

Setting up a Slackware chroot

There are multiple reasons why you might want to set up a Slackware chroot:

- building 32-bit packages on a 64-bit multilib system
- building -stable packages on a -current system
- building (and testing) packages for SBo on a clean system

For this guide, we'll create a chroot at **/chroot_folder** from **slackware-14.1-install-dvd.iso**.

Obtaining a Slackware installation of your desired architecture

Start with a Slackware installation DVD. Download it from <http://www.slackware.com/getslack/> via torrent.

Installing the packages

Automatically

You can create your chroot and install Slackware into it using the following elegant script:
<http://tty1.uk/scripts/slackware/mkchroot>

Manually

First, create a folder which will contain the chroot:

```
mkdir /chroot_folder
```

Mount the installation ISO:

```
mount -o loop slackware-14.1-install-dvd.iso /mnt/cdrom  
cd /mnt/cdrom
```

After the ISO has been mounted, the packages (found under the *slackware* or *slackware64* folder) can be installed to the chroot folder with:

```
installpkg --root /chroot-folder */*.t?z
```

Then unmount the ISO:

```
umount /mnt/cdrom
```

Setting up required files

fstab

The following minimal snippet can be used for `/chroot_folder/etc/fstab`

#	<file system>	<mount point>	<type>	<options>	<dump>	<pass>
	tmpfs	/dev/shm	tmpfs	defaults	0	0
	devpts	/dev/pts	devpts	noexec,nosuid,gid=tty,mode=0620		0
	sysfs	/sys	sysfs	defaults	0	0
	proc	/proc	proc	defaults	0	0

Entering the Chroot

Automatic mount

To have the chroot mounted permanently, add the following to your host system's `/etc/fstab`:

/dev	chroot_folder/dev	none	bind,auto	0	0
/proc	chroot_folder/proc	none	bind,auto	0	0
/sys	chroot_folder/sys	none	bind,auto	0	0
/etc/resolv.conf	chroot_folder/etc/resolv.conf	none	bind,auto	0	0

And reboot. Then run the following command to mount the chroot folder:

```
mount /chroot_folder
```

Manual mount

Refer to: ([volume_mounting](#)).

Entering the Chroot

Now that the chroot is set up, one can chroot into it:

```
chroot /chroot_folder /bin/bash
```

Note

Wrote a small script to automate the chroot steps.

<https://raw.githubusercontent.com/aadityabagga/scripts/master/chroot.sh>

Updating packages

After that, you can run `slackpkg` and update the packages: ([configure_a_package_manager](#)).

Exiting

When you're done, exited the chroot by pressing `Ctrl+d`.

Usecase: Building 32-bit Packages

Mounting partitions

I use a chroot to build 32-bit packages on a 64-bit system. I needed to mount the partition which contained the SlackBuilds for which I wanted to make a package, As my Slackware host mount point is (in this example) at `/slackware_host_mount_point`, I used the command:

```
mount -B /slackware_host_mount_point /chroot_folder
```

(<http://www.thegeekstuff.com/2013/01/mount-umount-examples/>)

Then I built the package by executing the Slackbuild as follows:

```
ARCH=i686 ./my_package.SlackBuild
```

An alternative way to build other ARCH packages

Instead of using ``ARCH=i686'` before running a slackbuild, we can use a program called ``setarch'`, which, among other things, can set the ARCH and the kernel version in the shell. It has some handy symlinks, such as `linux32` or `i586`, which saves some typing. The ``linux32'` command will set the reported kernel's ARCH as ``i686'`.

SYNOPSIS

```
setarch arch [options] [program [argument...]]
```

When we run ``linux32'` it starts a new shell, so we can also use it to chroot:

```
chroot /path/to/chroot linux32 /bin/zsh
```

or it could be run after chrooting into our new root. Settings will revert to normal when we exit the new shell. One useful option is to change the kernel's reported version:

```
chroot /path/to/chroot linux32 --uname-2.6 /bin/zsh
```

That `--uname-2.6` isn't a typo, there has to be a dash between the flag and the version. The `setarch(8)` man page shows all the options.

- Dave

See also

- <https://wiki.archlinux.org/index.php/Chroot>
- <http://www.linuxquestions.org/questions/slackware-installation-40/install-slackware-to-a-folder-using-chroot-825598/#post4093831>

Sources

* Originally written by [Aaditya](#)

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Permanent link:
https://docs.slackware.com/howtos:general_admin:setting_up_a_slackware_chroot

Last update: **2020/11/16 12:54 (UTC)**

