

--docdir

```
docdir () {
    local PATH_PREFIX_FOR_DOCDIR="/usr/share/doc"
    echo "${PATH_PREFIX_FOR_DOCDIR}/${(basename $(pwd))}"
}

export -f docdir
```

Host LFS chroot

6

```
:
auto-lfs s : chroot ,
auto-lfs c : chroot
```



LFS, LFS_PART /boot, /boot/efi, /home, /sources

```
#!/bin/bash
# LFS 12.1-systemd
# <7.2 >
# 가 /
# Begin ~/bin/lfs-env-config

VERSION=0.1.7
LFS=/mnt/lfs
LFS_PART=/dev/nvme0n1p8
LFS_BOOT=/dev/nvme0n1p6
LFS_EFI=/dev/nvme0n1p2
LFS_HOME=/dev/nvme0n1p7

#
if ! mountpoint -q $LFS; then mount $LFS_PART $LFS; fi
if ! mountpoint -q $LFS/boot; then mount $LFS_BOOT $LFS/boot; fi
if ! mountpoint -q $LFS/boot/efi; then mount $LFS_EFI $LFS/boot/efi; fi
if ! mountpoint -q $LFS/home; then mount $LFS_HOME $LFS/home; fi
if ! mountpoint -q $LFS/sources; then mount /mnt/nfs/sources $LFS/sources; fi
fi

# /dev
if [ ! -d $LFS/dev ]; then
    echo "Make necessary directories"
    mkdir -pv $LFS/{dev,proc,sys,run}
```

```
else
    echo "All required directories have been verified."
fi

#          chroot          exit          가
case $1 in
    clean|c|-c)
        if mountpoint -q $LFS/dev/shm; then
            # Unmount Kernel Virtual File System used in previous LFS
            sessions.
            echo "LFS is now set to '$LFS'"
            echo "Now proceed with the unmount of <Kernel Virtual File
            System> for chroot"
            for kvfs in dev/shm dev/pts sys proc run dev ; do
                if mountpoint $LFS/$kvfs; then umount -q $LFS/$kvfs; fi
            done
            findmnt -D -R $LFS
            echo "Ok unmount unnecessary devices"
            echo "Good bye"
            exit 0
        else
            echo "Cleanup of Kernel Virtual File System is Complete."
            findmnt -D -R $LFS
            exit 0
        fi
    ;;
    start|s|-s)
        # Mount the Kernel Virtual File System to Enter LFS chroot
        environment.
        echo "Now proceed with the mount of <Kernel Virtual File System> for
        chroot"
        echo "LFS is now set to '$LFS'"
        if ! mountpoint -q $LFS/dev;      then mount --bind /dev $LFS/dev;
    fi
        if ! mountpoint -q $LFS/dev/pts; then mount -t devpts devpts -o
        gid=5,mode=0620 $LFS/dev/pts; fi
        if ! mountpoint -q $LFS/proc;    then mount -t proc proc $LFS/proc;
    fi
        if ! mountpoint -q $LFS/sys;     then mount -t sysfs sysfs $LFS/sys;
    fi
        if ! mountpoint -q $LFS/run;     then mount -t tmpfs tmpfs $LFS/run;
    fi
        if ! mountpoint -q $LFS/dev/shm; then mount -t tmpfs -o nosuid,nodev
        tmpfs $LFS/dev/shm;      fi
        if ! mountpoint -q $LFS/sources; then mount --rbind /mnt/nfs/sources
        $LFS/sources;          fi
        findmnt -D -R $LFS
        # Run 'chroot'
        chroot "$LFS" $(type -p env) -i \
            HOME=/root          \
            TERM="$TERM"        \

```

```

        PS1='<LFS> \u@\h [ \w ] \$ ' \
        PATH=/usr/bin:/usr/sbin      \
        MAKEFLAGS="-j$(nproc)"        \
        TESTSUITEFLAGS="-j$(nproc)"   \
        NINJAJOBS="$(nproc)"          \
        /bin/bash --login
    exit 0
;;
version|v|-v)
    echo "LFS chroot script $VERSION"
    exit 0
;;
help|h|-h)
    echo "LFS chroot script $VERSION"
    echo "Usage:"
    echo "clean   or c- Unmount Kernel Virtual File System"
    echo "start   or s- Mount and run 'chroot' command with necessary
variables"
    echo "version or v- Print script version"
    echo "help    or h - This screen"
    exit 0
;;
*)
    #Guidance on the factors needed to execute script
    echo "sh ./lfs-env-config [ start | clean | help | version ]"
    exit 0
;;
esac
## End ~/bin/lfs-env-config

