16 Things to Try for a More Linuxy Year

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16 Things???

Did one of these I believe back in 2014 and it was called 14 for 14. So that is where this one picks up.

New tools, New things. Some of them link to others

Just a light presentation please feel free to hop in with suggestions or ideas

16 Things

Operating Systems

1. Ubuntu BSD
2. Devuan
3. Redox
4. Ubuntu 16.04

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Raspberry PI Things

1. RetroPie
2. Make your own Amazon Echo with a Raspberry PI
3. Virtual Raspberry PIs

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USB Stuff

1. MultiBootUSB
2. Write Protectable USB Sticks
3. Etcher - Software for writing USB sticks

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Software

1. APG - Automated Password Generator
2. MergeFS / MP3FS / Other FUSE filesystems
3. Opera / Vivaldi - Browsers still matter
4. OSalt.com - Open Source Alternatives
5. Microsoft SQL Server on Linux

16 Things

Misc

1.   Linode/Digital Ocean

Ubuntu BSD

This is Ubuntu currently 15.10 using the BSD kernel
Debian 7.0 has a similar project named Debian/kFreeBSD - dropped from official Repos with Debian 8

No Systemd, interesting project :-)

Let's take a quick look

Devuan

Debian has flipped to Systemd
Not everybody is happy about this
The Devuan team is keeping alive the old style init stuff
An interesting project because it will hopefully help keep other projects less tightly coupled to Systemd (KDE is fighting this a bit)

The ability to install it seems to depend on how their mirror infrastructure is holding up.

Redox

Redox is a new operating system written in Rust. Rust is a modern programming language initially developed by Mozilla

What made Unix such a success was that it was written in C mostly with a minor amount of assembler.

It is still very early, but is pretty darn interesting

Currently not working under VirtualBox

Ubuntu 16.04

The latest version of Ubuntu has a couple of very cool new features in it

LXD - LXD is another lightweight virtualization solution. It has a couple of interesting features that some of the others miss like live migration and failover

Snap - Snap is a new package manager that is going to be being used by some projects such as Firefox to allow you to keep newer packages on the system

Ubuntu 16.04

The latest version of Ubuntu has a couple of very cool new features in it

ZFS - Sun's filesystem. Available in Solaris / BSD for quite a while. Has a lot of features that other systems like BTRFS are working on adding to Linux (Deduplication, Snapshots, Logging, and so on)

RetroPie

RetroPie is a distribution that puts together a whole load of emulators into one simple package. Load RetroPie, Load Roms, game :-)

If you've got a spare Raspberry Pi it is an awesome little project. Also a very simple way of doing things.

If you need some roms head over to archive.org and look for Mame roms. There was an approximately 50gb torrent of Mame roms over there

Virtual Raspberry Pi

Qemu can be used to emulate a Raspberry Pi. It can be quite a time saver when you're just trying things out.

Hack-A-Day and the Raspberry PI homepage have examples of this. My demo for this works on Debian but not on Linux Mint

Make your Own Amazon Echo with a Pi

Amazon has posted full instructions on how to take a Raspberry Pi and turn one into an Amazon Echo and a Raspberry Pi 2 or 3.

Very cool little example to show what the Pi is capable of.

MultiBootable USB sticks

Sometimes you want to load multiple Live distros onto one USB stick

You can do it via grub and playing around or you can use a tool like YUMI, lot of other tools available as well. Can roll your own with grub as well. Own with grub is probably the best solution.

Can be very handy when you want Kali/BlackArch/Spike Linux/Pentoo and others all on one stick or external hard drive

Write Protectable USB Sticks

This is a reddit category which is updated every now and then to provide a list of USB sticks that you can turn the ability to write to the USB stick off

Note: this isn't like SD cards which is a software only switch which can be ignored, this is a real switch

Can be very useful when you have to access computers you don't consider clean

Etcher

Etcher is another tool for writing iso images to USB sticks
What makes it cool is that it is very easy to use and it is
distributed as an appimage image

AppImage is another new packaging system similar to Snap
except it is cross-distro. AppImage is the spiritual successor to
the old Klick package format.

