Customizing Debian

“Fork Yours with Debian GNU/Linux”

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Ubuntu

Debian Project

Software in the Public Interest

The World of Debian Customizers

There are **115** distributions derived from Debian.

AbulÉdu • Adamantix • AGNULA GNU/Linux Audio Distribution • ANTEMIUM Linux • Arabbix • ARMA aka Omoikane GNU/Linux • ASLinux • Auditor Security Linux • Augustux • B2D Linux • BEERnix • Biadix • BIG LINUX • Bioknoppix • BlackRhino • Bluewall GNU/Linux • Bonzai Linux • BrlSpeak • Càtix • CensorNet • Clusterix • ClusterKNOPPIX • Condorux • Damn Small Linux • Danix • DebXPde • eduKnoppix • ERPOSS • ESware • Euronode • FAMELIX • Feather Linux • Flonix • Vital Data Forensic or Rescue Kit (FoRK) • Freeduc-cd • GEOLivre Linux • Gibraltar Firewall • GNIX-Vivo • Gnoppix Linux • gnuLinEx • GNU/Linux Kinneret • GNUstep Live CD • grml • Guadalinex • Helix • Hiweed Linux • Impi Linux • Julex • K-DEMar • Kaella • Knoppix Linux Azur • Kalango Linux • KANOTIX • KlusTriX • knopILS • Knoppel • Knoppix • Knoppix 64 • Knoppix STD • KnoppiXMAME • KnoppMyth • Kurumin Linux • LAMPPIX • Libranet GNU/Linux • LIIS Linux • LinEspa • Linspire • Linux Live Game Project • Linux Loco • LinuxDefender Live! CD • Linuxin • LiVux • Local Area Security Linux (L.A.S.) • Luinux • Luit Linux • MAX: Madrid_Linux • Mediainlinux • MEPIS Linux • Metadistro-Pequelin • MIKO GNYO/Linux • Morphix • Munjoy Linux • Nature's Linux • NordisKnoppix • OGo Knoppix • Oralux • Overclockix • Quantian • Penguin Sleuth • PHLAK • PilotLinux • Progeny Debian • Rays Linux • ROSLIMS Live CD • Salvare • Santa Fe Linux • Shabdix GNU/Linux • Skolelinux • Slavix • Slix • Slo-Tech Linux • Soyombo Mongolian Linux • SULIX • Tablix on Morphix • Tilix Linux • TupiServer Linux • Ubuntu Linux • UserLinux • WHoppiX • X-evian • Xfld • Xandros Desktop OS • Xarnoppix • ZoneCD • Zopix

The World of Debian Customizers

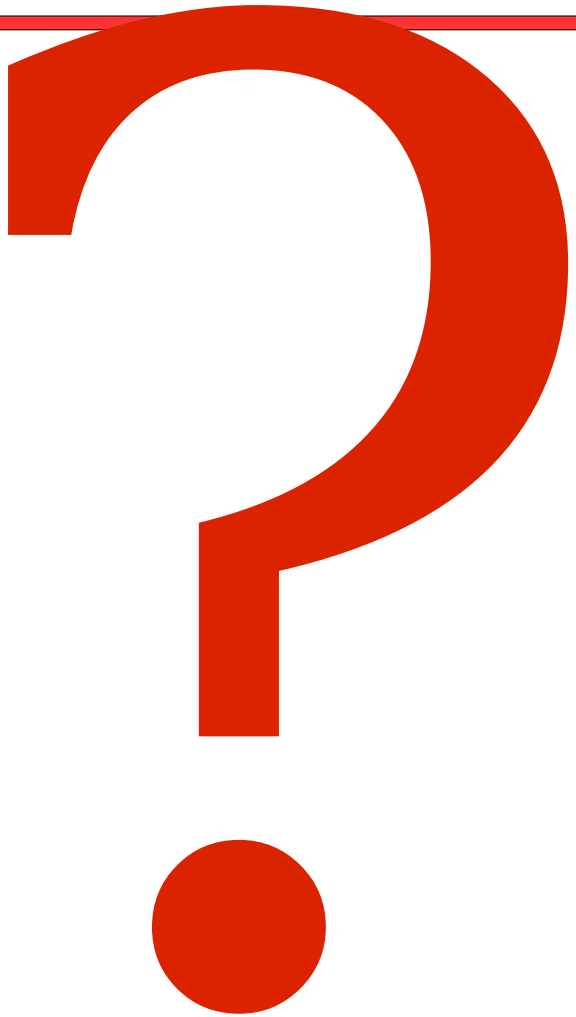
The most recognizable include:

- Knoppix
- Linspire/Lindows
- MEPIS
- Ubuntu
- UserLinux
- Xandros

Debian: Quick Facts

- Debian contains what is approaching 18,000 packages (and adding 5 each day);
- Debian consists of 1,000 official volunteers;
- Debian includes the work of many companies and organizations;
- Debian is 100% free software;
- Debian has very good package management;

But What *Is* Debian?



