

## Cannot create Timeshift Backup on BTRFS: system disk with root subvolume (@)

#f34 #btrfs

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**Luke Newtown** grafdude

May 2021

So I'm on Fedora 34 with the BTRFS and when I try to create a system backup on my btrfs partition with timeshift, I get error "Selected snapshot device is not a system disk  
Select a BTRFS system disk with root subvolume (@) "

I've done some duckducking on the issue and I saw on reddit that it had something to do with fstab using the old / root. Apparently it's fixable by booting onto a live pen and making a snapshot and so on... I'm just not advanced enough to understand the procedures that were given.

Any easier fix out there?

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**L.S. ilikelinux** Science (Kernel Tester I)

May 2021

grafdude:

I saw on reddit that it had something to do with fstab using the old / root.

Could you post the link, to see what exactly you mean.

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Select a BTRFS system disk with root subvolume (@)

Here it is

[https://www.reddit.com/r/btrfs/comments/jx71fp/  
getting\\_error\\_select\\_btrfs\\_system\\_disk\\_with\\_root/](https://www.reddit.com/r/btrfs/comments/jx71fp/getting_error_select_btrfs_system_disk_with_root/)

Luke Newtown grafduke

May 2021

Another thread:

**[r/btrfs - Select BTRFS system disk with root subvolume \(@\)](#)**

5 votes and 16 comments so far on Reddit

Chris Murphy

May 2021

Instead of changing the subvolume's name in the installer, I recommend changing it post-install. There's a bug if you rename the `/` subvolume (it's not a bad bug but ...)

[https://bugzilla.redhat.com/show\\_bug.cgi?id=1952764](https://bugzilla.redhat.com/show_bug.cgi?id=1952764)

You need to identify which `/dev/` node and partition has the btrfs filesystem used for `/` and `/home` and mount its top-level so you can rename the subvolumes:

```
lsblk -f
mount /dev/sdXY /mnt
cd /mnt
mv root @
mv home @home
nano /etc/fstab
```

In nano:

- Change subvol=root to subvol=@ for the `/` mount point.
- Change subvol=home to subvol=@home for the `/home` mount point.

Next change each `/boot/loader/entries/*conf` file's `rootflags=subvol=root` to `rootflags=subvol=@` I think it's easier to just use nano to it in this case, one by one; OR...

It is possible to use grubby to change the BLS drop-in files in `/boot/loader/entries` instead, which is ordinarily the preferred way, but in this case it involves some extra steps than just using nano or vim.

```
grubby --remove-arg="rootflags=subvol=root" --update-kernel=ALL
grubby --arg="rootflags=subvol=@" --update-kernel=ALL
nano /etc/default/grub
```

Remove `rootflags=subvol=@` from the `/etc/default/grub` file - it's here because of the `update-kernel=ALL` flag above, but grub has its own way of adding it.

these since it's a bit much for me and I'm scared I will break the system.

It's a bit of a shame there is not a user-friendlier solution, I don't think anyone should have to go through those after a fresh install.

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**dalto**

**May 2021**

grafdude:

It's a bit of a shame there is not a user-friendlier solution, I don't think anyone should have to go through those after a fresh install.

Just my opinion but the real issue here is a limitation of timeshift. It requires a highly specific layout for btrfs subvolumes for it to work properly. There is no real valid reason why the root subvolume should be mounted as @. It isn't even a widely used convention outside of Ubuntu.

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**Sergio Mauricio Vanegas Arias sergiovaneg**

**Apr 2022**

Hello, there. I know it has been a while, but I tried this yesterday and it seems to work perfectly (thank you so much!), but one question remains. At a certain point, grubby modifies the `/boot/loader/entries/` files of all available kernels. Assuming I followed all the process and chose to use grubby when the option was presented, are the changes I made gonna persist when a new kernel is installed? Thanks again in advance.

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**Chris Murphy**

**Apr 2022**

It does persist across kernel installs.

