

Linux

Linux

- Systemd
 -
 - Systemd-boot
- - PNG WebP
- Arch Linux
 - Arch User Repository
- Bash
- GPG
- Proton
- Wine
- sudo
- Distrobox
- libimobiledevice
- Podman / Docker

Systemd

Systemd



[Unit]

Description=<Description>

[Service]

Type=oneshot

User=<user>

Group=<groups>

ExecStart=<command>

[Install]

WantedBy=multi-user.target



[Unit]

- Description :

systemctl status

[Service]

- Type :
 - simple :
 - oneshot :

simple
- User :

root
- Group :

root

- ExecStart :

shell script

[Install]

- WantedBy : Target systemctl enable

Systemd

Systemd-boot

UEFI ☐ ☐ ☐

| | | | |
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|--|--|--|--|

- ESP 512MB 1GB
 - Systemd-boot Kernel ESP
- UEFI BIOS CSM BIOS
- Linux Systemd init daemon

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The image shows two rows of base ten blocks. The top row contains 18 tens blocks (each labeled '10'), and the bottom row contains 10 ones blocks (each labeled '1').

chroot

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ESP ESP

Linux

/boot /efi

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```
sudo bootctl install # █ sudo █ root ██████ sudo
```

Systemd [][][][][][][][]

ESP

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UEFI ☐ ☐ ☐ ☐

ArchWiki

ESP ☐ /boot ☐☐☐☐☐

Windows 100MB ESP

||||| /boot ||||| "Linux extended boot"

“ In other cases, it is recommended to set the partition type to **Extended Boot Loader (XBOOTLDR)** Partition which is GPT partition type GUID **BC13C2FF-59E6-4262-A352-B275FD6F7172** (ea00 type for gdisk) or MBR partition type ID **ea**.

□□□□□□ /boot □ /efi □□□□□□□□□□

```
sudo bootctl --esp-path=/efi --boot-path=/boot install
```

□□ Cmdline□ Kernel Parameter□

/etc/kernel/cmdline

```
sudo kernel-install add-all
```

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Kernel

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Systemd-boot

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Cmdline ☐ ☐ ☐ ☐





PNG

WebP



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| | |
|--|--|

- `ls` `array`

```
for key in "${array[@]}"; do cwebp $key -o $key.webp; done
```

- `${array[@]}` array

-  for-loop  cwebp 

- WebP



- libwebp Linux library

- Array  bash  sh  zsh  shell 

Arch Linux

Arch User Repository

Arch User Repository (AUR)

yay

makepkg debug

```
#####  
#####  
# GLOBAL PACKAGE OPTIONS  
# These are default values for the options=() settings  
#####  
#####  
#  
# Makepkg defaults: OPTIONS=(!strip docs libtool staticlibs emptydirs !zipman !purge !debug !lto)  
# A negated option will do the opposite of the comments below.  
#  
#-- strip: Strip symbols from binaries/libraries  
#-- docs: Save doc directories specified by DOC_DIRS  
#-- libtool: Leave libtool (.la) files in packages  
#-- staticlibs: Leave static library (.a) files in packages  
#-- emptydirs: Leave empty directories in packages  
#-- zipman: Compress manual (man and info) pages in MAN_DIRS with gzip  
#-- purge: Remove files specified by PURGE_TARGETS  
#-- debug: Add debugging flags as specified in DEBUG_* variables  
#-- lto: Add compile flags for building with link time optimization  
#  
OPTIONS=(strip docs !libtool !staticlibs emptydirs zipman purge !debug lto)
```

debug yay


```
sudo pacman -S --needed base-devel git
git clone https://aur.archlinux.org/yay.git
cd yay
makepkg -si
```

makepkg.conf



☐ MAKEFLAGS ☐ nproc ☐

```
MAKEFLAGS="-j$(nproc)"
```

☐ / ☐

```
yay -S pigz pbzip2 lbzip2 plzip
```

☐

```
COMPRESSGZ=(pigz -c -f -n)
COMPRESSBZ2=(pbzip2 -c -f)
COMPRESSXZ=(xz -c -z -)
COMPRESSZST=(zstd -c -T0 --ultra -20 -)
COMPRESSLRZ=(lrzip -q)
COMPRESSLZO=(lzop -q)
COMPRESSZ=(compress -c -f)
COMPRESSLZ4=(lz4 -q)
COMPRESSLZ=(plzip -c -f)
```


Bash

[[Unix Shell

[[alias

