btrfs-replace(8)

SYNOPSIS

btrfs replace <subcommand> <args>

DESCRIPTION

btrfs replace is used to replace btrfs managed devices with other device.

SUBCOMMAND

cancel <mount_point>

Cancel a running device replace operation.

start [options] <srcdev>|<devid> <targetdev> <path>

Replace device of a btrfs filesystem.

On a live filesystem, duplicate the data to the target device which is currently stored on the source device. If the source device is not available anymore, or if the -r option is set, the data is built only using the RAID redundancy mechanisms. After completion of the operation, the source device is removed from the filesystem. If the *srcdev* is a numerical value, it is assumed to be the device id of the filesystem which is mounted at *path*, otherwise it is the path to the source device. If the source device is disconnected, from the system, you have to use the devid parameter format. The *targetdev* needs to be same size or larger than the *srcdev*.

Note

The filesystem has to be resized to fully take advantage of a larger target device; this can be achieved with `btrfs filesystem resize <devid>:max /path`

`Options`

-r

only read from *srcdev* if no other zero-defect mirror exists. (enable this if your drive has lots of read errors, the access would be very slow)

-f

force using and overwriting *targetdev* even if it looks like it contains a valid btrfs filesystem.

A valid filesystem is assumed if a btrfs superblock is found which contains a correct checksum. Devices that are currently mounted are never allowed to be used as the *targetdev*.

-B

no background replace.

--enqueue

wait if there's another exclusive operation running, otherwise continue

-K|--nodiscard

Do not perform whole device TRIM operation on devices that are capable of that. This does not affect discard/trim operation when the filesystem is mounted. Please see the mount option *discard* for that in btrfs(5).

status [-1] <mount_point>

Print status and progress information of a running device replace operation.

`Options`

-1

print once instead of print continuously until the replace operation finishes (or is cancelled)

EXAMPLES

Replacing an online drive with a bigger one

Given the following filesystem mounted at `/mnt/my-vault`

```
Label: 'MyVault'  uuid: ae20903e-b72d-49ba-b944-901fc6d888a1
        Total devices 2 FS bytes used 1TiB
        devid    1 size 1TiB used 500.00GiB path /dev/sda
        devid    2 size 1TiB used 500.00GiB path /dev/sdb
```

In order to replace `/dev/sda` (*devid 1*) with a bigger drive located at `/dev/sdc` you would run the following:

```
btrfs replace start 1 /dev/sdc /mnt/my-vault/
```

You can monitor progress via:

```
btrfs replace status /mnt/my-vault/
```

After the replacement is complete, as per the docs at btrfs-filesystem(8) in order to use the entire storage space of the new drive you need to run:

```
btrfs filesystem resize 1:max /mnt/my-vault/
```

EXIT STATUS

btrfs replace returns a zero exit status if it succeeds. Non zero is returned in case of failure.

AVAILABILITY

btrfs is part of btrfs-progs. Please refer to the documentation at https://btrfs.readthedocs.io.

SEE ALSO

btrfs-device(8), btrfs-filesystem(8), mkfs.btrfs(8)