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**Benny Isaiah**

**Apr 2022**

Timeshift does have trouble restoring sometimes. I couldn't get my system to restore two times and I lost a lot of data.

I am trying to work on a way to have a recovery partion with Fedora. Even though btrfs has snapshots they are not so straightforward for users who dont know the syntax's.

A recovery partition implemented quite well I have seen on PopOS & MacOS. It would be incredible for Fedora, also Nvidia driver options at install.

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**me io maddox**

**Apr 22**

Hello Chris, i have the same prblem, but when i did the installation i created subvolumes @ and @home.

```
sudo btrfs subvolume list /btrfs-pool
ID 256 gen 157 top level 5 path @home
ID 257 gen 159 top level 5 path @-0
```

```
The SSD is nvme1n1
me@192:~$ lsblk -f
NAME FSTYPE FSVER LABEL UUID FSAVAIL FSUSE% MOUNTPOINTS
zram0 [SWAP]
nvme0n1
├─nvme0n1p1 vfat FAT32 BOOT 1117-6312
├─nvme0n1p2 ext4 1.0 2e611b56-afa6-46f1-8cf4-6dfde3193662
├─nvme0n1p3 crypto_LUKS 2 614b0ff8-9aa6-4376-9dfe-8444a569a8a1
└─nvme0n1p4 btrfs @ 394f2d69-3191-4b36-b5a0-dda0a293d795
nvme1n1
```

.....

```
|—nvme1n1p1 ext4 1.0 2ccac7e3-b9d8-45e2-af9c-61a3ded4c59a 525.7M 39% /boot
|—nvme1n1p2 vfat FAT32 6782-8180 579.8M 3% /boot/efi
└—nvme1n1p3 crypto_LUKS 2 692d0381-e51a-4d16-b105-51c16fb95ea1
└—luks-692d0381-e51a-4d16-b105-51c16fb95ea1 btrfs fedora 4fa1f2a8-cd9b-4f88-8efc-
c4b5d03bdf9a 920.7G 1% /home
/
```

Any help? 🙄

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**L.S. ilikelinux** Science (Kernel Tester I)

Apr 23

me io:

i created subvolumes @ and @home.

me io:

ID 257 gen 159 top level 5 path @-0

Just to mention that @-0 is not the same as @. Can you not fix this?

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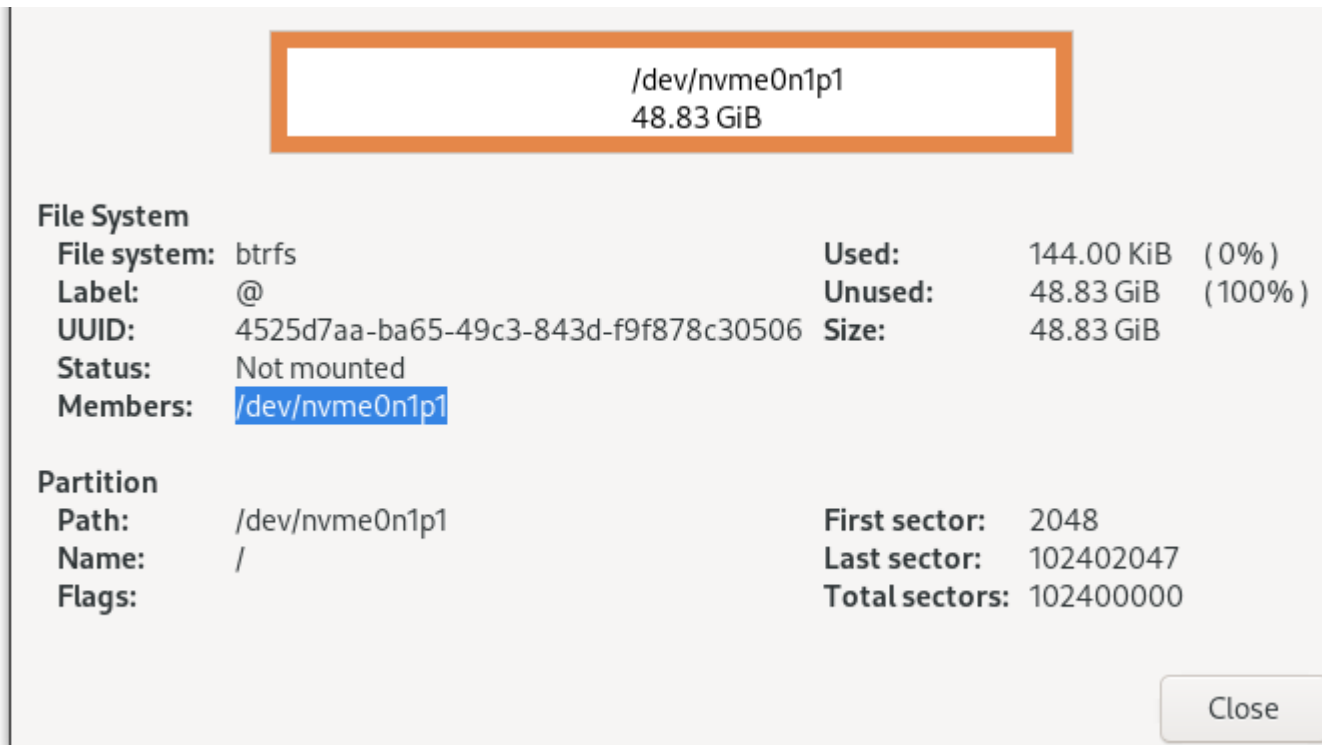
**me io maddox**

