



Slackware Software Packaging: How and Where To Start

How many of you are aware of the steps in creating Slackware packages

Pritvi Jheengut

13 March 2015



Outline



- 1 Introduction
- 2 What is a Package?
- 3 Preparation For Building
- 4 The End



Outline



1 Introduction

2 What is a Package?

3 Preparation For Building

4 The End



Prerequisites

The Shell and Coreutils



Shell

- Some basic shell programming skills
- GNU Coreutils

Example

GNU Coreutils

- mkdir
- cat
- ls



Prerequisites

Packaging tools



Unix

- tar
- install
- cp/mv
- chmod/chown

Packaging tools



- tar

- install



Prerequisites

Packaging tools



Unix

- `tar`
- `install`
- `cp/mv`
- `chmod/chown`



Prerequisites

Packaging tools



Unix

- `tar`
- `install`
- `cp/mv`
- `chmod/chown`



Prerequisites

Compression Utilities



mime Compression Utility

tgz gzip

tbz bzip2

txz xz/lzma



Prerequisites

Compression Utilities



mime Compression Utility

tgz gzip

tbz bzip2

txz xz/lzma



Prerequisites

Compression Utilities



mime Compression Utility

tgz gzip

tbz bzip2

txz xz/lzma



Prerequisites

Compression Utilities



mime Compression Utility

tgz gzip

tbz bzip2

txz xz/lzma



Prerequisites

Slackware Basic tools



Slackware

- **pkgtool** - The Package Manager
- <http://tukaani.org/pkgtools/> an old forked version
- **installpkg**
- **removepkg**
- **upgradepkg**
- **explodepkg**
- **makepkg** - The Package Creator/Maker
- **slackbuild** scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
- <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodepkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
- <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodepkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
- <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodepkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
- <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodpkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
 - <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodpkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
 - <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodpkg
- makepkg - The Package Creator/Maker
 - slackbuild scripting



Prerequisites

Slackware Basic tools



Slackware

- pkgtool - The Package Manager
 - <http://tukaani.org/pkgtools/> an old forked version
- installpkg
- removepkg
- upgradepkg
- explodpkg
- makepkg - The Package Creator/Maker
- slackbuild scripting



Outline



1 Introduction

2 What is a Package?

3 Preparation For Building

4 The End



Definition of a package

A Slacker's goal to world domination



A Package

Definition: An archive format with/out instructions used for the installation of files on a system

Example

- t?z
- deb
- rpm



Outline



- 1 Introduction
- 2 What is a Package?
- 3 Preparation For Building
- 4 The End



Prepare The Build Directory

Sanitize The Build Directory



`mktmp`

`cd /tmp/"The_Temporary_File_Just_Created"`

`mktmp`

Create temporary files/directories that are predictable, safe and to avoid possible race conditions.

`/tmp`

The `/tmp` directory is assumed to be cleaned regularly, sometimes assumed a tmpfs is mounted over tmp



Prepare The Build Directory

Populating The Build Directory



Dump The Source Code

copy the source code archive into the tmp dir afterwards
extract files into the 'mktmp' directory

```
cp ${old path}/${source code archive} .  
OR  
wget/curl protocol://url/  
    ${source code archive}  
mkdir build  
cd build  
tar -xvzf ../"${source_code_archive}"  
unzip ../"${source_code_archive}"
```



Example

-
-



Outline



- 1 Introduction
- 2 What is a Package?
- 3 Preparation For Building
- 4 The End

A Slacker's goal to world domination



- slack the hard way
- sip some beer
- Take over the world
- Relax...



Resources

If you want to improve this style



LaTeX Beamer

<http://latex-beamer.sourceforge.net/>



KDE Presentations

<http://www.kde.org/kdeslides/>



Questions ?

Pritvi Jheengut

z.coldplayer@gmail.com