```
alias alias_name="command_to_run"
```

[[[[alias_name [[

GPG

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Key

-  Key: `gpg --list-keys --keyid-format SHORT`
 -  SHORT 
-  : `gpg --edit-key <keyid>`
-  `gpg>`  `trust` 
-  `ultimate`  `quit` 
-  `key` 

5 (ultimate)

Proton

☐ Steam (Valve) ☐☐☐☐ Wine fork☐

Proton vs. Proton-GE-Custom

- [illegible]

Proton

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Steam -> -> **Steam Play**

Proton-GE-Custom

In Arch Linux (yay AUR Helper):

yay -S proton-ge-custom-bin

```

[ ] [ ] [ ] asdf [ ] 2:

```

```
asdf plugin add protonge
```

```
# Or install a version from a tag (Eg.: GE-Proton8-25)
```

```
asdf install protonge latest
```

asdf

| | | | | | | |
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[illegible]

```
~/steam/root/compatibilitytools.d
```

d ☐ Steam ☐

symlink ☐ Plugin ☐☐☐☐

30

ASDF_PROTONGE_STEAM_COMPAT_DIR

•

```
ls ~/.steam/root/compatibilitytools.d | asdf protonge manage
```


Wine

Linux Windows

[TOC]



In Arch Linux:

```
sudo pacman -S wine
```

Proton

Proton

Prefix

Wine ~/.wine Prefix 1 2

WINEPREFIX Prefix:

```
WINEPREFIX=~/.wine-other wine winecfg
```

WINEARCH Wine win32 32 Wine win64 64

```
WINEARCH=win32 WINEPREFIX=~/.wine-32 wine winecfg
```


sudo


UID=0 root

| | | | |
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| | | | |
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- **-E** : sudo
 - `--preserve-env`
- **-e** :
 - `--edit` `sudoedit`
- **-u** : `www-data`
 - `su <username>` `su` `shell`

Distrobox

Distro 

 Distro 

Debian 12

```
sudo apt install distrobox
```

.bashrc

```
mkdir -p ~/distrobox-home/arch
```

```
distrobox create -n arch -i docker.io/library/archlinux:latest --home $HOME/distrobox-home/arch
```

```
distrobox enter arch
```

 `distrobox create`

- `-n` : `□□□□`
- `-i` : `□□□□`
 - `□□ Debian □ Podman □□□□□□□□` `Docker Registry □□□□□□□□□□` `(`
`docker.io/library)`
- `--home` : `□□□□□□□□□□`

distrobox enter <name>

libimobiledevice

📱 iTunes📱 Linux 📱📱📱 Apple 📱📱📱



Ubuntu 📱📱📱📱📱

```
sudo apt-get install usbmuxd libimobiledevice6 libimobiledevice-utils
```

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Experimental📱

AUR 📱📱📱📱📱📱📱📱📱📱📱📱📱📱📱📱

```
yay -S idicerestore-git usbmuxd-git
```

📱📱📱📱

Apple 📱📱📱📱📱📱📱📱

GitHub 📱📱📱📱📱📱

📱📱📱📱📱📱📱📱 VM 📱 Arch Linux 📱 Gentoo 📱 openSUSE Tumbleweed

📱📱📱📱📱 libimobiledevice 📱📱📱📱 Ubuntu📱 Debian

📱📱📱📱📱📱



📱📱📱

📱📱📱 idevicebackup 📱📱📱

iOS 3📱📱📱📱📱📱📱



```
idevicebackup2 backup --full ./idevice-backup
```

📱📱📱📱📱📱📱📱 ./idevice-backup 📱📱📱📱📱 --full



Find My iPhone

Find My iPad

```
idevicebackup2 -s "device-uid" restore --system --settings ./device-backup
```

./device-backup

-s

-i

Apple ID

App



IPSW

```
idicrrestore -e <IPSW_file_location>
```

-e

idicrrestore

-l

DFU

-R

(

--recovery-mode

IPSW

USB

root

idicrrestore



DFU



irecovery

irecovery -n



Podman / Docker

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□□□□□□□□

Host □□□

Command:

```
docker run --network=host -it ...
```

docker-compose.yml (v3 □□): □□ network_mode: "host" □□

□□□□ Port □□□□□□ host □□□□□□ Port □□□□□□□□□□□□ iptables □
firewalld) □□

□□□□ Podman/Docker □□□□□□□□ □□□□□□□□ □□ □□□□