

So you want to build a distro...

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So you want to...

- create a purpose built distro...
 - An audio server
 - A firewall
 - Your HPC cluster
 - A showcase for new software

Have you ever...

- had your hands tied by a distro vendor?
- couldn't do what you want?
- felt you were reimplementing the wheel?
- Patched and repatched the upstream package?

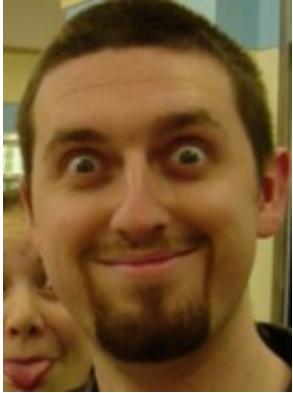
So you want to...

- Base it on...
 - RPM
 - dpkg
 - portage

So why would you want to...

- What's wrong with these options?
 - Hard to maintain
 - Version Collisions
 - An example

Why we need rich versioning: An r p a t h example from Ubuntu



<jdub> why would you want to install patched software?

<desrt> i have all sorts of patches against gnome that didn't make it into the release

<jdub> keep in mind that you will have versioning issues

<jdub> you are insane

<desrt> versioning issues?

<jdub> get them upstream

<desrt> jdub; they're blocked by the freeze

<jdub> if you don't change the version of the package (correctly!), it will be replaced

<jdub> and/or don't be so anal retentive about what you run that's packaged

An example

<desrt> so it should be installed

<desrt> jdub; something strange happened. the ubuntu-update thingy popped open and told me that there are new versions available of the packages that i just installed from source

<jdub> desrt: you didn't change the version number :(

<desrt> jdub; right. i kept it the same

<desrt> i'd have expected that it would have installed over the existing package and been considered to be the same version

<desrt> jdub; so before i try this again, what -should- i have done? (keeping in mind that when the new vesrion comes out i'd like it to properly upgrade, even blowing away my patch)

...

An example cont'd

<jdub> desrt: either modify the version at the top of debian/changelog (hamfisted)

<jdub> desrt: or run dch -i to increment it

<jdub> desrt: ideally you'd add "desrt1" to the version, rather than really incrementing it

<jdub> desrt: see all the packages with ubuntuX added

What?

- It's not insane
 - to use specially patched software
 - to try to maintain one pkg on your own
- Given these options...
 - you just might not do it.

An rBuilder demo

<http://www.rpath.com>

So, whats cool about that?

- Low barrier of entry
- Maintain only what you care about
- ISOs very customizable
- Easy to upgrade

rBuilder: Future developments

- LiveCDs
- Next challenges
 - Track issues and features
 - Testing builds
 - Metadata

Help Wanted!

- Join a project
- Start a new project
- rPath is hiring

Questions?



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