



# HSF Packaging Group: Use Cases

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# Use Cases Document

- Started in November last year
- Some refinement and discussion since then
  - Actually converged pretty quickly
- Should now check we agree on this as a set of requirements for the group
- I went through the document and resolved all the comments, adding a few extra points where needed
  - AFAIK there is no controversy left...

## Use Cases for Packaging and Deployment Tools

HEP Software Foundation Packaging Group

This brief document summarises the major use cases for packaging and deployment systems in High Energy Physics. It is intended as a guide that can be used for determining objective criteria for different packaging and deployment systems.

It is also intended to provide background for the “required and desired” packaging features given in section 1.2 of the HSF Packaging WG Report (HSF-TN-2016-003).

# What does a common set of requirements mean?

- Our goal in this group is to find a best *common solution* to packaging as a problem
  - This is a mechanism to establish a common technical ‘language’ that allows us to share the effort required to build software coherently
  - I.e., it’s not just sharing for the sake of it, but because it brings tangible benefits
- Thus, in general, the solution to a set of overlapping requirements is to opt for the most stringent
  - Experiment X wants A; Experiment Y wants A and B
  - Tool M provides A; Tool N provides A and B
  - ⇒ We prefer tool N as that would allow X and Y to work together
  - Modularity is quite important: using or not using B should not make use of feature A more complex
  - *Appropriate parts of these subtleties can be part of the updated packaging TN*
- However, we must ensure that our requirements are **well motivated** in and of themselves and not **driven by edge cases**

To the document...



# Use Cases In Practice

- Return to the test stack
- Use our candidate tools to build it
  - Spack
  - Portage
  - Nix
  - ...
- Ensure that the use cases are actually satisfied
- This is also a cross check that
  - We didn't add use cases that are not actually needed
  - We didn't miss anything important out