Is Debian the code, people, principles, politics, policy?

One Size Does *Not* Fit All

To Fork or Not To Fork

Tonight's Case Studies

- Ubuntu
- UserLinux
- Internal *CDDs*:
  Skolelinux, Debian-NP

debian·np

Goals of Customizers Overview

The goals and problems of customizers include:

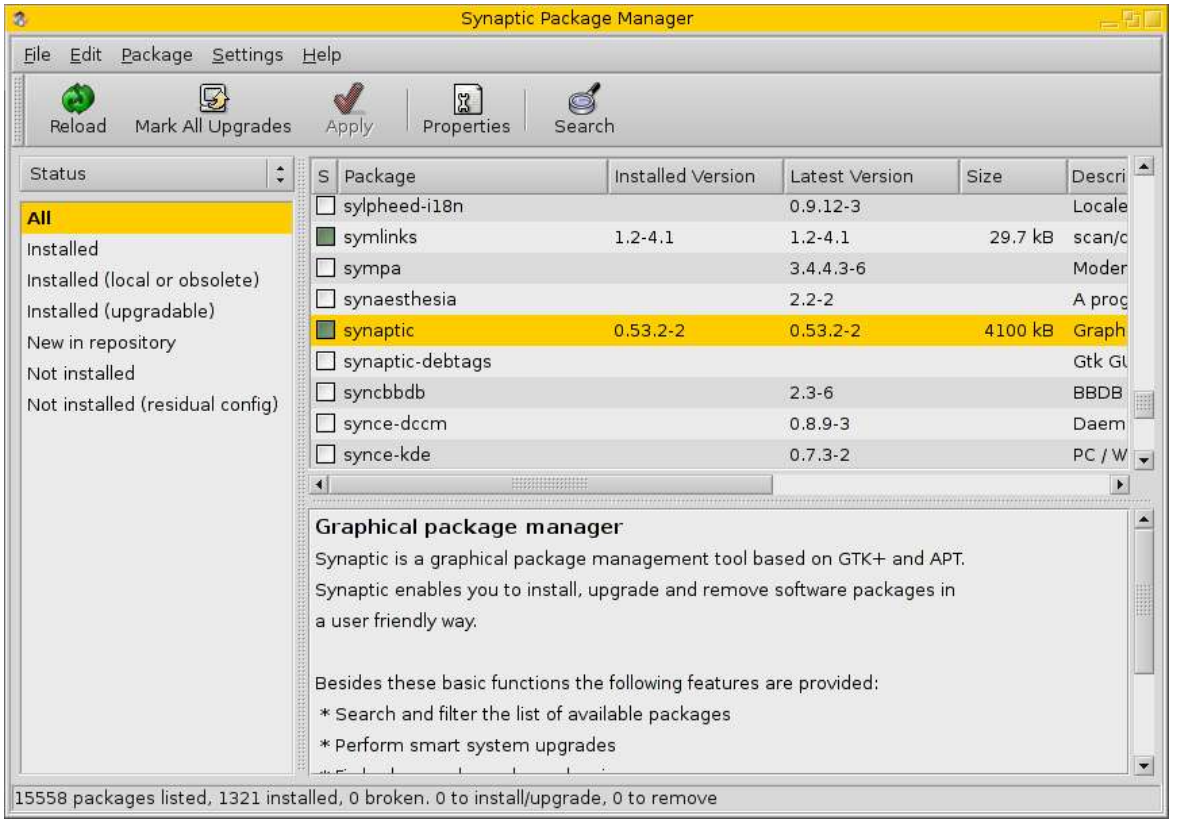
- Custom software selection
- Custom software configuration
- Software replacement
- Custom installers/environments

Plus:

