

Live

Live <debian-live@lists.debian.org>

2015-08-23

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Live
<debian-live@lists.debian.org>

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6  
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13 Live : Live Live CDDVDUSB (netboot {netboot }#building-netboot-image ) ( fetch=URL  
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15 ${project}: live-bootlive-buildlive-configlive-toolslive-manual  
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20 live-config: Live  
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23 Debian Installer (d-i): Debian  
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```

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```
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```

live-build :

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```

153

```
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Live

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```

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182

183

```
$ lb config
```

lb config

184

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185

186

```
# lb build
```

live-image-i386.hybrid.iso

187

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188

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189

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190

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191

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192

193

```
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$ xorriiso -as cdrecord -v dev=/dev/sr0 blank=as-needed live-image-i386.hybrid.iso
```

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194

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196

197

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$ sync
```

: sync USB

198

Live

USB

live-image-i386.hybrid.iso USB Live *gparted parted* USB

199

200

201

```
# gparted ${USB}
```

ext4 \${} /dev/sdb2

202

203

```
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```

: Windows OS{}#contact

204

Remember: live-image-i386.hybrid.iso USB USB Live

205

Live

Live CDDVDUSB PXE BIOS BIOS BIOS BIOS Live

206

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207

Live Live user {}#downloading-prebuilt-images standard user

208

Live (VM) :

209

VMOSOSRAMCPU

210

VM

211

VM

212

VM

213

VM

214

VM

215

VM

216

QEMU ISO

217

Debian VM QEMU *qemu-kvm qemu-kvm*

218

qemu-kvm qemu kvm qemu qemu-utils qemu-img

219

220

```
# apt-get install qemu-kvm qemu-utils
```

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221

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226

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$ virtualbox
```

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: X.org Live *virtualbox* live-build VirtualBox X.org *virtualboxbox-guest-dkms* *virtualboxbox-guest-x11* 800x600

229

```
$ echo "virtualbox-guest-dkms virtualbox-guest-x11" >> config/package-lists/my.list.chroot
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```
# /etc/dhcp/dhcpd.conf - configuration file for isc-dhcp-server
ddns-update-style none;

option domain-name "example.org";
option domain-name-servers ns1.example.org, ns2.example.org;

default-lease-time 600;
max-lease-time 7200;

log-facility local7;

subnet 192.168.0.0 netmask 255.255.255.0 {
    range 192.168.0.1 192.168.0.254;
    filename "pxelinux.0";
    next-server 192.168.0.2;
    option subnet-mask 255.255.255.0;
    option broadcast-address 192.168.0.255;
    option routers 192.168.0.1;
}
```

TFTP

261

RAM

262

tftpd-hpa /srv/tftp /srv/debian-live/tftpboot root

263

264

```
# dpkg-reconfigure -plow tftpd-hpa
```

tftp

265

NFS

266

Linux initrd NFS Live

267

nfs-kernel-server

268

/etc/exports

269

270

```
/srv/debian-live *(ro,async,no_root_squash,no_subtree_check)
```

NFSNFS:

271

272

```
# exportfs -rv
```

3 ↗<http://www.syslinux.org/wiki/index.php/PXELINUX> ↗[syslinux wiki](http://d-i.alioth.debian.org/manual/ja.i386/ch04s05.html) ↗<http://d-i.alioth.debian.org/manual/ja.i386/ch04s05.html>
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294

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295

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lb config config/ auto/ local/ 2	311
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\$ lb config [2015-01-06 19:25:58] lb config P: Creating config tree for a debian/stretch/i386 system P: Symlinking hooks...	
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:	314
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\$ lb config --apt aptitude	
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\$ lb config --binary-images netboot --bootappend-live "boot=live components hostname=live-host ↳ username=live-user" ...	
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\$ mkdir mylive && cd mylive && lb config \$ mkdir auto \$ cp /usr/share/doc/live-build/examples/auto/* auto/		
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#!/bin/sh lb config noauto \ --architectures i386 \ --linux-flavours 686-pae \ --binary-images hdd \ --mirror-bootstrap http://ftp.ch.debian.org/debian/ \ --mirror-binary http://ftp.ch.debian.org/debian/ \ "\${@}"		
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Live	

live-images

346

```
$ mkdir live-images && cd live-images
$ lb config --config git://live-systems.org/git/live-images.git
$ cd images/standard
```

