

Software Packaging

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Motivations

- Build tools are **foundational**. Packaging is an opportunity for **improvement**.
- Common enough problem, that duplication is not necessary.
- Most of our software stacks depend on $O(100)$ external packages, maintenance of that stack requires lots of manpower that could be shared/consolidated.
- Reducing effort in this area means it can be applied elsewhere.

Working Group Goals

- Many Skeptics:
 - The quest for common practices has been tried many times before: if they worked, we would not be here
 - Agreed that a phased approach, with well-defined milestones is probably best.
 - Decide if and how we proceed after each phase
- Phase I – requirements and specifications (note: there is not universal agreement here...)
 - Define the problem space well...
 - Collect technical input from all communities on what they have and want in the future (use case style requirements gathering)
 - Distill it down to common language and features necessary to define some sort of **packaging / building protocol**

Packaging Discussions

- Benedikt called the first organizing meeting on Feb 25
 - <https://indico.cern.ch/event/373973/>
- Currently the scope includes
 - Package building, management, and deployment
 - Associated runtime environments
 - Technology explorations, like how dockers might be useful

Packaging Discussions

- A home has been established at
 - <https://github.com/HEP-SF/packaging>
- Initial concerns are:
 - Source management
 - Build recipes
 - Configuration management
- Discussions have started in the “issues” area. There are many important points brought up here concerning benefits, buy-in, and approaches for moving forward.

The gitHub Issue

Define a build protocol for single package build #1

New issue

Open **hegner** opened this issue on Mar 18 · 15 comments



hegner commented on Mar 18

Owner

The build of individual packages should follow a common 'protocol'. This issue is to discuss how it could look like.



ktf commented 29 days ago

Owner

I would personally be happy with something which allows me to build externals with:

```
EXTERNAL_ROOT1=/some/path
EXTERNAL_VERSION=vX.Y.Z
OPTION1=someoption
PREFIX=/unique/build/prefix
...
./build.sh
```

and install them with:

```
./install.sh
```

Labels

None yet

Milestone

No milestone

Assignee

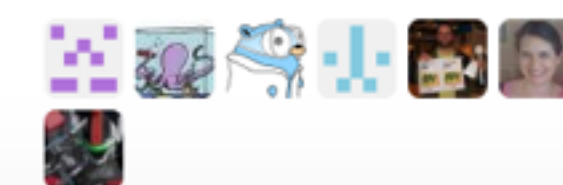
No one assigned

Notifications

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7 participants



Note the experimentation with focused issues page

7 participants so far
We need more!

Discussion!