Slackware Demystified

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What to talk about ?

Smidgens

Philosophy

Services

Configurations

Packages

Kernels

Community

Smidgens

First, Some Thanks!

To All Yall

<3

<3

<3
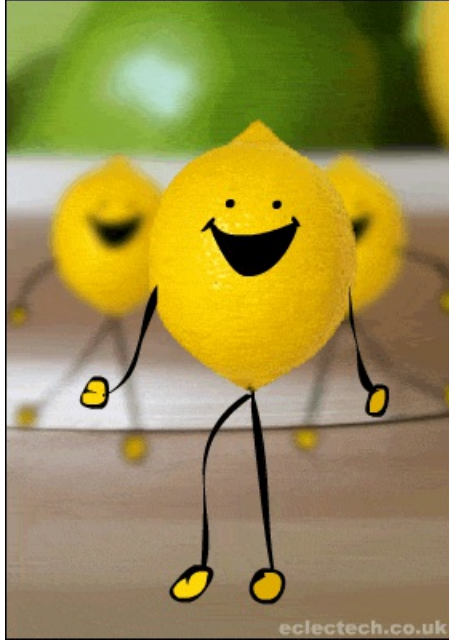
slackware linux

volkerdi

& rest of the team

(alienBob, rworkman, Alan_Hicks, fred,

PiterPunk, alphageek,

mrgoblin, Mozes, karlmag)

<3

Trivia:

Why was there a pi Release Candidate?

(for 13.37)

Trivia:

Who is the guy smoking the pipe?

Who has run
Slackware Linux?

slackware linux

it is old

it is stable

it is cultist

(not really) :)

LEMONS

are pretty good.

Next

```
$ whoami
vbatts
```

Shade tree Linux Nerd

Slackware Crew

since summer of 2009

Primary distractions are **Ruby** and
KDE

Day Job

We are hiring!

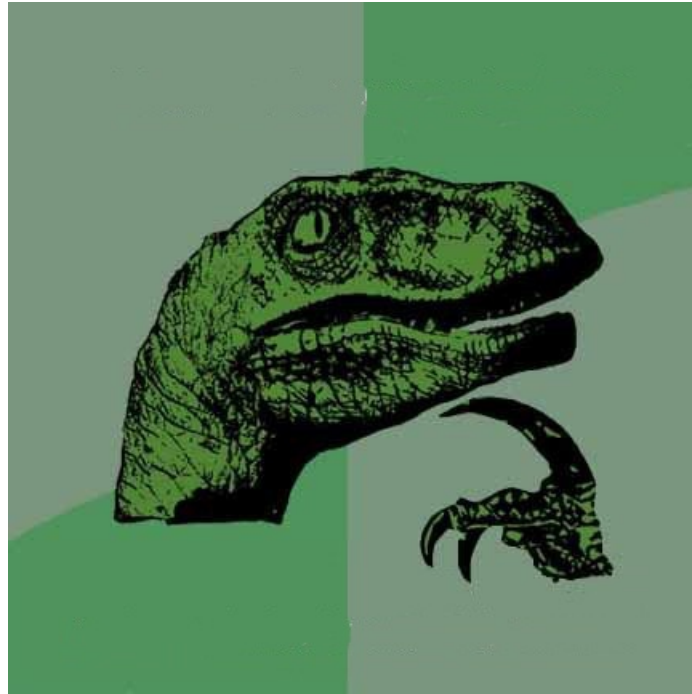akamai.com/careers

Contact

vbatts@

slackware.com

hashbangbash.com

akamai.com

Philosophy

Keep It Simple

If it ain't broke, don't fix it.

Lack of *"here, let me help you with that"*

and no *magic*

Stick with Upstream

./configure && make && make install

essentially

Shell

startup scripts

package management

(no magic)

Learning to Learn

Get comfortable reading man pages

and the difference in their sections.

Validate bugs against *STOCK* Slackware, **before** submitting an issue

Build out *your* protocol for investigating.

SRSLY, make an effort to ask educated questions

Services

init

(sysvinit)

Age old,

tried and true

Trivia:

Default runlevel?

/etc/inittab

1: single user

3: multiple user (default)

4: X11 with KDM/XDM/GDM

2,5: "unused", but setup same as 3

0: halt

6: reboot

/etc/rc.d/rc.*

rc.S - system initialization

rc.K - single user

rc.M - Multi user (3,4)

rc.4 - X11

rc.0 - shutdown

rc.6 - reboot

rc.inet1 - various networking (see rc.inet1.conf)

rc.inet2 - network system (sshd, nfs, rpc, cifs, etc.)

rc.wireless - ... wireless setup (see rc.wireless.conf)

rc.sysvinit - to support /etc/init.d and the /etc/rc[0123456].d/* structure

local startups

rc.local

Trivia: Where else?

rc.local_shutdown

gist of the rc.local

(and a lot of the rc.{M,S})

```
if [ -x /etc/rc.d/rc.foo ] ; then
  . /etc/rc.d/rc.foo start
fi

/sbin/modprobe acpi-cpufreq
echo "level auto" > /proc/acpi/ibm/fa
```

Configurations

Upstream

(again)

There is not a shimmed in OS
abstraction.

