HashDist Flash Talk

Is Code Sufficient?

An article about computational science in a scientific publication is not the scholarship itself, it is merely advertising of the scholarship. The actual scholarship is the complete software development environment and the complete set of instructions which generated the figures.
David Donoho, 1998.

Is Code Sufficient?

the complete software development environment

Thirty years ago

"Here's my .f77 file! I hope you've got a computer with 1 MB of RAM…"

Ten years ago

"Here's a bunch of source code and a Makefile, don't worry I just included all of the dependencies in my code…"

Today

"These results rely on SciPy, matplotlib, IPython, pandas, sympy, NumPy version 1.7.1, a patched version of PETSc, the system's Accelerate framework, and the latest commit on this branch on my GitHub repository."

What is HashDist?

- **HashDist** - A user-local tool for developing, managing, versioning, and deploying software builds

- **HashStack** - A collection of package specifications for building software using HashDist

How it Works

When your software stack is built by HashDist, HashDist versions your builds like a revision control system.

- Unique hashes track all components and sub-components of each stack

- Switching between build versions is a single command

- Profile and package specifications can be tracked in any version control system

- Works on all three major operating systems as well as supercomputers.

More Information

Website

https://hashdist.github.io/

Repository

github.com/hashdist/hashdist

Mailing List

https://groups.google.com/d/forum/hashdist