```

cd 가 .

```
alias <filename>='source <filename>'
```

:

가

1. URL Git 가
2. 가 .zip 가
3. 가
4. 가
- 5.

가

1. alias
2. wget, git, gawk

1. git clone source

```

user@host:[ ~ ] $ pre-stage
https://xorg.freedesktop.org/archive/individual/proto/xcb-proto-1.17.0.tar.x
z
xcb-proto-1.17.0.tar 100%
[=====>] 148.19K 302.76KB/s
                [Files: 1 Bytes: 148.19K [153.40KB/s] Redirects:
0 Todo: 0 Errors: 0 ]
user@host:[ /workbench/xcb-proto-1.17.0 ] $ _

```

```
#!/bin/bash
```

```
Green='\033[0;32m'
```

```
BIGreen='\033[1;32m'
```

```
Red='\033[0;31m'
```

```
Yellow='\033[0;33m'
```

```
Color_Off='\033[0m'
```

```

if [ "$(type -t p4c)" != 'alias' ] ; then
    echo -e "p4c is not ${Yellow}alias registered${Color_Off}, so the
functionality is not available."
    source ${HOME}/.bash_aliases
    return 2>&/dev/null
fi

```

```
fi
```

```

if [ -z "$1" ]; then echo -e "${Green}An appropriate factor (file name or
download link) is required.${Color_Off}"; return; fi
InputStringType=$(echo "$1" | awk 'BEGIN { FS = ":" } ; { print $1 }')
BuildBase="$LFS"/workbench
SourceBase="$LFS"/sources
TargetFile=$(basename "$1")
GitDirCheck=$(basename -s .git "$1")
GitCheck=${TargetFile: -3}
ZipCheck=${TargetFile: -3}
TargetDir=$(echo "$TargetFile" | sed -e 's/\.tar.*$//' -e 's/\.tgz*$//' -e
's/\.src*$//' -e 's/\.zip*$//' -e 's@^.*/@@')
NotFoundMsg1="The directory derived from the filename is
${BIGreen}$TargetDir${Color_Off}.\n\
However, it does not exist, so it will move to the ${Yellow}most recent
directory created${Color_Off}.\n\
Please check if it is correct."

```

```
if [ $(stat -c %u $BuildBase) -ne $(id -u) ] ; then echo -e "Check
${Red}$BuildBase${Color_Off} Ownership"; return; fi

function chg_dir() {
    if [ -d "$1" ]; then
        cd "$1"
    else
        cd $(ls -tcA -w1 | head -n1)
        echo -e "$NotFoundMsg1"
    fi
}

# Change directory "$BuildBase"
if [ "$PWD" != "$BuildBase" ]; then
    chg_dir "$BuildBase"
fi

## Handling Git
if [ "$GitCheck" == "git" ] ; then
    if [ -d "$GitDirCheck" ] ; then
        chg_dir "$GitDirCheck"
        return
    else
        pushd $SourceBase
        if [ -d $GitDirCheck ] ; then
            rm -rf $GitDirCheck
        fi
        git clone "$1"
        cp -R $GitDirCheck $BuildBase
        popd
    #    echo "Git #1"
    chg_dir "$GitDirCheck"
    return
fi
fi

case "$InputStringType" in
    https|http|ftp)
        wget --no-verbose -nc --directory-prefix="$SourceBase" "$1"
        ;;
    *)
        ;;
esac

# Prepare Package Build
if [ "$ZipCheck" == "zip" ] ; then
    mkdir -p "$TargetDir"
    chg_dir "$TargetDir"
    unzip -q "$SourceBase"/"$TargetFile"
    return
else
```

```
    if [ ! -d "$TargetDir" ]; then
        tar -xf "$SourceBase"/"$TargetFile" 2>/dev/null
    fi
    chg_dir "$TargetDir"

fi

unset InputStringType BuildBase SourceBase TargetFile GitDirCheck GitCheck
ZipCheck TargetDir NotFoundMsg1
```