347

auto/config config non-free -archive-areas "main contrib non-free"

348

Git\${HOME}/.gitconfig

349

350

```
[url "git://live-systems.org/git/"]
insteadOf = lso:
```

live-systems.org git lso: .git :

351

352

```
$ lb config --config lso:live-images
```

live-images

353

lb build

354

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376
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381
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385
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387
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--mirror-binary-security http://mirror/debian-security/ \
--mirror-binary-backports http://mirror/debian-backports/

388
backports experimental config/archives/your-repository.list.chroot config/archives/your-repository.list.chroot
-mirror-* **chroot** Live

config/archives/live.list.chroot Live debian-live 390

391

```
deb http://live-systems.org/ sid-snapshots main contrib non-free
```

config/archives/live.list.binary Live /etc/apt/sources.list.d/ 392

393

GPG config/archives/your-repository.key.{binary,chroot} 394

APTAPT config/archives/your-repository.pref.{binary,chroot} Live /etc/apt/preferences.d/ 395

396

There are a number of ways to choose which packages live-build will install in your image, covering a variety of different needs. You can simply name individual packages to install in a package list. You can also use metapackages in those lists, or select them using package control file fields. And finally, you may place package files in your config/ tree, which is well suited to testing of new or experimental packages before they are available from a repository. 397

: live-build APT apt aptitude 400

398

: 402

403

```
$ lb config  
$ echo task-gnome-desktop > config/package-lists/desktop.list.chroot
```

live-build 2.x Live 404

task- (): 405

406

```
$ apt-cache search --names-only ^task-
```

gnome-core education-* Debian Pure Blend debtags role::metapackage :

407

```
$ debtags search role::metapackage
```

408

```
config/package-lists/ Live  
.list .chroot .binary  
: .list.chroot Live .deb
```

409

```
.list.binary config/package-lists/ Live Live pool/ Live chroot .list
```

410

```
chroot ! grep-aptavail -n -sPackage -FPriority standard | sort Priority: standard  
grep-aptavail (dctrl-tools ) live-build Packages 2:
```

411

```
$ lb config  
$ echo '! Packages Priority standard' > config/package-lists/standard.list.chroot
```

412

```
config/* (LB_ ) live-build lb config DISTRIBUTION ARCHITECTURESARCHIVE_AREAS  
-architectures amd64 ia32-libs :
```

413

```
#if ARCHITECTURES amd64  
ia32-libs  
#endif
```

414

```
1-architectures i386 -architectures amd64 memtest86+ :
```

415

```
#if ARCHITECTURES i386 amd64  
memtest86+  
#endif
```

416

```
-archive-areas contrib non-free vrms :
```

417

```
#if ARCHIVE AREAS contrib non-free  
vrms  
#endif
```

427

```
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```

428

```
429  
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```

430

```
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```

431

```
GNOME :
```

432

```
$ lb config  
$ echo "task-gnome-desktop task-laptop" >> config/package-lists/my.list.chroot  
$ echo "task-german task-german-desktop task-german-gnome-desktop" >> config/package-lists/my.list.chroot
```

433

```
()
```

435

```
-linux-flavours linux-image
```

436

```
amd64 linux-image-amd64 i386 linux-image-586
```

437

```
-linux-packages amd64 experimental linux-image-3.18.0-trunk-amd64 :
```

438

439

```
$ lb config --linux-packages linux-image-3.18.0-trunk  
$ echo "deb http://ftp.debian.org/debian/ experimental main" > config/archives/experimental.list.chroot
```

```
Debian live-build .deb
```

440

```
kernel-handbook ABI linux linux-latest
```

441

```
{ () }#kernel-flavour-and-version -linux-packages {}#installing-modified-or-third-party-  
packages
```

442

```
:
```

443

RAM	445
(aufs)	446
(squashfs)	447
	448
Live Debian Live	449
Joachim Breitner <small>↳ http://www.joachim-breitner.de/blog/archives/282-How-to-fork-privately.html</small> How to fork privately <small>↳ https://www.debian.org/doc/maint-guide/</small> Debian	450
2:	451
packages.chroot	452
APT	453
packages.chroot APT	454
	455
packages.chroot	455
config/packages.chroot/ Live -	456
dpkg-name	457
packages.chroot :	458
secure APT	459
config/packages.chroot/	460
Live	461
	462
APT	462
packages.chroot APT{}#choosing-packages-to-install	463
APT	464
	465
APT	465
live-build Live APT ()2APT	466
debian/changeLog Debian Live APT - {APT}#apt-pinning	467
	468
APT	468
APT (Live APT Live config/includes.chroot/) lb_config man apt	469

apt aptitude

apt aptitude lb config -apt

apt:

aptitude:

470

471

472

473

APT

APT-apt-ftp-proxy -apt-http-proxy APT:

474

475

476