APG - Automated Password Generator

Automated Password Generator is a very simple tool that generates semi-pronounceable passwords

I personally use it to generate passwords for low value sites that require a password. Pretty much anybody who doesn't have a payment method or is hooked to my reputation

It generates better passwords than a lot of people I know

MergeFS / MP3FS / SSHFS / Fuse Filesystems

MergeFS - allows you to turn multiple drives into one filesystem. E.g. have 10gb free on one drive and 20gb free on one disk. MergeFS allows you to create one virtual 30gb drive

Mp3FS - cool filesystem, mount a directory with flac files and it will automatically convert them to Mp3 files

SSHFS - Allows you to mount a drive over ssh, very useful for accessing remote systems without trying to do samba or nfs

FUSE Filesystems - there are a lot of different FUSE filesystems out there. If what you want isn't there you can always write your own :-)

Opera / Vivaldi Browsers

Browsers are still evolving and more is happening in the space

Opera - has added Ad-blocking / built-in VPN (currently in developer channel), powersaving mode and more

Vivalidi - a browser created by some of the Opera people also doing some new cool innovative stuff (user defined mouse gestures)

osalt.com

Osalt.com - Open Source Alternatives

What is an alternative to Visio? Osalt.com probably has a couple of suggestions. Can be useful to help end conversations about how linux doesn't do X

SQL Server on Linux

Oracle supporting their database on Linux was one of the watershed events for Linux. When they named it as their primary platform even more so but that is getting ahead of ourselves.

Microsoft has announced that SQL Server will be available on Linux. There is a beta out there, but I haven't given this a shot yet. If this actually happens and isn't bad this could be a tremendous boost for Linux's credibility with some people in the Enterprise.

Linode/Digital Ocean

Cheap hosting in the web.

Digital Ocean droplets start at $5 / month / Linode $10 / month. Quick to startup/shutdown. Both also have a lot of good tutorials on them as well

Digital Ocean Referral Code - get $10 free (2 months small droplet) - if you spend $25 I get a Credit

https://m.do.co/c/b10103f656e2

Links

UbuntuBSD

Sourceforge page

https://sourceforge.net/projects/ubuntubsd/

Twitter Page

https://twitter.com/ubuntubsd

Links

Devuan

https://devuan.org/

Redox

http://www.redox-os.org/

Links

Ubuntu 16.04

http://www.ubuntu.com

RetroPie

https://retropie.org.uk/

Links

Virtual Raspberry Pi

Hack-A-Day article

http://hackaday.com/2016/05/20/need-a-raspberry-pi-right-now-maybe-you-have-one-needs-art/

Links

Make your own Amazon Echo

https://github.com/amzn/alexa-avs-raspberry-pi

Links

MultiBootUSB

http://multibootusb.org

How to for Multiple USB using Grub

https://apps.education.ucsb.edu/wiki/Boot_multiple_ISOs_from_a_single_USB_flash_drive
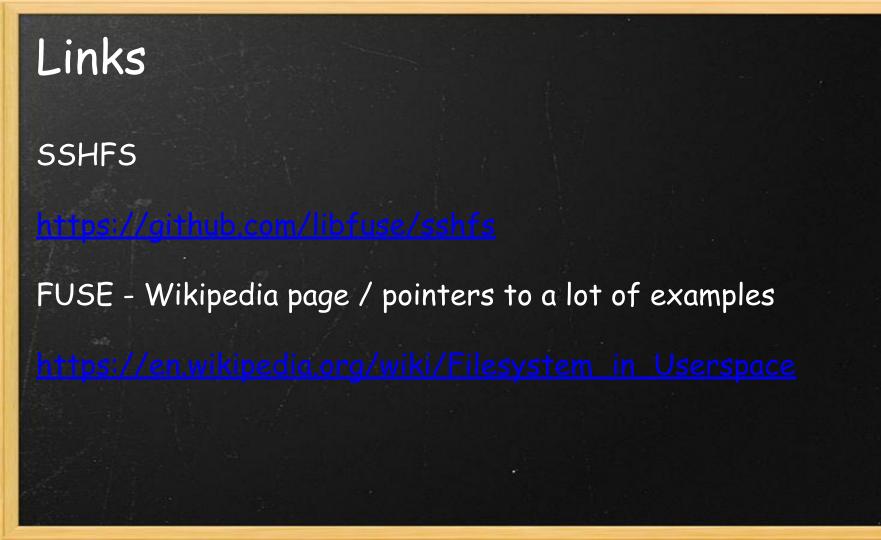
Links

Write Protectable USB Sticks

http://www.fencepost.net/2010/03/usb-flash-drives-with-hardware-write-protection/

Links

Etcher

http://www.etcher.io/

APG

http://linux.die.net/man/1/apg

Links

MergeFS

https://github.com/stettberger/MergeFS/blob/master/mergefs.py

MP3fs

https://khenriks.github.io/mp3fs/

Links

SSHFS

https://github.com/libfuse/sshfs

FUSE - Wikipedia page / pointers to a lot of examples

https://en.wikipedia.org/wiki/Filesystem_in_Userspace

Links

Opera

http://www.opera.com/

Vivaldi

https://vivaldi.com/?lang=en_US

Links

Osalt.com

https://www.osalt.com/

SQL Server on Linux

http://www.microsoft.com/en-us/server-cloud/sql-server-on-linux.aspx

Links

Linode

https://www.linode.com/

Digital Ocean

https://www.digitalocean.com/