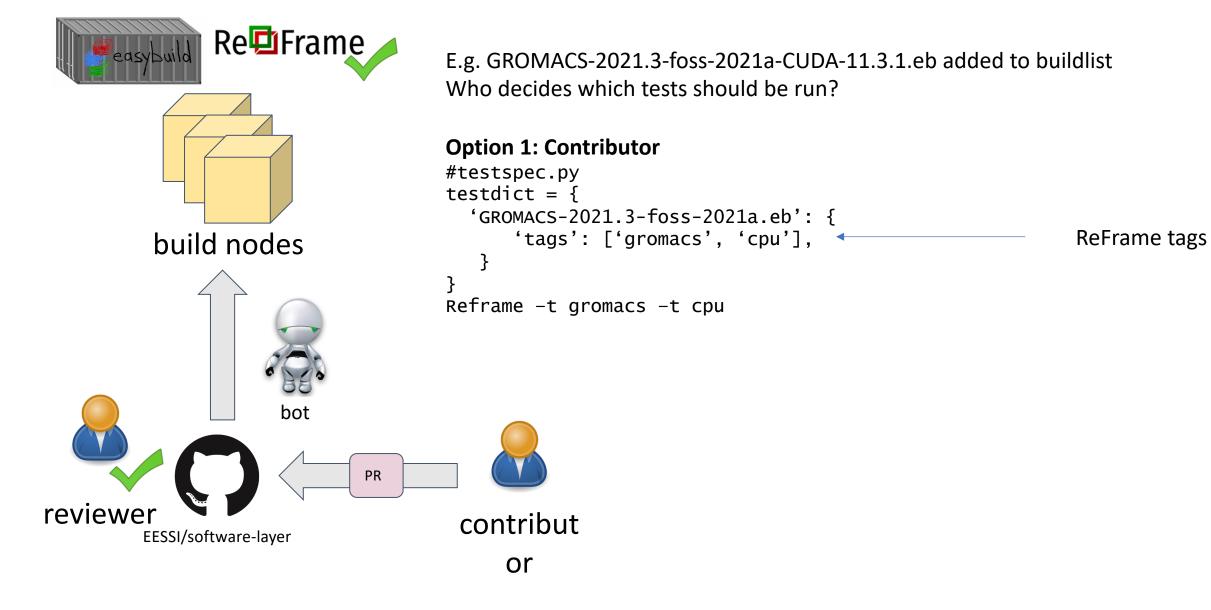
Should be lightweight, so can probably run all

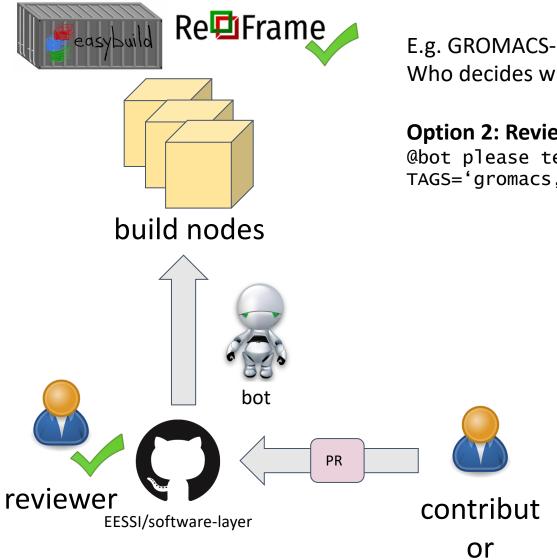
Layer	When	Which tests	Where	Trigger
Compat	Changes made (CI)	All (?)	GH CI	PR
Compat	Monitoring	All	Various HPC/cloud systems (GH runner?)	Every X days
Software	Changes made (CI)	Added/changed application	Various HPC/cloud systems (GH runner?)	PR or Maintainer triggers bot (a-la boegelbot)
Software	Monitoring	All	Various HPC/cloud systems (GH runner?)	Every X days

Progress on automating software deployment

Goal: automated, with human oversight







E.g. GROMACS-2021.3-foss-2021a-CUDA-11.3.1.eb added to buildlist Who decides which tests should be run?

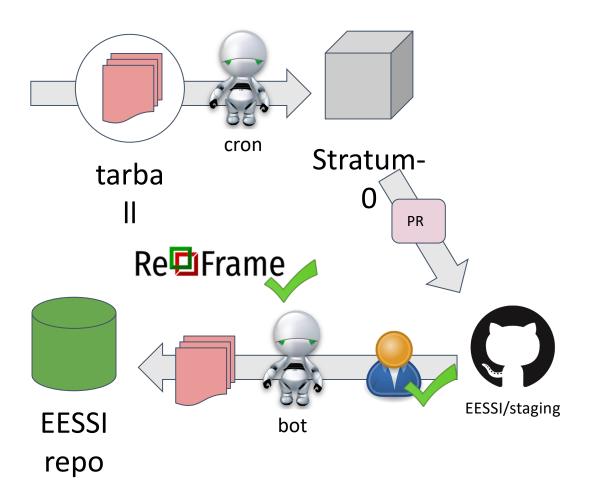
Option 2: Reviewer

@bot please test @hpc_sys1 @cloud_sys1 TAGS='gromacs, gpu'

E.g. GROMACS-2021.3-foss-2021a-CUDA-11.3.1.tar picked up Who decides which tests should be run?

Option 1: original PR to EESSI/software

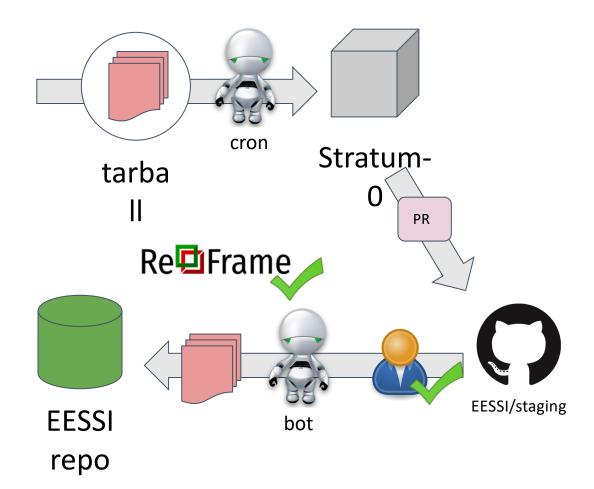
Read either #testspec.py or @bot comment in PR?



E.g. GROMACS-2021.3-foss-2021a-CUDA-11.3.1.tar picked up Who decides which tests should be run?

Option 2: Reviewer

Does a new @bot please test @hpc_sys1 @cloud_sys1 TAGS='gromacs, gpu'



Open questions

- Which infrastructures to use for building / testing?
 - CSCS?
 - Our HPC infrastructure in the cloud? (@Boegel, you talked about this?)
 - Other HPC centers?
 - Who can help set up GH runners there?
- How do we handle authentication?
- Can we breakdown current TODO into smaller tasks, and assign for the hackathon?

What should be the tags

Layer	When	Which SW to test	Where	Trigger	ReFrame tags
Compat	Changes made (CI)	AII (?)	GH CI	PR	
Compat	Monitoring	All	Various HPC/cloud systems (GH runner?)	Every X days	
Software	Changes made (CI)	Added/changed application	Various HPC/cloud systems (GH runner?)	PR or Maintainer triggers bot (a-la boegelbot)	E.g. gromacs_ci
Software	Monitoring	All	Various HPC/cloud systems (GH runner?)	Every X days	E.g. monitoring