```
$ lb config --apt-http-proxy http://proxy/
```

APT

APT:

477

478

479

480

```
$ lb config --apt-indices false
```

```
/etc/apt/sources.list /var/lib/apt Live APTapt-cache search apt-get install apt-get update
```

481

APT:

482

483

```
$ lb config --apt-recommends false
```

live-boot live-config Live live-config Live user-setup live-*

484

(Debian 7.2) Live (lb build binary.packages) {APT}#apt-pinning APT

485

apt aptitude

APT lb config -apt-options -aptitude-options APT apt aptitude man snapshot.debian.org Acquire:::Check-Valid-Until=false APT Release -yes :

486

487

```
$ lb config --apt-options "--yes -oAcquire:::Check-Valid-Until=false"
```

man Live

489

apt.conf APT config/apt/apt.conf apt-*

490

APT

491

```
apt_preferences(5) man APT config/archives/*.prefconfig/archives/*.pref.chrootconfig/apt/preferences  
config/includes.chroot/etc/apt/preferences
```

```
 ${testing} Live Live sid APT sid sid Live sid ${testing} :
```

493

494

```
$ echo "deb http://mirror/debian/ sid main" > config/archives/sid.list.chroot  
$ cat >> config/archives/sid.pref.chroot << EOF  
Package: live-*  
Pin: release n=sid  
Pin-Priority: 600  
  
Package: *  
Pin: release n=sid  
Pin-Priority: 1  
EOF
```

```
config/package-lists/desktop.list.chroot task-lxde-desktop LXDE wifi lxde-core lxde- 495  
core gksu gksu gnome-keyring gnome-keyring config/apt/preferences :
```

496

```
Package: gnome-keyring  
Pin: version *  
Pin-Priority: -1
```


498

Live Live preseed debconf 499

Includes 500

Live Live () live-build 2: 501

chroot : chroot/Live {Live/chroot }#live-chroot-local-includes 502

: {}#binary-local-includes 503

Live{}#terms 504

Live/chroot 505

chroot chroot/Live Live Live (/etc/skel) live Live/chroot 506

config/includes.chroot Live / Live /var/www/index.html : 507

508

```
$ mkdir -p config/includes.chroot/var/www
$ cp /path/to/my/index.html config/includes.chroot/var/www
```

: 509

510

```
-- config
[...]
|-- includes.chroot
|   '-- var
|       '-- www
|           '-- index.html
[...]
```

chroot 511

512

Live chroot /video_demo.* Live HTML config/includes.binary/ : 513

514

```
$ cp ~/video_demo.* config/includes.binary/
```

Live 515

516

chroot 517

Live/chroot

518

```
chroot .hook.chroot config/hooks/ chroot chroot chroot /usr/share/doc/live-build/examples/hooks  
chroot
```

520

```
man live-config /lib/live/config/ live-config config/includes.chroot/lib/live/config/  
chroot {}#installing-modified-or-third-party-packages
```

522

```
.hook.binary config/hooks/ binary_checksums chroot ! /usr/share/doc/live-build/examples/hooks
```

Debconf preseed

524

```
config/preseed/ (.chroot .binary) .cfg debconf preseed live-build debconf-set-selections
```

```
debconf debconf debconf(7)
```

526

Live

	528
live-config live-config live-config man	529
live	530
1live live-boot live-build Live/chroot live live	531
live-config live live fuse config/includes.chroot/etc/live/config/user-setup.conf	532
	533
LIVE_USER_DEFAULT_GROUPS="audio cdrom dip floppy video plugdev netdev powerdev scanner ↵ bluetooth fuse"	
live-config.user-default-groups=audio,cdrom,dip,floppy,video,plugdev,netdev,powerdev,scanner,bluetooth,fuse	
userlive:	535
:	536
	537
\$ lb config --bootappend-live "boot=live components username=live-user"	
1{}#boot-time-hooks /usr/share/doc/live-config/examples/hooks passwd (2000-passwd)	538
config/includes.chroot/lib/live/config/	
	539
Live 2:	540
	541
	542
Live locales=en_US.UTF-8 lb config -bootappend-live locales	543
	544
\$ lb config --bootappend-live "boot=live components locales=de_CH.UTF-8"	
	545
_ () _./usr/share/i18n/SUPPORTED	546
X live-config console-setup -bootappend-live keyboard-layoutskeyboard-variantskeyboard-optionskeyb	547
/usr/share/X11/xkb/rules/base.lst :	
	548