- Gain from others work
- Share your work

Selecting Packages

- Task packages
- Metapackages
- Debtags



Package Selection Details

- Meta-Packages

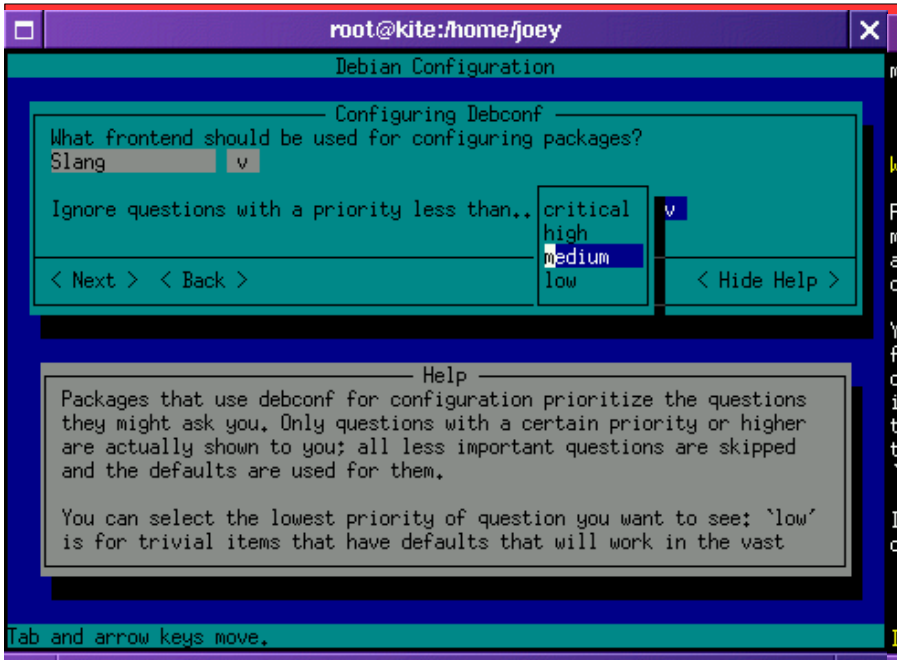
```
Source: userlinux-emterprise-desktop
Section: userlinux
Priority: optional
Maintainer: Bruce Perens <bruce@perens.com>
Standards-Version: 3.5.8
Package: userlinux-desktop
Architecture: all
Depends: bash, cupsys, cupsys-client, eclipse-sdk, epiphany, evolution, gaim,
 gfax, ghfaxviewer, gimp, gimp-data-extras, gimp-manual, gimp-perl, gimp-python,
 gimpprint-doc, gimpprint-locales, gnome, gnome-control-center, gnome-core,
 gnome-cups-manager, gnome-games, gnome-media, gnome-system-monitor,  gnome-system-tools,
 gnome-terminal, gnome-utils, gthumb, hylafax-client, hylafax-doc, hylafax-server,
 kernel-image-2.6-386, mozilla, myspell-dictionary, ooqstart-gnome, openoffice.org,
 openoffice.org-help, openoffice.org-hyphenation, openoffice.org-mimelnk,
 openoffice.org-thesaurus, pan, planner, rhythmbox, samba, smbclient, smbfs, tomcat4,
 totem, usermin-postgresql, wine, wine-doc, wine-utils, winesetuptk, x-ttcidfont-conf,
 xchat
Description: Installs the UserLinux desktop software packages.
 UserLinux is a logical subset of the Debian system. Installing this package
 will cause all of the software packages that are a standard part of the
 UserLinux desktop system to be installed.
```

