

# Drives Partitions and Volumes

## Arch Linux Installation Btrfs-01

Machine contains 1-Disk  
**vda** (50Gb)

efi Partition 300MB  
/dev/vda1

swap Partition 2GB  
/dev/vda2

main (data) Remaining Disk  
/dev/vda3

Partitions  
Create 3-Partitions  
1. efi  
2. swap  
3. main (data)

Formatting

efi Partition 300MB  
/dev/vda1

`mkfs.fat -F32 /dev/vda1`

swap Partition 2GB  
/dev/vda2

`mkswap /dev/vda2`

main (data) Remaining Disk  
/dev/vda3

`mkfs.btrfs /dev/vda3`



<div>Drives Partitions and Volumes Arch Linux Installation Btrfs-01 Mount Points</div>		
	<div>Create A Mount Point</div>	

mount /dev/vda3 /mnt  
mount partition vda3 at mount point /mnt  
/mnt is the installation directory where the system will be installed



# Drives Partitions and Volumes

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### Subvolumes

Subvolumes will be created on the Main Data Partition /dev/vda3

```
btrfs su cr /mnt/@
```

Create the root subvolume

```
btrfs su cr /mnt/@home
```

Create the home subvolume

```
btrfs su cr /mnt/@snapshots
```

Create the snapshots subvolume

```
btrfs su cr /mnt/@var_log
```

Create the var\_log subvolume  
This should be mounted as var/log



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### Mount Subvolumes In Directories

Re-Mount Subvolumes to their individual respective directories

Mount the **root** Subvolume to its mount directory

```
mount -o noatime,compress=lzo,space_cache=v2,subvol=@ /dev/vda3 /mnt
```

Once you specify options for a subvolume, they will be applied to all other subvolumes, no matter what you specify.

Create the directories where remaining subvolumes will be mounted.  
`mkdir -p /mnt/{boot,home,.snapshots,var/log}`

Mount the **home** Subvolume to its mount directory

```
mount -o noatime,compress=lzo,space_cache=v2,subvol=@home /dev/vda3 /mnt/home
```

Mount the **snapshots** Subvolume to its mount directory

```
mount -o noatime,compress=lzo,space_cache=v2,subvol=@snapshots /dev/vda3 /mnt/.snapshots
```

Mount the **var\_log** Subvolume to its mount directory

```
mount -o noatime,compress=lzo,space_cache=v2,subvol=@var_log /dev/vda3 /mnt/var/log
```

Mount the **efi** Partition to its mount directory

```
mount /dev/vda1 /mnt/boot
```

