Presentation to Metro Detroit Linux Users Group

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Grub2: The Sources

https://help.ubuntu.com/community/Grub2
http://grub.enbug.org/CommandList
http://kubuntuforum.net
Grub2: Agenda

- Meet the new menu.lst - grub.cfg
- Customizing Grub2
  - /etc/default/grub
  - /etc/grub.d/*
- Manually booting Grub2 versus Grub Legacy
- Other command changes
- Questions?
Grub2: Meet the “new” menu.lst – grub.cfg

- Contains similar content as menu.lst
- Located in /boot/grub/ like menu.lst
- Should **not** be "directly" edited by humans.
- Changes to grub.cfg are applied when update-grub command is run and when new kernels are installed.
- How do you customize your grub2 menu?
Changes to Grub are made via two files:

- `/etc/default/grub`
- `/etc/grub.d/*`

- `/etc/default/grub` contains many of the `menu.lst` options, including whether to display the Grub menu, how long to wait before timeout, whether the kernel should include a splash screen, etc.

- `/etc/grub.d/*` contains files for boot menu options. Approach varies considerably from Grub Legacy. Resembles Linux start-up system.
Grub2: Customizing /etc/default/grub

- This file contains information previously found in the upper section of /boot/grub/menu.lst.
- It contains settings primarily affecting Grub's menu display.
- This file can be edited by root to make changes to these settings; they will be imported into grub.cfg when "update-grub" is executed.
Grub2: Customizing Grub2 - /etc/grub.d/*

- **00_header**  Sets initial appearance items such as the graphics mode, default selection, timeout, etc.

- **05_debian_theme**  The settings in this file set splash image, text colors, selection highlighting and themes.

- **10_linux**  Locates kernels on the root device for the operating system currently in use.

- **30_os-prober**  This file with os-prober, which searches for Linux and other operating systems. The file is divided into 4 sections, representing the types of operating systems handled by the scripts: Windows, Linux, OSX, and Hurd.

- **40_custom**  A template for adding custom menu entries which will be inserted into grub.cfg upon execution of the update-grub2 command.
Grub2: Manual Boot Commands – A Comparison

Grub Legacy

grub> root (hd0,2)
grub> kernel /vmlinuz root=/dev/sda3
grub> initrd /initrd.img
grub> boot

Grub2

grub> set root=(hd0,3)
grub> linux /vmlinuz root=/dev/sda3
grub> initrd /initrd.img
grub> boot
find is replaced with search
geometry is gone and replaced by ls
kernel (in menu.lst) is replaced by linux (and other terms for different Oss)
title (in menu.lst) is replaced by menuentry (in grub.cfg)
root is still used but is now a variable
setup is gone; the work is done by grub-install
map is replaced by drivemap
device is replaced by loopback (makes a drive out of a file)
set is a GRUB 2 term used to set a variable