

Northern Suburbs Linux SIG Report January 2020

David Hatton

The first meeting for the year was opened with the now traditional Linux News which featured a video reviewing the rise of Open Source software in the computing landscape.

The video featured comments by several “heavy hitters” of the Open Source world, for example Nat Freidman (CEO GitHub), Chris Wright (CEO Red Hat), and Jim Zemlin (Executive Officer Linux Foundation).

A brief history of open source software development was outlined, starting with the late 1990s closed source proprietary software. The achievements of the Free Software movement originating with Richard Stallman at the MIT AI Lab and leading to Linux Torvalds’ Linux Operating system challenged the proprietary software development model, and led to the open source movement of today.

In 2008, Google released the first versions of Android, an operating system for mobile devices built on the Linux Kernel. Since then, Open Source software development has become the “new normal”, where collaboration and sharing of information are increasingly adopted by those who need to solve today’s more complex problems.

Currently, funds for open source software development and maintenance are usually raised by software support subscriptions, the sale of useful add-ons to free core software, and Linux Foundation support.

Following on from Linux News, David Hatton gave a presentation in the “Random Bytes” series. Two topics were introduced and discussed, namely the use of swap partitions and swap files and the use of the gpg command line utility to quickly encrypt a file with a passphrase.

It is considered essential for a Linux installation to include the creation of either a swap partition or a swap file to make the operation of the linux kernel more robust.

Different Linux distributions have different default arrangements for creating a swap facility – for example Debian defaults to a swap partition and Linux Mint defaults to a swap file. These defaults are set up when the user installing the distribution simply accepts the predefined setup.

David demonstrated the use of the ‘swapon’ command to confirm the type of swap facility in use, and the use of the ‘df’ command to check the configuration of memory.

Assuming that the swap space is being heavily used, generally indicated by a significant slowdown of the system, the creation of an extra swap file was outlined. This is the most convenient and quick method to provide extra swap space, which involved the use of the ‘dd’ command to create a suitable swap file. Once a swap file is created, it needs to be set up for use with the ‘mkswap’ command, and then made visible to the system with the ‘swapon’ command. Finally, there needs to be a line added to the ‘fstab’ file to make the new setup permanent.

A refreshment break followed, which extended to fill available time as attendees caught up with each other and the events of the past two months, and the meeting finished promptly at 9.30 pm.

Links:

<https://www.cnbc.com/2019/12/14/how-open-source-software-became-the-new-industry-standard.html>