

NAME

btrfs-receive – receive subvolumes from send stream

SYNOPSIS

btrfs receive [options] <path>

or

btrfs receive --dump [options]

DESCRIPTION

Receive a stream of changes and replicate one or more subvolumes that were previously generated by **btrfs send**. The received subvolumes are stored to *path*, unless *--dump* option is given.

If *--dump* option is specified, **btrfs receive** will only do the validation of the stream, and print the stream metadata, one operation per line.

btrfs receive will fail in the following cases:

1. receiving subvolume already exists
2. previously received subvolume has been changed after it was received
3. default subvolume has changed or you didn't mount the filesystem at the toplevel subvolume

A subvolume is made read-only after the receiving process finishes successfully (see BUGS below).

Options

-f <FILE>

read the stream from <FILE> instead of stdin,

-C|--chroot

confine the process to *path* using **chroot**(1)

-e

terminate after receiving an *end cmd* marker in the stream.

Without this option the receiver side terminates only in case of an error on end of file.

-E|--max-errors <NERR>

terminate as soon as NERR errors occur while stream processing commands from the stream

Default value is 1. A value of 0 means no limit.

-m <ROOTMOUNT>

the root mount point of the destination filesystem

By default the mountpoint is searched in */proc/self/mounts*. If */proc* is not accessible, eg. in a chroot environment, use this option to tell us where this filesystem is mounted.

--dump

dump the stream metadata, one line per operation

Does not require the *path* parameter. The filesystem remains unchanged.

-q|--quiet

(deprecated) alias for global *-q* option

-v

(deprecated) alias for global *-v* option

Global options

- `-v|--verbose`
increase verbosity about performed actions, print details about each operation
- `-q|--quiet`
suppress all messages except errors

BUGS

btrfs receive sets the subvolume read-only after it completes successfully. However, while the receive is in progress, users who have write access to files or directories in the receiving *path* can add, remove, or modify files, in which case the resulting read-only subvolume will not be an exact copy of the sent subvolume.

If the intention is to create an exact copy, the receiving *path* should be protected from access by users until the receive operation has completed and the subvolume is set to read-only.

Additionally, receive does not currently do a very good job of validating that an incremental send stream actually makes sense, and it is thus possible for a specially crafted send stream to create a subvolume with reflinks to arbitrary files in the same filesystem. Because of this, users are advised to not use **btrfs receive** on send streams from untrusted sources, and to protect trusted streams when sending them across untrusted networks.

EXIT STATUS

btrfs receive 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 btrfs wiki <http://btrfs.wiki.kernel.org> for further details.

SEE ALSO

mkfs.btrfs(8), **btrfs-send(8)**