I have prepared this document to assist those that are interested in learning a new computer operating system. During several past CUGG meetings, the use of some form of Linux has been discussed. A relevant reason to consider Linux is that Microsoft will discontinue supporting Windows XP next April 2014. Linux can be installed on many types of older computers as an upgrade from XP. It is a pleasant surprise to find that an older computer with Linux can be much more robust than Windows XP ever was. There are several CUGG members that have even moved from Windows 7 to Linux Mint and found it to be a lot of fun to use and better than Windows 7.

There are numerous versions of Linux that are available although my preference is Linux Mint Mate. The latest version is Linux Mint Mate 16 (Petra). Two basic install options are available. You may install Mint along side of Windows with a dual boot system or you may replace Windows with Mint. During the install process, you may use an advanced hard drive partition option as detailed in this document or you may use a default partition option.

The following procedure replaces an existing system using 4 partitions for Mint. The use of a bootable DVD for the install is included. If you have a means to create a bootable USB, that is certainly a good option, although the below does not detail the procedure.

A. Downloading and creating a bootable DVD using a Windows 7 system.

1. Go to the Linux Mint download site at http://www.linuxmint.com/release.php?id=21
2. If you have a 64 bit capable computer that you plan to install Mint on, select Mate (64-bit), otherwise select Mate (32-bit). If you have less than 4 GB of RAM in the computer you propose to install Mint on, select Mate (32-bit).
3. In the next window scroll down to North America. There are 6 different servers that you can select from for the download. One or more may be slow at any given time. I used the University of Oklahoma site the last time and it took about 30 minutes to download the file.
4. The download is a file with a .iso suffix. There is a routine that you could use to determine that the download is an error free download although you can go forward without that complication.
5. If you are running Windows 7 on the computer that you did the download on, go to Windows Explorer (not Internet Explorer) or My Computer. Navigate to the folder containing the downloaded .iso file. The file name will be linuxmint-16-mate-dvd-32bit.iso or linuxmint-16-mate-dvd-64bit.iso. Click on the downloaded file and the following window will open:

Insert a DVD into your DVD writable drive and click on Burn. The routine will create a bootable DVD that is to be used for installing Mint.
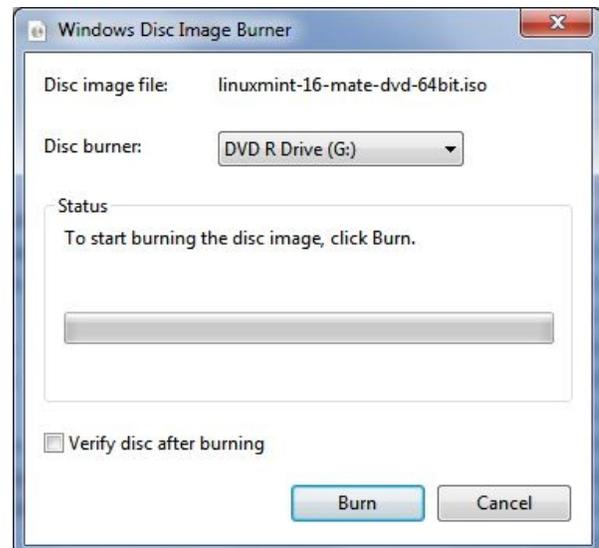
B. Installing Linux Mint from the DVD.

1. Boot with the DVD by pressing the function key that the particular computer uses to bring up the boot menu. Or if the BIOS is set to boot from the CD/DVD drive as the first boot device, the system will automatically see it first and boot to the DVD.

2. Click on Start Linux Mint and press return. In some cases, the install may hang. Try starting over and click on "Start in compatibility mode" and press Return.

3. The system will boot into a live fully operational Mint system running from the DVD without having used your hard drive.

4. Plug in an Ethernet cable to the computer or sign onto your Wireless using the Icon in the lower right task bar and connect to your wireless system.

5. Right click on the Desktop Icon, "Install Linux Mint", then select "Open".

6. The next Window allows for selecting a language. The default English is already selected, so just click on "Continue".

7. The next Window provides options for the installation type.

> "Install Linux Mint alongside (whatever system you now have)". This would install Mint as a second system in a dual boot option where a window will display which allows you to boot to the selected system. You will be asked to allocate a part of the existing hard drive space to the Mint install.

> "Replace (your existing system) with Linux Mint". This would do what is indicated creating a default partition setup. This may be the easiest way to proceed, although I have not used it and do not know if any complications exist nor what the details are.

> "Something Else" I use this when creating a customized partition setup

8. Assuming you select "Something Else" above, proceed as follows:

> a. Highlight the existing partition that holds the Windows system, then click on – in order to delete the partition. The Windows partition should show as Device /dev/sda1 or /dev/sda2 etc. The /dev/sdb will be the DVD drive don't try to delete it. If more than one /dev/sda device exists, delete them all. That sets the existing partitions to Free Space for the entire drive.
> b. Now highlight the Free Space, and click on + to add a partition to it. Set the size to 200 MB, click in the Use as: drop down window and select Ext4 journaling file system. Click on Format the partition, and then on the down arrow Mount point and select /boot. The window should look like the below
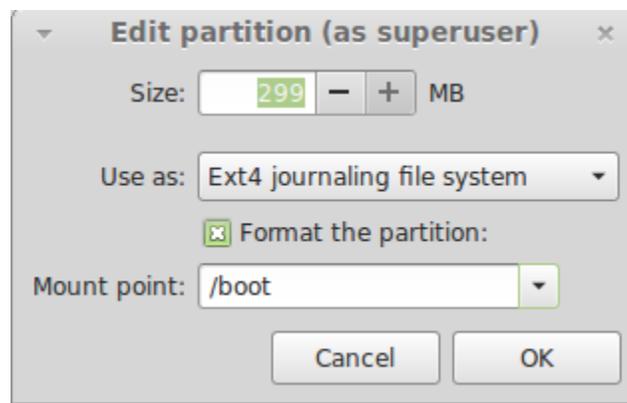
> Click on OK

b. Highlight the Free Space again and click on + to add another partition. Set the size to 2 times the amount of RAM installed in the machine. For an 8 GB RAM I chose 4000MB. In the Use as: drop down window select swap area. The window should look like the below:

