Debian Basic Packaging Workshop

Per Andersson <avtobiff@gmail.com>
`http://sigsucc.se/talks/debian-basic/`

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Outline

Why Package for Debian

- Help maintain a very popular GNU distribution
  - GNU and kernels Linux, HURD, kFreeBSD...
  - 12 arches, 25 000+ packages
  - Debian is free software with a social contract
  - Large user base, user and developer communities
  - Goal: The Universal Operating System
  - ...i.e. WORLD DOMINATION
- Robust package management system
  - dpkg
  - APT
- Contribute because it is a Good Thing$^{\mathrm{TM}}$
- Also, very fun and rewarding

How Does Software Enter Debian?

- Upstream source
- Voluntary work
- Request For Package (RFP)
  - You want someone else to do the job
- Intend To Package (ITP)
  - You will do the job
- Checking existing work
  - Work Needing and Prospective Packages (WNPP)

Debian Infrastructure

- dpkg, debs
- APT
  - apt-get
  - aptitude
  - synaptic
  - wajig
  - ...
- Repository
  - dist: Directory containing "distributions", canonical entry point (meta information)
  - pool: Physical location for all packages of Debian (pre-)releases

Debian Package

- Source Package
  - Upstream source with debian/ dir or patched with diff.gz
- debian/
  - control
  - copyright
  - changelog
  - rules
  - Package related files
  - debian/bin-pkg-name
- Binary Package
  - deb or udeb
  - Package name listed in control field Package
  - ar(1) archive with special magic value

Wedge Package Into Debian

- Keep the package tidy
  - maint-guide
  - policy
  - lintian
  - developers reference
- Upload
  - As a Debian Developer
  - With a sponsor
  - `mentors.debian.net`

Maintaining, or, Keeping Package in Debian

- `bugs.debian.org`
- patches
- New upstream releases
- Uploading

Tools

- Helper Tools
  - debhelper, cdbs
  - dput, dupload
  - devscripts
- Collaborate
  - VCS

References and Resources

- Main Entry Point(s)
  - `www.debian.org`
  - `www.debian.org/devel/`
- Documents
  - maint-guide
  - Policy manual
  - Developers reference
- Social (HALP!!)
  - IRC: oftc.net: #debian-devel, #debian-mentors
  - Mail: lists.debian.org: debian-devel, debian-mentors

Let's start the workshop and, hands-on, create a package

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