```
$ egrep -i '^(?!german.*switzerland)' /usr/share/X11/xkb/rules/base.lst
! model
! layout
ch          German (Switzerland)
! variant
legacy      ch: German (Switzerland, legacy)
de_nodeadkeys ch: German (Switzerland, eliminate dead keys)
de_sundeadkeys ch: German (Switzerland, Sun dead keys)
de_mac       ch: German (Switzerland, Macintosh)
! option
```

549

X:

550

551

```
$ lb config --bootappend-live "boot=live components locales=de_CH.UTF-8 keyboard-layouts=ch"
```

TypeMatrix EZ-Reach 2030 USB (Bepo) Dvorak :

552

553

```
$ lb config --bootappend-live \
"boot=live components locales=fr_FR.UTF-8 keyboard-layouts=fr keyboard-variants=bepo ←
keyboard-model=tm2030usb"
```

1 keyboard-model keyboard-* XKBMODEL XKBLAYOUTXKBVARIANTXKBOPTIONS keyboard(5) man
keyboard-variants 1 keyboard-layouts (setxkbmap(1) -variant) QWERTY Dvorak2:

554

555

```
$ lb config --bootappend-live \
"boot=live components keyboard-layouts=us,us keyboard-variants=,dvorak"
```

556

CD CD-ROM

557

Live CD

558

RAM (tmpfs) RAM

559

RAM () CD/DVD Live persistence

560

persistence (nopersistence) (USB) live-boot(7) man :

561

GPT

562

563

(OS NTFS)

564

persistence persistence.conf persistence.conf

565

USB

566

567

```
# mkfs.ext4 -L persistence /dev/sdb1
```

ext4 {USB}#using-usb-extra-space 568

:

569

570

```
# tune2fs -L persistence /dev/sdb1 # for ext2,3,4 filesystems
```

ext4 :

571

572

```
$ dd if=/dev/null of=persistence bs=1 count=0 seek=1G # for a 1GB sized image file  
$ /sbin/mkfs.ext4 -F persistence
```

/usr /usr union /mnt : 573

574

```
# cp persistence /  
# mount -t ext4 /persistence /mnt
```

persistence.conf 575

576

```
# echo "/usr union" >> /mnt/persistence.conf  
# umount /mnt
```

persistence Live 577

578

persistence.conf

persistence persistence.conf 579

580

persistence.conf(5) man /dev/sdb1 ext4 APT: 580

581

```
# mkfs.ext4 -L persistence /dev/sdb1  
# mount -t ext4 /dev/sdb1 /mnt  
# echo "/home" >> /mnt/persistence.conf  
# echo "/var/cache/apt" >> /mnt/persistence.conf  
# umount /mnt
```

/home /var/cache/apt persistence.conf . and .. /lib /lib/live ()/ persistence.conf / 582
union

```
1 583
  ( persistence.conf ) 12() persistence.conf persistence.conf(5) man (: )
  : /home /root persistence 2 persistence.conf 1 # echo "/home" > persistence.conf 12 #
  echo "/root" > persistence.conf persistence
  private work persistence persistence-label private persistence persistence-label=private 587
  persistence persistence-label=work
  private work persistence.conf live-boot man 588
  589
USBlive-boot luks Live cryptsetup 590
cryptsetup : 591
  592
# apt-get install cryptsetup 593
Live cryptsetup : 593
  594
$ lb config
$ echo "cryptsetup" > config/package-lists/encryption.list.chroot 595
cryptsetup Live persistence persistence-encryption=luks : 595
  596
$ lb config --bootappend-live "boot=live components persistence persistence-encryption=luks" 596
/dev/sdc2 USB 597
USBlive-manual ls -l /dev/disk/by-id : 598
  599
# cryptsetup --verify-passphrase luksFormat /dev/sdc2 600
luks live : 600
  601
# cryptsetup luksOpen /dev/sdc2 live 601
: 602
  603
# dd if=/dev/zero of=/dev/mapper/live 603
```

Live

persistence

604

