# Meta

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### Metapackages

Metapackages simply provide collections of packages as their dependencies, without providing any real software themselves. A good example of this would be the kubuntu-desktop package, which install KDE in Ubuntu. See below:

Package: kubuntu-desktop

State: installed

Automatically installed: no

Version: 1.254
Priority: optional
Section: metapackages

Maintainer: Kubuntu Developers <kubuntu-devel@lists.ubuntu.com>

Architecture: i386

Uncompressed Size: 54.3 k

Depends: alsa-base, alsa-utils, anacron, ark, bc, ca-certificates, dolphin, foomatic-db-comp ghostscript-x, inputattach, kde-window-manager, kde-workspace-bin, kde-zeroconf, kde-khelpcenter4, klipper, kmix, konsole, ksnapshot, ksysguard, kubuntu-netbook-default libpam-ck-connector, libsasl2-modules, libxp6, nvidia-common, okular, openprinting plasma-desktop, plasma-netbook, printer-driver-pnm2ppa, rfkill, software-properties ttf-freefont, ubuntu-extras-keyring, unzip, wireless-tools, wpasupplicant, xdg-user

Recommends: acpi-support, akregator, amarok, appmenu-gtk, appmenu-gtk3, apport-kde, apturl-bluez, bluez-alsa, bluez-cups, brltty, cdrdao, cryptsetup, cups, cups-bsd, cups-fonts-khmeros-core, fonts-lao, fonts-liberation, fonts-nanum, fonts-takao-pgoth: gstreamer0.10-qapt, gtk2-engines-oxygen, gtk3-engines-oxygen, gwenview, hplip, kaccessible, kaddressbook, kamera, kate, kcalc, kde-config-gtk, kde-config-touck kdenetwork-filesharing, kdepim-kresources, kdepim-runtime, kdepim-strigi-pluging kmousetool, knotes, kontact, kopete, korganizer, kpat, kppp, ksystemlog, ktimetr kubuntu-docs, kubuntu-firefox-installer, kubuntu-notification-helper, kubuntu-wellaptop-detect, libnss-mdns, libqca2-plugin-ossl, libreoffice-calc, libreoffice-ilibreoffice-style-oxygen, libreoffice-writer, mobile-broadband-provider-info, mokular-extra-backends, oxygen-cursor-theme, oxygen-icon-theme, partitionmanager

plasma-widget-facebook, plasma-widget-folderview, plasma-widget-kimpanel, plasma-plasma-widget-message-indicator, plasma-widget-networkmanagement, plasma-widgets plymouth-theme-kubuntu-text, policykit-desktop-privileges, polkit-kde-1, printer-printer-driver-foo2zjs, printer-driver-min12xxw, printer-driver-ptouch, printer-printer-driver-splix, pulseaudio, pulseaudio-module-bluetooth, python-qt4-dbus, system-config-printer-kde, ttf-indic-fonts-core, ttf-punjabi-fonts, ttf-ubuntu-usb-creator-kde, userconfig, xcursor-themes, xdg-utils, xsettings-kde

Description: Kubuntu Plasma Desktop/Netbook system

This package depends on all of the packages in the Kubuntu desktop system. Installing this Plasma Desktop or Netbook installation.

It is safe to remove this package if some of the desktop system packages are not desired.

Note that the section is set as 'metapackages' and that the dependency list is a bit crazy. These metapackages can be useful if you have a lot of software and users commonly want to install all of it together. A genomics related example might be a GMOD metapackage which would install Chado, GBrowse, WebApollo, etc.

# **Equivs**

Equivs is a package which provides scripts to create control files and build packages from control files. It is *perfect* for building metapackages, and lying to your installation about installing a package (I have done this...)

#### equivs-control

This script generates a control file. It literally just copies a template control file provided with the package.

```
$ equivs-control control
$ cat control
#### Commented entries have reasonable defaults.
### Uncomment to edit them.
# Source: <source package name; defaults to package name>
Section: misc
Priority: optional
# Homepage: <enter URL here; no default>
Standards-Version: 3.9.2

Package: <package name; defaults to equivs-dummy>
# Version: <enter version here; defaults to 1.0>
# Maintainer: Your Name <yourname@example.com>
```

```
# Pre-Depends: <comma-separated list of packages>
# Depends: <comma-separated list of packages>
# Recommends: <comma-separated list of packages>
# Suggests: <comma-separated list of packages>
# Provides: <comma-separated list of packages>
# Replaces: <comma-separated list of packages>
# Architecture: all
# Copyright: <copyright file; defaults to GPL2>
# Changelog: <changelog file; defaults to a generic changelog>
# Readme: <README.Debian file; defaults to a generic one>
# Extra-Files: <comma-separated list of additional files for the doc directory>
# <more pairs, if there's more than one file to include. Notice the starting space>
Description: <short description; defaults to some wise words>
long description and info
second paragraph
```

This control file can now be used to do create a metapackage, or an empty version of existing package (e.g., LaTeX + kile case).

#### equivs-build

```
$ equivs-build .
dh_testdir
dh_testroot
dh_prep
dh_testdir
dh testroot
dh_install
dh_installdocs
dh_installchangelogs
dh_compress
dh_fixperms
dh_installdeb
dh_gencontrol
dh_md5sums
dh_builddeb
dpkg-deb: building package 'equivs-dummy' in '../equivs-dummy_1.0_all.deb'.
The package has been created.
Attention, the package has been created in the current directory,
not in ".." as indicated by the message above!
```

equivs-build however has some useful options. It provides a <code>--full</code> flag to have a signed build and a <code>--arch</code> flag to build dummy packages for other architectures.