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 • Arbbix • 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 • ClusterKNOPIX • 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 • knoplILS • 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

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NYLUG: Customizing Debian

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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

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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-enterprise-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, oqgstart-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, winersetuptk, x-xtcifont-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

Packages that use debconf for configuration prioritize the questions they might ask you. Only questions with a certain priority or higher are actually shown to you, all less important questions are skipped and the defaults are used for them.

You can select the lowest priority of question you want to see. "Low" is for trivial items that have defaults that will work in the vast majority of cases. "Medium" is for normal items that have reasonable defaults. "High" is for items that don't have reasonable defaults, "Critical" is for items that will probably break the system without user intervention. For example, this question is of medium priority, and if your priority were already "High" or "Critical", you wouldn't see this question.

If you are new to the Debian GNU/Linux system choose "Critical" now, so you only see the most important questions.

More options to select:
- Slang
- Dialog
- Text
- Web
- Noninteractive

Ignore questions with a priority less than: medium

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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*. 