

Why Pybackpack Sucks

And how to make it suck less

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Google Summer of Code 2005

- Dave Arter's Summer of Code project for Fedora
- He was a python newbie back then
- Rushed to meet the deadline
- Not good enough for Fedora! Lots of hoops to jump through.
- "Consider it dead." – Dave, 30/05/2006
- "Challenge says ye?" – Me, ??/08/2006

Yoink!

- Took over pybackpack in August 2006
- Set about learning the code
- Reorganised repository
- Told the Fedora folks it was alive again

But first...

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Sorry, Dave.

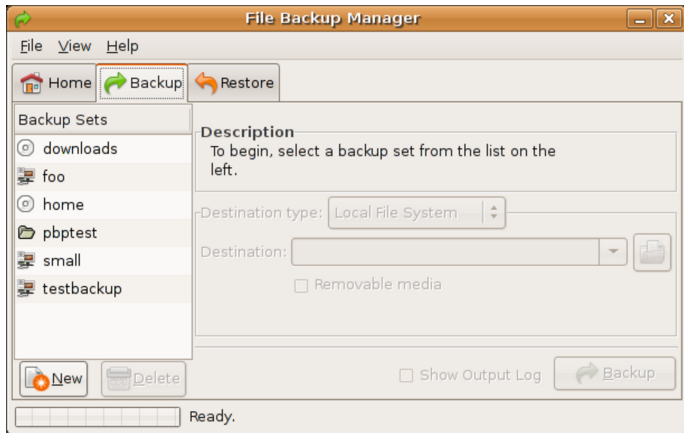
Initial Suckiness

- Badly modularised
- Disorganised files
- Maintenance nightmare
- Some fundamental bugs
- Too dependent on Gnome libs?
- Not attractive to devs!

Bug Examples

- Infinite loop with symlinks
- SSH not used properly
- Progress bars didn't show progress
- Unable to restore from CD (!)

GUI: Ghastly User Interface



Example: gui.py

- 1281 lines
- 2 classes
- 60 functions
- 12 global declarations (6 unique)
- Longest function: 109 lines
- Most informative error message evar:

```
try:
    exists = gnomevfs.exists(
        "sftp://%s@%s%s" % (user, host, setfile))
except:
    print "wtf"
```

Rdiff-backup Suckiness

- rdiff-backup 1.1.5 bugs:
- “Unable to restore from read-only locations”

Patched

- “No escaping for globs in filelists”

Patched

- Version 1.1.9 suck-free

libnautilus-burn Suckiness

- API change around v2.14
- Problems detecting CD drives
- Loss of backward compatibility

Fixes

- Lots of (small) fixes already
- More stable
- Better progress reporting
- Runs faster

Code Rejig

- Split gui.py into logical parts
- Parts already done e.g. mkisofs wrapper
- Improve modularity
- Stabilise, then add features
- Support older APIs to work on Debian/Dapper
- Rewrite

Fixing the GUI

- K.I.S.S.
- Split into task-orientated bits
- One-click backups (configurable)
- Run from the commandline?

The Social Side

- Get more people involved
- Documentation!
- Getting into distros - Fedora, Ubuntu, Debian
- Bug reporters are people too
- Improve communication with “upstreams”

More Info

- Check out pybackpack! File bugs! Write docs! Submit Patches!
- (Or just use it to do your backups)
- <http://andrewprice.me.uk/projects/pybackpack>
- <http://projects.sucs.org/projects/pybackpack>

The End



Thank you!