```
# mkfs.ext4 -L persistence /dev/mapper/live
```

/mnt

606

```
# mount /dev/mapper/live /mnt
```

persistence.conf {persistence.conf }#persistence-conf

608

```
# echo "/ union" > /mnt/persistence.conf
```

:

610

```
# umount /mnt
```

:

611

```
# cryptsetup luksClose live
```

Live ISO hybrid USB USBUSB Live live-boot

614

	616
	617
live-build <i>syslinux</i> ()	618
/usr/share/live/build/bootloaders config/bootloaders 1 config/bootloaders/isolinux isolinux	
640x480 splash.png splash.svg	620
syslinux 0	621
iso-hybrid isolinux.cfg 1/105 isolinux.cfg	622
	623
include menu.cfg default vesamenu.c32 prompt 0 timeout 50	

ISO

ISO9660	624
LB_ISO_APPLICATION/-iso-application NAME: 128	625
LB_ISO_PREPARER/-iso-preparer NAME: live-build 128	626
LB_ISO_PUBLISHER/-iso-publisher NAME: 128	627
LB_ISO_VOLUME/-iso-volume NAME: IDWindows Apple Mac OS 32	628
	629

Debian

630

Debian

Live Debian

631

Debian - Debian d-i

632

633

Debian

3:

634

Debian : Live () Debian CD Debian initrd Live

635

debootstrap .deb Debian Debian

636

preseed Debian preseed live-build

637

638

LiveDebian : Live () Debian initrd

639

debootstrap Live live-installer udeb

640

Debian

641

: Live Live live-installer/enable=false preseed live-installer

642

Debian : Debian d-i debian-installer-launcher

643

live-build Debian lb config Live d-i :

644

645

```
$ lb config --architectures i386 --linux-flavours 586 \
      --debian-installer live
$ echo debian-installer-launcher >> config/package-lists/my.list.chroot
```

preseed Debian

646

「<https://www.debian.org/releases/stable/i386/apb.html>」 Debian Bpreseed live-build preseed.cfg config/includes.installer/ en_US preseed :

647

648

```
$ echo "d-i debian-installer/locale string en_US" \
      >> config/includes.installer/preseed.cfg
```

Debian

649

d-i udeb config/packages.binary/ {Live/chroot }#live-chroot-local-includes config/includes.so instal initrd

	653
GPL 3	654
{ }#contact	655
\${project}Git{Git}#git-repositories debian debian-next 2debian-next live-bootlive-buildlive-configlive-imageslive-manuallive-tools	656
	657
fast-forward	658
	659
	660
	661
Fixing/Adding/Removing/Correcting/Translating/...	662
changelog 180	663
	664
	665
live-manual live-manual { }#how-to-contribute	666
:	667
	668
<pre>\$ mkdir -p ~/.ssh/keys \$ wget http://live-systems.org/other/keys/git@live-systems.org -O ~/.ssh/keys/git@live-systems.org \$ wget http://live-systems.org/other/keys/git@live-systems.org.pub -O ~/.ssh/keys/git@live-systems.org.pub \$ chmod 0600 ~/.ssh/keys/git@live-systems.org*</pre>	
openssh-client :	669
	670
<pre>\$ cat >> ~/.ssh/config << EOF Host live-systems.org Hostname live-systems.org User git IdentitiesOnly yes IdentityFile ~/.ssh/keys/git@live-systems.org EOF</pre>	
ssh live-manual :	671
	672
<pre>\$ git clone git@live-systems.org:/live-manual.git \$ cd live-manual && git checkout debian-next</pre>	

Git:

673

674

```
$ git config user.name "John Doe"  
$ git config user.email john@example.org
```

: debian-next

675

676

677

```
$ git commit -a -m "Adding a section on applying patches."
```

:

678

679

```
$ git push
```


	681
Live -	682
:	683
↳ http://live-systems.org/	684
live-build live-boot live-config live-tools (live-build 4 4.x live-build)	685
() live-build live-boot live-config live-tools Live	686
	687
Debian (testing) Debian (unstable)	688
(testing) (unstable) (stable)} live-build *{ (stable)	689
↳ http://live-systems.org/ Status	690
2: (testing) (unstable) (unstable) (testing) (unstable) (APTPIN)	691
	692
Live	693
	694
()	695
	696
live-build	697
:	698
	699
	700
live-build	701
<i>debootstrap</i>	702
Live	703
Live	704
Live live-boot	705
Live live-config	706

Live

