

Free Software Downloads

Computer Tech 2016

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Windows Programs (Apps)

- Free and Open Source Software (FOSS) for Windows
- From the schedule:
 - Get free, legal software for MS Windows and Mac: download and install compatible substitutes for Office, Access, Photo Shop, Quicken, and others. Handout w/links.

Background

- I'm a recently-retired (2016-01-01) engineer with ManTech International Corporation (<http://mantech.com>)
- I've been using Unix and GNU/Linux and FOSS professionally for over 22 years

The sessions are interrelated:

- Free Software
 - 09:00 AM - Room 127
- Introduction to Linux
 - 10:00 AM - Room 309
- Introduction to Perl 6
 - 11:00 AM - Room 309

These links are on your handout and are related to my sessions:

`<https://computertechnwf.org/2016/sessions/sessions.html>`

`<https://nwflug.org>`

`<http://nicevile.pm.org>`

`<https://github.com/tbrowder>`

Become familiar with FOSS

- Motivation
- Resources
- Advantages
- Scope
- Sources
- Installation
- Cautions

Many people are responsible for our current technology, but these are particularly noteworthy in the FOSS arena:

- Windows is not my OS of choice, but I thank **Bill Gates** for making the PC widely available
- For Linux and FOSS we need to thank:
 - **Richard Stallman** (originator of the Free Software Foundation and much GNU software)
 - **Linus Torvalds** (originator of the Linux kernel)

Why do we recommend and use FOSS?

- Source is available for inspection
- Fixes are available from the community of developers
- Two major variants:
 - Free for non-commercial use
 - Free for any use
- Why do developers work on FOSS?
 - Fun, pride, self-interest, altruism, competition
 - Some are paid by companies with a vested interest in a particular FOSS project
- Why do companies give it away?
 - Constrained by licensing
 - Sell support services
- Doesn't it seem like socialism?

Topics to be covered

- Windows versus Linux
- Internet considerations
- Downloading
- Authenticating
- Tour of free programs and resources

Windows vs. Linux

- Windows:

- Is everywhere
- It's primarily a GUI operation
- Expensive
- Hides internals

- Linux:

- Is pretty much the opposite of Windows in most respects
- Is unparalleled for the scientist or engineers: a powerful, programmable calculator
- Is free

Fundamentals

- I assume familiarity with getting around your computer and the internet and with:
 - Files and directories (folders)
 - Searching (local and web)
 - Downloading and installing
 - Browsing
 - Getting help
 - Command line use

- Like the Biblical Tree of Knowledge
 - Good
 - Infinite resources for good
 - Evil
 - Criminals, terrorists, and mischief makers abound
- You **must** be on the alert

- Browser security
- Download authentication
- Encrypted communications (**https**)
- DNS spoofing
 - **google.com** translates to an IP address by a DNS server
 - DNS servers can be hijacked
 - Familiar home pages can be hijacked

- Chrome (or Firefox)
 - **Lastpass** add-on (<https://lastpass.com>)
 - Strong passwords
 - Unique password for every site
- Use **https** where available
 - Provides encrypted communications between you and recipient

- Use check sums to check downloaded files
 - Jacksum
- Use public key encryption when appropriate
 - GNU Privacy Guard (GPG)

Preparation for using FOSS

- Install a zip program (7Zip)
- Install (if necessary) Windows Power Shell
- Install a check sums program (Jacksum)
- Install a public key program (gpg)

Tour of free programs and resources

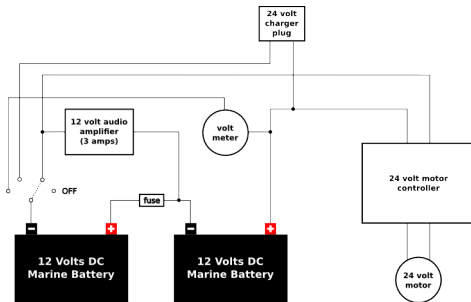
Use my free handout available online at
<https://computertechnwf.org>.

Some brief looks

Replacement for Corel Draw

Here is one of my drawings: a circuit diagram. ([demo](#))

The same drawing converted to a bitmap:



Replacement for Photoshop

I use all the time for preparing images for my websites. I crop all my images to a small square and then scale to 100x100 pixels to use as thumb nails.

We look at one of my sites for an example (report 2014-08-23).

<<https://psrr.info/pauls-reports.html>>

Here is an example of how I do that. ([demo](#))

Replacement for Quicken

Replacement for Microsoft Office

- Today we have looked at a few of the thousands of free programs available for Windows (and Mac and Linux).
- There is something out there for nearly any interest. I encourage to venture forth, have fun, and expand your knowledge and skills.
- I am glad to help via e-mail (please mention Computer Tech 2016 in the subject):
 - [tom.browder@gmail.com]