--sysconfdir=/etc

the few, the proud

/etc/rc.d/rc.*.conf

rc.inet1.conf

rc.wireless.conf

rc.bluetooth.conf

Boot Loader

Trivia: What bootloader is used?

lilo(8)

lilo.conf(5)

mkinitrd(8)

mkinitrd.conf(5)

*.new files

```
$ slackpkg new-config

Searching for NEW configuration files

[...]

$ find /etc/ -type f -name '*.new'
/etc/rc.d/rc.inet1.conf.new
/etc/httpd/httpd.conf.new
/etc/httpd/extra/httpd-default.conf.new
/etc/httpd/extra/httpd-userdir.conf.new
/etc/httpd/extra/httpd-autoindex.conf.new
/etc/httpd/extra/httpd-ssl.conf.new
```

Packages

Counts

core: 936 pkgs (+ 82 kde l10n)

/extra: ~21 pkgs

Slackbuilds.org Counts

unofficial

+2600 pkgs

Package Structure

A compressed tar ball of the file tree relative to '/'

Package "meta" data

/install/slack-desc

/install/doinst.sh

TRIVIA: What else can be used (in stock Slackare)?

/var/log/setup/setup.$PKGNAME

Tools

pkgtool(8)

makepkg(8)

explodepkg(8)

installpkg(8)

removepkg(8)

upgradepkg(8)

Package data storage

/var/log/packages/ & /var/log/scripts/

removed_packages/ & removed_scripts/

X

To X, or not to X

Robust Command Line Installation

```
$ xmwconfig
```

┌─────────── SELECT DEFAULT WINDOW MANAGER FOR X ───────────┐
│ Please select the default window manager to use with the X │
│ System. This will define the style of graphical user inte │
│ computer uses. KDE provides the most features, and people │
│ Windows or MacOS experience will find it easy to use. Oth │
│ managers are easier on system resources, or provide other │
│ features.   │
│ ┌───┐ │
│ │   xinitrc.kde   KDE: K Desktop Environment   │ │
│ │   xinitrc.xfce   The Cholesterol Free Desktop Enviro │ │
│ │   xinitrc.fluxbox   The fluxbox window manager   │ │
│ │   xinitrc.blackbox   The blackbox window manager   │ │
│ │   xinitrc.wmaker   WindowMaker   │ │
│ │   xinitrc.fvwm2   F(?) Virtual Window Manager (versio │ │
│ │   xinitrc.twm   Tab Window Manager (very basic)   │ │
│ └───┘ │
│   │
│   <   OK   >   <Cancel>   │
└───┘
                                              43 SLID

```
$ startx
```

Kernels

No patching *

Apart from CVEs or a blocker regression

huge & generic

Shared *.ko modules

hacking

(because people do it)

$REPO/testing/

/usr/src/linux

/proc/config.gz

Build your own

```
$ wget http://www.kernel.org/pub/linux/kernel/v3.0/testing/linux-
[...]
$ tar jxf linux-3.0-rc2.tar.bz2
$ cd linux-3.0-rc2
$ zcat /proc/config.gz > .config
$ make oldconfig
[...]
$ make
  CHK     include/linux/version.h
  CHK     include/generated/utsrelease.h
  CALL    scripts/checksyscalls.sh
  CHK     include/generated/compile.h
[...]
```

WARNING!!1!one!

do **NOT** report issues, until

you validate it against a stock installation.

Even if you don't think it's kernel related

Community

Where is it?

People

IRC - Freenode ##slackware

Usenet - alt.os.linux.slackware (AOLS)

Forum

linuxquestions.org/questions/slackware-14/

Mailing Lists

Discussion - mailman.lug.org.uk/mailman/listinfo/slackware

AOLS Off Topic - wombat.san-francisco.ca.us/mailman/listinfo/slackware-ot/

Additional Packages

slackbuilds.org/

Bug Tracking?

Nothing Formal

Emails to the team, and forums

Not much in the OS interferes

Most reports go straight upstream

Recap

K.I.S.S

(Keep It Simple, S<word>)

Questions?

Links

slackware.com/ - ... Slackware!

slackbuilds.org/ - Community contributed packages

slackware.com/~vbatts/2011_SELF/ - This Talk

akamai.com/careers - Akamai Jobs

github.com/schacon/showoff - what this slide deck is using

fin