Apr 25

Done, now i have a little “problem”. I would like to save snapshots in another empty SSD. Maybe allocating 50GB for snapshots, but i don’t know how to do 🙄  
I formatted as btrfs with only / with @ as label, but Timeshift don’t recognize as btrfs file system.

Information about /dev/nvme0n1p1





```
lsblk -p
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
/dev/zram0 252:0 0 8G 0 disk [SWAP]
/dev/nvme1n1 259:0 0 931.5G 0 disk
├─/dev/nvme1n1p1 259:1 0 600M 0 part /boot/efi
├─/dev/nvme1n1p2 259:2 0 1G 0 part /boot
└─/dev/nvme1n1p3 259:3 0 929.9G 0 part /home
/
/dev/nvme0n1 259:4 0 465.8G 0 disk
└─/dev/nvme0n1p1 259:6 0 48.8G 0 part /mnt
```

Man this thread is from 2021. . . Couldn't the new questions be moved to a new thread?

### [Cannot create Timeshift Backup on BTRFS: system disk with root subvolume \(@\)](#)

Hello Chris, i have the same prblem, but when i did the installation i created subvolumes @ and @home. sudo btrfs subvolume list /btrfs-pool ID 256 gen 157 top level 5 path @home ID 257 gen 159 top level 5 path @-0 The SSD is nvme1n1 me@192:~\$ lsblk -f  
NAME FSTYPE FSVER LABEL UUID FSAVAIL FSUSE% MOUNTPOINTS zram0 ...

**L.S. ilikelinux** Science (Kernel Tester I)

**Apr 25**

[@hamrheadcorvette](#) of course we can ... you can flag the new question and write to create a new topic ... as we as TL3 can not do it.

But I think with time-shift there is still the same issue?!

## Related Topics

Topic	Replies	Views	Activity
<a href="#">Timeshift system backup problem</a> #f38 #kde	5	830	<b>May 2023</b>
<a href="#">Timeshift Fedora 40</a>	4	1.6k	<b>Apr 25</b>
<a href="#">Timeshift with support for fedora subvolumes</a> #workstation-wg	0	669	<b>Feb 2021</b>



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**Fedora 33 snapshot management on Btrfs**  
**#workstation-wg**

2

2.3k

Sep 2020

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5

1.3k

Jun 2023