```
Live live-tools 707
tee auto/build ({ }#managing-a-configuration )
708
709
# lb build 2>&1 | tee build.log

live-boot live-config /var/log/live/
config/ tar () () lb config -dump ( config/ ) 710
711
LC_ALL=C LC_ALL=en_US live-build 712

713
714

715
Live debian-live 716
717

718
live-build debootstrap Debian Debian () 719
Live Debian 720

721
live-build Debian Debian 722
Live Debian - Live debootstrap lbbootstrap -debug 723
724

725
{}#collect-information / 726

727
Live Live : 728
```

	729
	730
Live	731
live-build	732
live-boot	
live-config	
live-tools	
	733
\${project} (BTS) ↗ https://bugs.debian.org/ reportbug	734
live-build	
live-boot	
live-config	
debian-live	
(Ubuntu)	
Debian	
Debian	
Debian	
Debian	
BTS	736

	738
Live	739
	740
Bash	741
POSIX - 'foo' \$(foo)	742
'sh -n' 'checkbashisms'	743
'set -e'	744
	745
	746
	747
80	748
Linux :	749
:	750
	751
if foo; then bar fi	
:	752
	753
if foo then bar fi	
:	754
:	755
	756
Foo () { bar }	
:	757
	758

Live

```
Foo ()  
{  
    bar  
}
```

759

760

live-build LB_

761

live-build
LB

762

live-build

763

_
LB

live-config LIVE_

764

live-config _

765

{ } \${FOO} \${FOO}

766

: \${FOO} "\${FOO}"

767

:

768

:

769

770

```
FOO=bar
```

:

771

772

```
FOO="bar"
```

:

773

:

774

775

```
if [ -f "${FOO}"/foo/"${BAR}"/bar ]  
then  
    foobar  
fi
```

:

776

777

```
if [ -f "${FOO}/foo/${BAR}/bar" ]
then
    foobar
fi
```

778

```
sed |sed -e 's|foo|bar|'
```

779

```
test []if [ -x /bin/foo ]; ...if test -x /bin/foo; ...
```

780

```
test case
```

781

782

	784
Debian \${project}	785
	786
Debian Live Live	787
debian debian-security debian-live buildd	788
(debian-live---.iso)	789
debian-cd (udeb)	790
cdimage.debian.org	791
	792
debian debian-security	793
cdimage.debian.org	794
	795
Debian	796
Debian ftp.debian.org archive.debian.org chroot Live	797
	798
	799
	800
\$ sed \\\n -e 's @MAJOR@ 9.0 g' \\\n -e 's @MINOR@ 9.0.1 g' \\\n -e 's @CODENAME@ stretch g' \\\n -e 's @ANNOUNCE@ 2017/msgXXXXX.html g'	
	801
	802
Updated Live @MAJOR@: @MINOR@ released	
The Live Systems Project is pleased to announce the @MINOR@ update of the Live images for the stable distribution Debian @MAJOR@ (codename "@CODENAME@").	
The images are available for download at:	
< http://live-systems.org/cdimage/release/current/ >	

```
and later at:
```

```
<http://cdimage.debian.org/cdimage/release/current-live/>
```

```
This update includes the changes of the Debian @MINOR@ release:
```

```
<https://lists.debian.org/debian-announce/@ANNOUNCE@>
```

```
Additionally it includes the following Live-specific changes:
```

- * [LIVE]
- * [LIVE]
- * []

```
About Live Systems
```

```
-----  
The Live Systems Project produces the tools used to build official  
live systems and the official live images themselves for Debian.
```

```
About Debian
```

```
-----  
The Debian Project is an association of Free Software developers who  
volunteer their time and effort in order to produce the completely free  
operating system Debian.
```

```
Contact Information
```

```
-----  
For further information, please visit the Live Systems web pages at  
<http://live-systems.org/>, or contact the Live Systems team at  
<debian-live@lists.debian.org>.
```

Git

803

Git

804