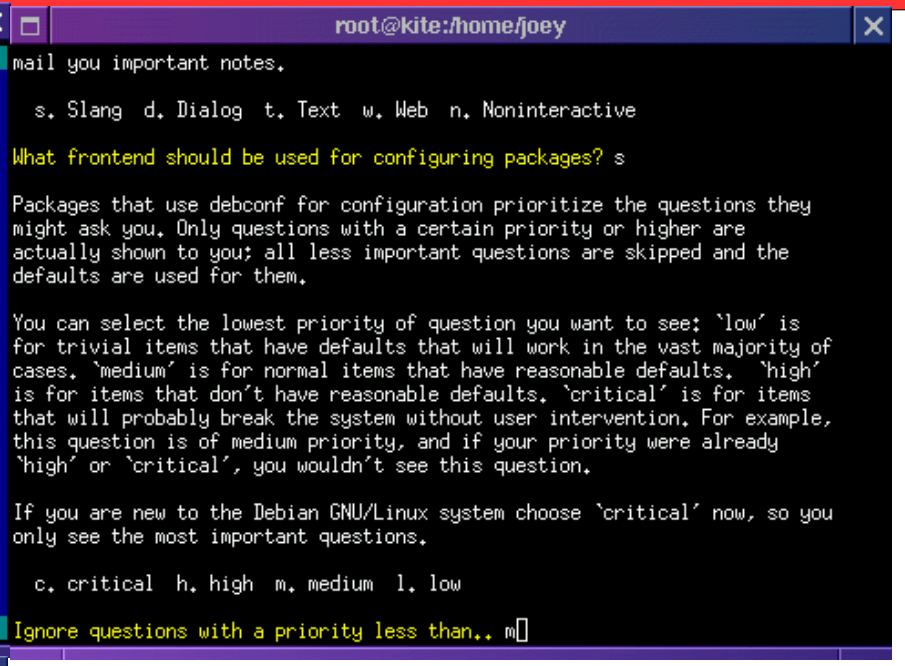
- Debtags

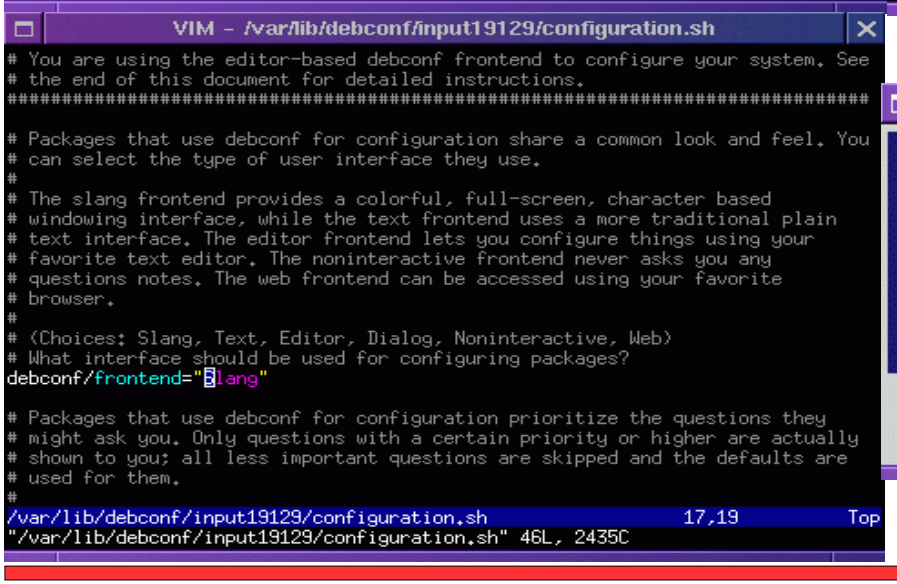
Configuring Packages

- *Debconf* preseeding
- Low-priority (or unasked) *Debconf* Questions
- *cfengine* tweaks

Debconf Examples







cfengine Tweaks

```
editfiles:

  { $(ftp)/etc/passwd

  AutoCreate
  EmptyEntireFilePlease
  AppendIfNoSuchLine "ftp:x:$(uid):$(gid):Anonymous FTP:$(ftp):/
bin/sync"
  }

  { $(ftp)/etc/group

  AutoCreate
  EmptyEntireFilePlease
  AppendIfNoSuchLine "ftp::$(gid):"
  }

  {  $(ftp)/etc/shadow

  AutoCreate
  EmptyEntireFilePlease
  AppendIfNoSuchLine "ftp:NP:6445::::::"
  }
```

Replacing Packages

- Shared package repositories
- Version Control Magic

Creating Custom Installers/Environments

Examples:

- Progeny uses Anaconda, the Redhat installer, to install their Debian based system.
- Knoppix, Morphix, etc. are "Live" distributions meant to be run off a CD.

Summary

- **Problem**: Debian is great -- But can't be everything everyone wants it to be at once.
- **Answer**: Balance the global and local in creating infrastructure to:
  - Select software
  - Configure software
  - Replace software
  - Install and run software in different ways
- **Result**:
  - A complex and varied set of approaches.
  - A single united goal of inter-project and inter-distribution collaboration and ***Total World Domination***.