Loopback, Mounting, Devices

- [Mounting images as devices using loopback devices.](#)

Mounting images as devices using loopback devices.

Mounting with a Loopback

Loop Device in Linux - DZone

Copy the Image that you want to mount using DD

```
dd if=/dev/zero of=/loopfile
```

Check for the unused loop device.

```
# losetup -f

/dev/loop1
```

Set up the loop device with the backing file. If this has partitions you can use the -P flag.

```
# losetup /dev/loop1 /loopfile [-P]
```

Creating an ext4 fs with the device

Make the Ext FS

```
# mkfs -t ext4 -v /dev/loop1

mke2fs 1.45.3 (14-Jul-2019)

fs_types for mke2fs.conf resolution: 'ext4', 'small'

Discarding device blocks: done
```

```
Filesystem label=

OS type: Linux

Block size=4096 (log=2)

Fragment size=4096 (log=2)

Stride=0 blocks, Stripe width=0 blocks

12800 inodes, 12800 blocks

640 blocks (5.00%) reserved for the super user

First data block=0

Maximum filesystem blocks=14680064

1 block group

32768 blocks per group, 32768 fragments per group

12800 inodes per group



Allocating group tables: done

Writing inode tables: done

Creating journal (1024 blocks): done

Writing superblocks and filesystem accounting information: done
```

Create a mount point

```
# mkdir /mnt/loopfs
```

Mount the fs

```
# mount -t ext4 /dev/loop1 /mnt/loopfs
```

Unmounting and deleting the loop and fs

```
# umount /mnt/loopfs/

# losetup -d /dev/loop1
```