```
 ${project} ↵ http://live-systems.org/gitweb/ ↵ git URL : ://live-systems.org/git/ live-manual 805
```

806

```
 $ git clone git://live-systems.org/git/live-manual.git
```

807

```
 $ git clone https://live-systems.org/git/live-manual.git
```

808

```
 $ git clone http://live-systems.org/git/live-manual.git
```

809

```
git@live-systems.org:/
```

810

```
live-manual ssh
```

811

```
 $ git clone git@live-systems.org:live-manual.git
```

gitdebian debian-next

812

debian debian-next

813

814

```
 $ git checkout debian-next
```

debian-next fast-forward **debian** git pull --rebase

815

816

Live **debian-next** mrconfig git mr

817

818

```
 $ mr bootstrap http://live-systems.org/other/mr/mrconfig
```

Debian **debian-next** live-images {Git}#clone-configuration-via-git

819

Live

822

Live Live 3 823

824

{ }#requirements {live-build }#installing-live-build live-build 825

{ }#distribution-mirrors-build-time 1b config /etc/live/build.conf LB_MIRROR_* : 826

827

```
LB_MIRROR_BOOTSTRAP="http://mirror/debian/"
LB_MIRROR_CHROOT_SECURITY="http://mirror/debian-security/"
LB_MIRROR_CHROOT_BACKPORTS="http://mirror/debian-backports/"
```

1:

828

: live-build 829

live-build base (Xorg) Live ISO hybrid Live 830

: 831

832

```
$ mkdir tutorial1 ; cd tutorial1 ; lb config
```

config/ 833

tee 834

835

```
# lb build 2>&1 | tee build.log
```

live-image-i386.hybrid.iso ISO hybrid Qemu ISO VirtualBox ISO {ISO}#burning-iso- 836
image USB ISO hybrid USB

2:

837

: 838

Live 839

840

```
$ mkdir tutorial2
$ cd tutorial2
$ lb config
$ echo "task-lxde-desktop iceweasel" >> config/package-lists/my.list.chroot
```

LXDE config/includes.chroot/etc/iceweasel/profile/ 841

1 : 842

843

```
# lb build 2>&1 | tee build.log
```

{ 1 }#tutorial-1 844

3: 845

: USB 846

git{}#managing-a-configuration auto 847

848

849

```
$ mkdir -p tutorial3/auto
$ cp /usr/share/doc/live-build/examples/auto/* tutorial3/auto/
$ cd tutorial3
```

auto/config : 850

851

```
#!/bin/sh

lb config noauto \
    --architectures i386 \
    --linux-flavours 686-pae \
    "${@}"
```

lb config auto/config : 852

853

```
$ lb config
```

: 854

855

```
$ echo "task-lxde-desktop iceweasel xchat" >> config/package-lists/my.list.chroot
```

-architectures i386 amd64 32 -linux-flavours 686-pae *lxde iceweasel xchat* 856

: 857

858

```
# lb build
```

Live

```
22>&1 | tee build.log auto/build 859
```

```
( 1 ) git auto : 860
```

```
861
```

```
$ git init  
$ cp /usr/share/doc/live-build/examples/gitignore .gitignore  
$ git add .  
$ git commit -m "Initial import."
```

```
2
```

```
862
```

```
vlc 863
```

```
lb clean lb build 864
```

```
865
```

```
# lb clean
```

```
vlc config/package-lists/my.list.chroot : 866
```

```
867
```

```
$ echo vlc >> config/package-lists/my.list.chroot
```

```
: 868
```

```
869
```

```
# lb build
```

```
: 870
```

```
871
```

```
$ git commit -a -m "Adding vlc media player."
```

```
config/ config LB_* lb clean auto lb config 872
```

```
Live
```

```
873
```

VNC

```
874
```

```
: live-build VNC 875
```

```
2: 1 live-build Packages () 2 xorg gdm3 metacity xvnc4viewer 876
```

```
877
```

```
$ mkdir vnc-kiosk-client  
$ cd vnc-kiosk-client  
$ lb config -a i386 -k 686-pae --apt-recommends false  
$ echo '! Packages Priority standard' > config/package-lists/standard.list.chroot  
$ echo "xorg gdm3 metacity xvnc4viewer" > config/package-lists/my.list.chroot
```

APT 878

apt-cache : 879

880