Click on OK

Edit partition (as superuser) ×

Size: 2048 − + MB

Use as: swap area ▾

☐ Format the partition:

Cancel   OK
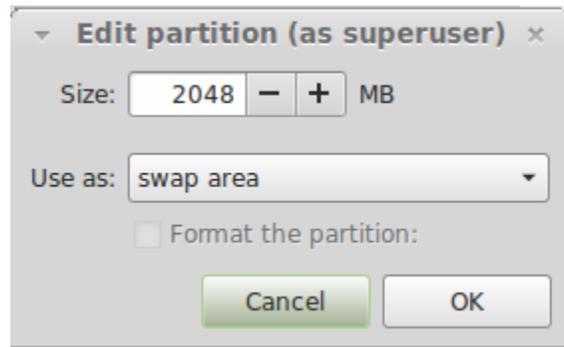
c. Highlight the Free Space again and click on + to add another partition. Set the size to 7000, in the Use as: drop down window select Ext4 journaling file system   Click on Format the partition. In the Mount point: drop down window select / . The window should look like the below:

Click on OK

Edit partition (as superuser)   ×

Size: 7999 − + MB

Use as: Ext4 journaling file system ▾

☒ Format the partition:

Mount point: / ▾

Cancel   OK
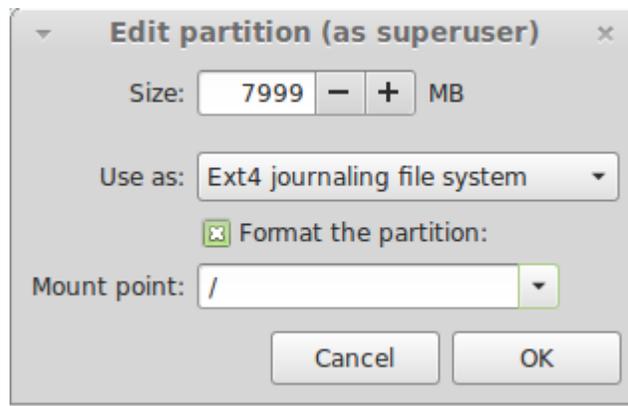
d. Highlight the Free Space again and click on + to add another partition. Leave the size as is because you will be using the rest of the hard drive for files and folders. in the Use as: drop down window select Ext4 journaling file system   Click on Format the partition. In the Mount point: drop down window select /home . The window should look like the below:

The size will differ depending on the hard drive space. Click on OK.

Edit partition (as superuser)   ×

Size: 69678 − + MB

Use as: Ext4 journaling file system ▾

☒ Format the partition:

Mount point: /home ▾

Cancel   OK
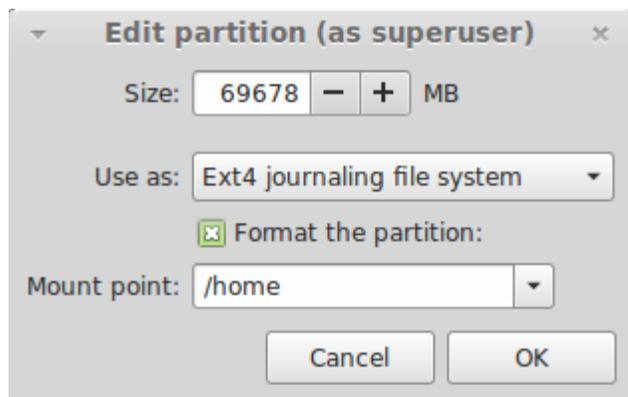
e. Back at the Install Window, click on Install Now.

9. The next window asks about the time zone, which should be selected already for your current time zone, click on Continue. The next window asks about the keyboard layout. Leave the selected layout as is and click on Continue. The next window asks for your full name, type in First and Last name, change or leave the computer name as is, use your first name as a user name (all lower case). The last item allows you to select automatic log on without entering a password or Require a Password. In any case, you need to have a password. Even with Automatic log on, you will need a password to add or delete programs and to make changes. Write down your password <u>now</u>, then click Install Now.

10. When the installation is complete, reboot into your new operating system. Click on the update badge in the lower right task bar and install the updates. You will need to do this two times to get all of the updates.

11. You can now add programs by clicking on Menu, Software Manager. The default installation without adding any additional programs contains most of what you would normally need; LibreOffice Suite, Gimp, Firefox, Thunderbird Mail, VLC media player etc. You can add Chrome or Opera browsers and thousands of other free programs.

12. Have fun learning to use Mint. Download a user guide at:
       http://www.linuxmint.com/documentation.php

13. Determine if your computer is compatible with Mint at:
       http://community.linuxmint.com/hardware/search

14. Go to on-line community help at:
       http://community.linuxmint.com/#
       Click on the Community tab for assistance.

15. Use google.com to search for answers to questions. Don't hesitate to search using a complete question such as:
       how do I install google earth on linux mint
              or
       my hp dv6000 laptop wireless does not work with linux mint

16. There are many comments that I have found stating that "Mint is fun", I agree.