

Arch Linux

Step-by-step guide to install the system

Created by Eng. Turkey Abdulaziz Abdulhafiz via open-source software LibreOffice and published on Monday October 23, 2017

1- Partitioning

use (cfdisk) or your preferred disk partitioning software and create at least the following partitions

Partition	Bootable	Type	Mount Point	File Format
/dev/sda1	Yes	Primary	/	Linux
/dev/sda2	No	Primary	swap	Linux
/dev/sda3	No	Extended	home	Extended
/dev/sda5	No	Extended	home	Linux

2- Making File System

make file-system for the created partitions as follows

Partition	File System	Command
/dev/sda1	Ext4	mkfs.ext4 /dev/sda1
/dev/sda5	Ext4	mkfs.ext4 /dev/sda5
/dev/sda2	swap	mkswap swapon /dev/sda2

3- Mount partitions

```
mount /dev/sda1 /mnt
mkdir /mnt/home
mount /dev/sda5 /mnt/home
```

4- Install Arch Base System

```
pacstrap /mnt base base-devel
```

5- Generate file-system tables

- generate: **genfstab /mnt >> /mnt/etc/fstab**
- verify: **cat /mnt/etc/fstab**

6- Configure Installed Arch System

- * Switch to installed system: **arch-chroot /mnt /bin/bash**
- * Configure System Languages:
 - Edit locale.gen file: **vi /etc/locale.gen**
 - ** Uncomment these lines: **en_US.UTF-8 UTF-8**
ar_SA.UTF-8 UTF-8
 - Generate locale: **locale-gen**
 - Create locale configuration file: **vi /etc/locale.conf**
 - ** Write this line inside: **LANG=en_US.UTF-8**
- * Configure time-zone:
 - ln -sf /usr/share/zoneinfo/Asia/Riyadh /etc/localtime**
- * Set UTC time: **hwclock -systohc -utc**
- * Set root password: **passwd**
- * Set host name: **vi /etc/hostname**
 - Write this line inside: **<your-hostname>**
- * Set host ip: **vi /etc/hosts**
 - Write this line inside:
127.0.0.1 localhost.localdomain <your-hostname>
- * Configure DHCP: **systemctl enable dhcpcd**
- * Install and configure GRUB bootloader:
 - Installation: **pacman -S grub os-prober**
 - Configuration: **grub-install /dev/sda**
grub-mkconfig -o /boot/grub/grub.cfg

7- End the installation

- * Exit: **exit**
- * Unmount all partitions:
 - umount /mnt/home**
 - umount /mnt**
- * Restart: **reboot**

Arch Linux

Step-by-step guide to install GUI

Created by Eng. Turkey Abdulaziz Abdulhafiz via open-source software LibreOffice and published on Monday October 23, 2017

1- Login as root

2- Update the system: **sudo pacman -Syu**

3- Include 32-bit packages

- * Edit pacman configuration file: **vi /etc/pacman.conf**

- * Uncomment the following line under **#[multilib]** section:

Include = /etc/pacman.d/mirrorlist

4- Create normal user account:

useradd -m -g users -G wheel,storage,power -s /bin/bash <username>

5- Set Password for the created user account: **passwd <username>**

6- Install sudoers:

- * Install sudo: **pacman -S sudo**

- * Edit sudoers file: visudo

- * Uncomment the following line: **%wheel ALL=(ALL) ALL**

7- Install X.Org: **pacman -S xorg xorg-server**

8- Install Desktop Environment: (choose one of the following DE)

- * **Deepin:**

- Install packages: **pacman -S deepin deepin-extra**

- Configure Display Manager:

- ** Edit LightDM file: **vi /etc/lightdm/lightdm.conf**

- ** Under **[Seat:*]** section:

- Change this line: **#greeter-session=example-gtk-greeter**

- To this line: **greeter-session=lightdm-deepin-greeter**

- Enable Display Manager: **systemctl enable lightdm.service**

- * **MATE:**

- Install packages: **pacman -S lxdm mate(mate-gtk3*) mate-extra**

- Enable Display Manager: **systemctl enable lxdm.service**

- * **Budgie:**

- Install packages: `pacman -S lxdm budgie-desktop`
- Enable Display Manager: `systemctl enable lxdm.service`

* **KDE:**

- Install packages: `pacman -S kdm* kdebase-workspace`
- Enable Display Manager: `systemctl enable kdm.service`

* **KDE Plasma:**

- Install packages: `pacman -S sddm plasma kde-applications`
- Enable Display Manager: `systemctl enable sddm.service`

* **Cinnamon:**

- Install packages: `pacman -S lxdm cinnamon nemo-roller archive utility`
- Enable Display Manager: `systemctl enable lxdm.service`

* **Gnome:**

- Install packages: `pacman -S gdm gnome gnome-extra`
- Enable Display Manager: `systemctl enable gdm.service`

* **LXDE:**

- Install packages: `pacman -S lxdm lxde(or lxde-gtk3*)`
- Enable Display Manager: `systemctl enable lxdm.service`

* **Xfce:**

- Install packages: `pacman -S lxdm xfce4 xfce4-goodies`
- Enable Display Manager: `systemctl enable lxdm.service`

9- Enable Sound: `pacman -S pulseaudio pulseaudio-alsa`

10- Enable wifi:

* Install packages:

`pacman -S wpa_supplicant networkmanager network-manager-applet`

* Disable NetCtl: `systemctl disable netctl.service`

* Enable NetworkManager: `systemctl enable NetworkManager.service`

11- Install Basic Software Git, GVIM, Firefox, Chromium, Atril, VLC, LibreOffice

`pacman -S git gvim firefox chromium atril vlc libreoffice`

12- Reboot: `reboot`

**** For Virtualbox users:**

- 1- Install guest utilities: `pacman -S virtualbox-guest-utils mesa`
 - 2- Edit configuration file: `vi /etc/modules-load.d/virtualbox.conf`
add three lines: `vboxguest`
`vboxsf`
`vboxvideo`
 - 3- Enable service: `systemctl enable vboxservice.service`
-

wpa_supplicant.conf (example)

```
# Allow frontend for all users
ctrl_interface = DIR = /var/run/wpa_supplicant GROUP=wheel

# Home wifi network
network = {
    ssid="home"
    scan_ssid=1
    key_mgmt=WPA-PSK
    psk="password"
}
```