Deployment Grub

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1 Debian 11 Bullseye EFI mode

Sometimes it can happen that the network install in text mode finishes without writing a boot loader to the disk on a system where EFI is enabled. I am not sure why this happens. Usually the install asks for the location of the boot loader to be written, but in such cases the install ends with a screen suggesting to boot into the new system. And since grub is not installed, it will never boot into the new system.

1. Boot into BIOS and make sure EFI is enabled
2. Make sure the boot device is the first one
3. If not sure disable network boot
4. Boot a Debian 11 **netinstall** with graphical rescue mode; execute a shell in the root partition of the system to be installed.
5. If you want to do the work via ssh execute inside the `chroot`.
   - `mount devpts /dev/pts -t devpts`
   - `/etc/init.d/ssh start`
   - `ip addr show`
   - Log in to the system from remote
6. To understand which grub method (`x86_64-efi` or `i386-pc`) is used a simple `ls` will do:

- `ls -1 /usr/lib/grub/`
- `grub-mkconfig_lib`
- `x86_64-efi`
- `x86_64-efi-signed`

7. Install grub inside the master boot record (change `sda` to the correct device!)
   - `grub-install /dev/sda`
8. If you have the error I assume then you will get an error like (the No error reported must bean insider joke)
   - `Installing for x86_64-efi platform.`
   - `grub-install: warning: EFI variables are not supported on this system.`
   - `Installation finished. No error reported.`
9. Mount the `efivar` file system:
   - `modprobe efivarfs`
   - `mount -t efivarfs efivarfs /sys/firmware/efi/efivars`
10. Install grub, finally

- `grub-install /dev/sda`
- `Installing for x86_64-efi platform.`
- `Installation finished. No error reported.`

11. Update the configuration

- `update-grub`

12. Update `initramfs`

- `update-initramfs -u`

There have been reports of this not working. As a workaround, switch the BIOS to legacy mode, reboot, and then either reinstall the OS, or follow similar steps as above, but omit `modprobe` and `mount`, and install the correct `i386-pc` grub libraries via package before running `grub-install`.

2 History

Version	Date	Notes
0.1.0	2023-04-24	Initial release

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