18.04 bionic

ZFS (guest)

From running ZFS ubuntu on guest install newer system in new ZFS fs

```
sudo su
DISTRO=bionic
apt install -y debootstrap
zfs create -o canmount=noauto -o mountpoint=/$DISTRO rpool/ROOT/$DISTRO
zfs mount rpool/ROOT/$DISTRO
mount -o remount,dev /$DISTRO
debootstrap $DISTRO /$DISTRO
mount --rbind /dev  /$DISTRO/dev
mount --rbind /proc /$DISTRO/proc
mount --rbind /sys  /$DISTRO/sys
chroot /$DISTRO /bin/bash --login
```

fuse

```
dpkg-reconfigure tzdata
```

keyboard localization

```
dpkg-reconfigure keyboard-configuration
```

```
echo 'LANG="it_IT.UTF-8"' > /etc/default/locale

locale-gen it_IT.UTF-8
locale-gen en_US.UTF-8
update-locale LANG=it_IT.UTF-8 LC_MESSAGES=POSIX

DISTRO=bionic
cat > /etc/apt/sources.list <<EOF
deb http://archive.ubuntu.com/ubuntu $DISTRO main universe
#deb-src http://archive.ubuntu.com/ubuntu $DISTRO main universe

deb http://security.ubuntu.com/ubuntu $DISTRO-security main universe
#deb-src http://security.ubuntu.com/ubuntu $DISTRO-security main universe

deb http://archive.ubuntu.com/ubuntu $DISTRO-updates main universe
#deb-src http://archive.ubuntu.com/ubuntu $DISTRO-updates main universe
EOF

ln -s /proc/self/mounts /etc/mtab
apt update
```

```
apt install --yes --no-install-recommends linux-lowlatency zfs-initramfs

cat > /etc/fstab <<EOF
rpool/ROOT/$DISTRO / zfs defaults,noatime 0 0
EOF
```

post install

```
sudo apt install -y ubuntu-restricted-extras
sudo apt-get -y install pigz vim inxi iftop htop xclip curl
sudo apt-get install -y gir1.2-gtop-2.0 gir1.2-networkmanager-1.0  gir1.2-clutter-1.0
sudo apt install -y gpaste gnome-shell-extensions-gpaste
sudo apt install -y gnome-shell-extension-system-monitor
sudo apt-get install -y chrome-gnome-shell
sudo apt-get install -y zsh

sudo add-apt-repository -y ppa:webupd8team/java
sudo apt update
sudo apt install -y oracle-java8-installer

sudo apt-add-repository -y ppa:numix/ppa
sudo apt update
sudo apt install -y numix-gtk-theme numix-icon-theme-circle numix-plymouth-theme
```

disable spectre checking in /etc/default/grub

```
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash elevator=deadline noibrs noibpb nopti"
```

enable ethernet device management

```
touch /etc/NetworkManager/conf.d/10-globally-managed-devices.conf
```

user

reset gnome 3

```
rm -rf .gnome .gnome2 .gconf .gconfd .metacity .cache .dbus .dmrc .mission-control .thumbnails ~/.config/dconf/user ~.compiz*
```

paper icons (and theme ?)

```
sudo add-apt-repository -y ppa:snwh/pulp
sudo apt install -y paper-icon-theme
```

adapta gtk theme

```
sudo add-apt-repository -y ppa:tista/adapta
sudo apt install -y adapta-gtk-theme
```

disable lock screen on resume

```
gsettings set org.gnome.desktop.screensaver ubuntu-lock-on-suspend false
gsettings set org.gnome.desktop.screensaver status-message-enabled false
gsettings set org.gnome.desktop.screensaver idle-activation-enabled false
```

This will drop you into an initramfs shell:

```
  Start your computer. Wait until the Grub menu appears.
  Hit e to edit the boot commands.
  Append break=mount to your kernel line.
  Hit F10 to boot.
  Within a moment, you will find yourself in a initramfs shell.
```

If you want to make this behavior persistent, add GRUB_CMDLINE_LINUX_DEFAULT="break=mount" to /etc/default/grub and run grub-mkconfig -o /boot/grub/grub.cfg.

android smartphone and adb

/etc/udev/rules.d/51-android.rules

```
SUBSYSTEM=="usb", ATTR{idVendor}=="05c6", ATTR{idProduct}=="adb0",
MODE="0660", GROUP="plugdev", SYMLINK+="android%n"
```

```
sudo udevadm control --reload
```

NVIDIA

latest drivers in ppa

```
sudo add-apt-repository ppa:graphics-drivers/ppa
sudo apt-get update
```

drivers

```
sudo apt install nvidia-driver-396
# nvidia-cuda-dev nvidia-cuda-toolkit
```

cuda: * download version 9.2 binary installation

```
sudo ./cuda_9.2.148_396.37_linux.run
```

Now cuda is in /usr/local/cuda-9.2/ path. Create environment

/etc/ld.so.conf.d/cuda.conf

```
/usr/local/cuda-9.2/extras/CUPTI/lib64
/usr/local/cuda-9.2/lib64
```

```
sudo ldconfig
```

/etc/profile.d/cuda.sh

```
export PATH=$PATH:/usr/local/cuda-9.2/bin
```

testing cuda

```
/usr/local/cuda-9.2/extras/demo_suite/deviceQuery
```

testing vidia GPU

```
sudo apt-get install glmark2
glmark2
```

for example:

- GeForce GTX 1070 Ti/PCIe/SSE2 **glmark2 Score: 12257**
- GeForce GTX 750 Ti/PCIe/SSE2 **glmark2 Score: 6865**

phoronix testing

```
sudo apt-get install phoronix-test-suite

phoronix-test-suite default-benchmark openarena xonotic tesseract gputest
unigine-valley
```

AMG GPU PRO

amdgpu-pro-18.20-579836.tar.xz

```
sudo usermod -a -G video $LOGNAME
./amdgpu-pro-install --y --opencl=legacy,rocm
```

grub options

```
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash elevator=deadline noibrs noibpb
```

```
nopti amdgpu.si_support=1 radeon.si_support=0"
```

/etc/modules (load early)

```
amdgpu
```

```
update-initramfs -k all -u
reboot
```

testing

```
sudo apt-get install glmark2
glmark2
```

for example:

- AMD Radeon (TM) RX 460 Graphics (POLARIS11 / DRM 3.23.0 / 4.15.0-22-lowlatency, LLVM 6.0.0) **glmark2 Score: 6303**