```
$ apt-cache depends live-config live-boot
```

live-config live-boot : user-setup sudoRAM live-tools Live eject : 881

882

```
$ echo "live-tools user-setup sudo eject" > config/package-lists/recommends.list.chroot
```

/etc/skel config/includes.chroot .xsession metacity xvncviewer 192.168.1.2 5901 883

:

884

```
$ mkdir -p config/includes.chroot/etc/skel
$ cat > config/includes.chroot/etc/skel/.xsession << EOF
#!/bin/sh

/usr/bin/metacity &
/usr/bin/xvncviewer 192.168.1.2:1

exit
EOF
```

:

885

886

```
# lb build
```

887

128MB USB 888

: 128MB USB 889

128MB *localepurge* --debootstrap-options 890

891

```
$ lb config --apt-indices false --apt-recommends false --debootstrap-options "--variant=minbase--"
" --firmware-chroot false --memtest none
```

--apt-recommends false 2{APT}#tweaking-apt-to-save-space 892

893

```
$ echo "user-setup sudo" > config/package-lists/recommends.list.chroot
```

:

894

895

```
# lb build 2>&1 | tee build.log
```

110MB { 1}#tutorial-1 192MB 896
-apt-indices false APT Live apt apt-get update -apt-recommends false -debootstrap-options
"-variant=minbase" -firmware-chroot false -memtest none 897
: /usr/share/doc/live-build/examples/hooks stripped.hook.chroot 62MB debootstrap 898

GNOME

: GNOME 900
i386 iso-hybrid GNOME GNOME Debian 901
live-build grep-dctrl tasksel-data : 902
903

```
# apt-get install dctrl-tools tasksel-data
```

904
905

```
$ grep-dctrl -FTest-lang de /usr/share/tasksel/descs/debian-tasks.desc -sTask  
Task: german
```

: 906
907

```
$ grep-dctrl -FEnhances german /usr/share/tasksel/descs/debian-tasks.desc -sTask  
Task: german-desktop  
Task: german-kde-desktop
```

de_CH.UTF-8 ch {}#using-metapackages task- : 908
909

```
$ mkdir live-gnome-ch  
$ cd live-gnome-ch  
$ lb config \  
-a i386 \  
--bootappend-live "boot=live components locales=de_CH.UTF-8 keyboard-layouts=ch" \  
--debian-installer live  
$ echo '! Packages Priority standard' > config/package-lists/standard.list.chroot  
$ echo task-gnome-desktop task-german-desktop >> config/package-lists/desktop.list.chroot  
$ echo debian-installer-launcher >> config/package-lists/installer.list.chroot
```

Live *debian-installer-launcher* 586 910

	913
	914
Live	915
: {}#how-to-contribute	916
	917
	918
	919
	920
	921
	922
	923
	924
Live	925
	926
he ()she ()s/he s(he) ()they ()	927
	928
	929
	930
	931
	932
	933
	934
()	935
	936
changelog!	937
	938
	939
(100)	940
() 2	941

	942
	943
	944
2	945
!	946
	947
	948
IRC	949
	950
	951
Live chroot VM	952
	953
	954
	955
	956
	957
	958
	959
	960
	961
live-manual GNU GPL ()	962
	963
- !	964
-	965
- \${testing} sid spellmake spell	966
-	967
	968
11.11.1.11.1.2 ... 1.21.2.11.2.2 ... 22.1 ...	969
First ()second (2)third (3) ... First ()Then ()After that ()Finally ()...	970
	971

live-manual

↳ SiSU ↳ {SiSU }http://www.sisudoc.org/sisu/en/html/sisu_manual/markup.html

972

```
$ sisu --help markup
```

973

- /:

974

foo foo

977

- :

978

979

```
/{foo}/
```

foo Debian

980

- :

981

982

```
#{foo}#
```

foo

983

- :

984

985

```
code{  
    $ foo  
    # bar  
}code
```

986

987

```
$ foo  
# bar
```

code{ }code

988

		989
Live		990
Debian		991
: {}#how-to-contribute {}#translation		992
		993
		994
		995
po #		996
<i>TN, Translator's Note ()</i>		997
()()		998
		999
you		1000
		1001
		1002
		1003
potpo		1004
		1005
100% .po		1006
		1007
Enter		1008
n		
		1009
:		1010
- ()		1011
-		1012
-		1013
- (::)		1014
-		1015
-		1016
-		1017