

Vanilla Arch Linux Base Installation

09/27/2013 10:12 AM - Daniel Curtis

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Description

I decided to finally try Arch Linux out, and found it to be fast and highly configurable. As such I will document what I did to get a Base installation for Arch. I booted Arch up from its live ISO and was dumped to a root shell.

This guide will use GRUB with a Master Boot Record; this is an older setup, but still useful.

Partition Hard Drive

- Use fdisk to setup the initial partition map:

```
fdisk /dev/sda
n
p
+1G
n
p
[Enter]
w
```

- Make file system and swap

```
mkswap /dev/sda1
mkfs.ext4 /dev/sda2
```

- Mount the new file system

```
mount /dev/sda1 /mnt
```

- Bootstrap the base system installation

```
pacstrap /mnt base base-devel openssh grub sudo
```

Configure Base System

- Generate A File System Configuration

```
genfstab -p /mnt >> /mnt/etc/fstab
```

- Chroot Into The Base System

```
arch-chroot /mnt
```

- Create a static ethernet connection

```
cp /etc/netctl/examples/ethernet-static /etc/netctl/wired
netctl enable wired
```

- **NOTE:** Edit /etc/netctl/wired to the correct network settings

- Set host name

```
vi /etc/hostname
```

- Set the local time

```
ln -s /usr/share/zoneinfo/America/Los_Angeles /etc/localtime
```

- Create initial ram disk

```
mkinitcpio -p linux
```

- Change root password

```
passwd
```

- Create a non-privileged user

```
useradd -m -g users -s /bin/bash bob
```

- Add non-privileged user to sudo users

```
visudo
```

- Then add the following

```
bob ALL=(ALL) ALL
```

- Install grub boot files

```
grub-install --target=i386-pc --recheck --debug /dev/sda
```

- Generate grub config file

```
grub-mkconfig -o /boot/grub/grub.cfg
```

- Exit The Chroot Environment

```
exit
```

Finalize The Install

At this point Arch is ready for use, however you can install packages for the new Base system before restarting the machine:

```
pacman -S gnome
```

- NOTE: Setting up Xorg or a Desktop Environment is outside the scope of this guide.

When all packages are finished installing unmount the Base system partition and reboot

```
umount /dev/sda1
reboot
```

History

#1 - 10/05/2014 12:08 AM - Daniel Curtis

- Description updated

#2 - 10/05/2014 12:09 AM - Daniel Curtis

- Description updated

#3 - 10/05/2014 12:10 AM - Daniel Curtis

- Description updated

#4 - 10/05/2014 12:18 AM - Daniel Curtis

- Description updated