

How to install Arch Linux

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1. Connecting to internet (Wi-Fi)

iwctl station wlan0 connect <SSID>

2. Partitioning

cdisk/fdisk /dev/your_hard_drive

UEFI (GPT):

Number	Type	FS	Mount point
1	EFI System (1)	FAT	/mnt/boot
2	Linux swap (19)	swap	[SWAP]
3	Linux filesystem (default)	ext4	/mnt

Formating partitions:

mkfs.fat -F32 /dev/efi
mkswap /dev/swap
mkfs.ext4 /dev/root

Mounting partitions:

swapon /dev/swap_partiton
mount /dev/root_partition /mnt
mount --mkdir /dev/efi /mnt/boot

BIOS:

MBR:

Number	Type	FS	Mount point
1	Linux swap/Solaris (82)	swap	[SWAP]
2	Linux (default)	ext4	/mnt

GPT:

Number	Type	FS	Mount point
1	BIOS boot (4)	no	no
2	Linux swap (19)	swap	[SWAP]
3	Linux filesystem (default)	ext4	/mnt

Formating partitions:

mkswap /dev/swap_partiton
mkfs.ext4 /dev/root_partiton

Mounting partitions:

swapon /dev/swap_partiton
mount /dev/root_partition /mnt

3. Installing base system

Update keyring (Optional):

pacman -Sy archlinux-keyring

Install base system:

pacstrap -K /mnt base linux linux-firmware

4. Setting up system

Generating fstab:

genfstab -U /mnt >> /mnt/etc/fstab

Changing root:

arch-chroot /mnt

Setting up clock:

ln -sf /usr/share/zoneinfo/Europe/Kyiv /etc/localtime
hwclock --systohc

Installing text editor:

pacman -S micro

Generating locales:

uncomment ``en_US.UTF-8 UTF-8`` or anything you need
micro /etc/locale.gen
locale-gen

5. Setting up the network:

Setting up host name:

micro /etc/hostname

Setting up hosts:

micro /etc/hosts

hosts example:

127.0.0.1 localhost
::1 localhost
127.0.1.1 <hostname>

Installing NetworkManager:

pacman -S networkmanager
systemctl enable NetworkManager

6. Setting up sudo & users

Setting up sudo:

pacman -S sudo
EDITOR=micro visudo
uncomment ``%wheel ALL=(ALL:ALL) ALL``

Setting up users:

useradd -m <username>
usermod -aG wheel,video,audio,storage,floppy <username>
passwd
passwd <username>

7. Installing boot loader

GRUB:

Download packages: pacman -S grub efibootmgr os-prober
Install the bootloader:

For UEFI: grub-install --efi-directory=/boot
For BIOS: grub-install /dev/your_hard_drive

Make GRUB config: grub-mkconfig -o /boot/grub/grub.cfg

systemd-boot (UEFI-GPT Only):

Install the bootloader:

bootctl install

Create an entry:

micro /boot/loader/entries/arch.conf

Entry example:

title Arch Linux
linux /vmlinuz-linux
initrd /initramfs-linux.img
options root=/dev/root rw

8. Rebooting to system

Exit chroot and reboot

Connect to Wi-Fi: sudo nmcli device wifi connect <SSID> password <password>

9. Installing sound server

PipeWire:

sudo pacman -S pipewire-pulse

PulseAudio:

sudo pacman -S pulseaudio

10. Installing Desktop Envoriment

GNOME:

Installing desktop envoriment:

sudo pacman -S gnome

Enable GDM:

sudo systemctl enable gdm

Reboot:

sudo reboot

Xfce:

Installing desktop envoriment:

sudo pacman -S xfce4 xfce4-goodies gvfs gvfs-mtp pavucontrol network-manager-applet bluedevil accountsservice

Installing login manager:

sudo pacman -S lightdm-gtk-greeter

Enable LightDM:

sudo systemctl enable lightdm

Reboot:

sudo reboot

KDE Plasma:

Installing desktop envoriment:

sudo pacman -S plasma plasma-wayland-session konsole dolphin gwenview

Enable SDDM:

sudo systemctl enable sddm

Reboot:

sudo reboot

LXQt:

Installing desktop envoriment:

sudo pacman -S lxqt breeze-icons network-manager-applet

Installing login manager:

sudo pacman -S sddm

Enable SDDM:

sudo systemctl enable sddm

Reboot:

sudo reboot now