AI :

```
#      (#!/bin/bash)  source      가

# 1. tput
BOLD=$(tput bold)
BLUE=$(tput setaf 4)
GREEN=$(tput setaf 2)
BIGREEN="${BOLD}${GREEN}"
RED=$(tput setaf 1)
YELLOW=$(tput setaf 3)
RESET=$(tput sgr0)

# OpenRC
print_status() {
    local msg="$1"
    local status=$2
    local col=$(tput cols)
    printf " ${BLUE}${BOLD}*${RESET} %s" "$msg"
    tput hpa $((col - 7))
    [ $status -eq 0 ] && printf "[  ${GREEN}OK${RESET}  ]\n" || printf "[
${RED}!!${RESET}  ]\n"
}

# 2.      (p4c      )
if [ "$(type -t p4c)" != 'alias' ]; then
    echo -e "p4c is not ${YELLOW}alias registered${RESET}, so functionality
is unavailable."
    # source
    [ -f "${HOME}/.bash_aliases" ] && . "${HOME}/.bash_aliases"
    return 2 2>/dev/null
fi

# 3.
if [ -z "$1" ]; then
    echo -e "${GREEN}An appropriate factor (file name or download link) is
required.${RESET}"
    return
fi
```

```

# (LFS )
BuildBase="${LFS}/workbench"
SourceBase="${LFS}/sources"
TargetFile=$(basename "$1")
TargetDir=$(echo "$TargetFile" | sed -r
's/\.\tar(\.\.*)"?\$|\.tgz$|\.src$|\.zip$//;s/\.git$//')
InputScheme=$(echo "$1" | grep -oP '^[^:]+(?:=:)' ) # http, https, ftp

# 4.
if [ ! -w "$BuildBase" ]; then
    echo -e "Check ${RED}$BuildBase${RESET} Ownership/Write Permission"
    return
fi

# 5. (가 )
chg_dir() {
    if [ -d "$1" ]; then
        cd "$1"
    else
        local latest=$(ls -tcA -w1 | head -n1)
        cd "$latest"
        echo -e "Derived: ${BIGGREEN}$1${RESET} (Not found)"
        echo -e "Moved to latest: ${YELLOW}$latest${RESET}"
    fi
}

#
[ "$PWD" != "$BuildBase" ] && cd "$BuildBase"

# 6. (http, https, ftp)
case "$InputScheme" in
    http|https|ftp)
        wget --no-verbose -nc -P "$SourceBase" "$1"
        print_status "Downloading $TargetFile" $?
        ;;
esac

# 7. (Git vs Archive)
if [[ "$1" == *.git ]] || [ "$InputScheme" == "git" ]; then
    # Git
    GitName=$(basename -s .git "$1")
    if [ -d "$GitName" ]; then
        chg_dir "$GitName"
    else
        pushd "$SourceBase" >/dev/null
        [ -d "$GitName" ] && rm -rf "$GitName"
        git clone "$1" && cp -R "$GitName" "$BuildBase/"
        popd >/dev/null
        chg_dir "$GitName"
        print_status "Git Clone: $GitName" $?
    fi
else

```

```
#
if [[ "$TargetFile" == *.zip ]]; then
    mkdir -p "$TargetDir" && cd "$TargetDir"
    unzip -q "$SourceBase/$TargetFile"
    print_status "Unzip: $TargetFile" $?
else
    if [ ! -d "$TargetDir" ]; then
        tar -xf "$SourceBase/$TargetFile" 2>/dev/null
        print_status "Extract: $TargetFile" $?
    fi
    chg_dir "$TargetDir"
fi
fi

#           (local           source           unset)
unset BOLD BLUE GREEN BIGREEN RED YELLOW RESET BuildBase SourceBase
TargetFile TargetDir InputScheme GitName
```

From:
<https://www.gamu.kr/dokuwiki/> -

Permanent link:
<https://www.gamu.kr/dokuwiki/linuxfromscratch/auto-lfs?rev=1768448056>

Last update: **2026/01/15 03:34**

