Discussion Board 10

DB10: File Systems

> CS340_OperatingSystems
> Date: 9/5/2022

Part 1 (Due Friday)

With a 100-word paragraph, using Linux commands, describe how you would make a file system in a partition you just created.

Part 2 (Due Sunday)

Respond to at least two of your classmates by critiquing their analysis.
How a Discussion Forum works: To post on the Discussion Forum, click the name of the forum then click on Create Thread. Type a subject "Discussion 10 - Your first name and last name" and a message. Then Submit your post.

Videos:

1. ~~https://youtu.be/V9uejS43cjo~~
2. Partitioning 101
3. ~~Linux Demo: Creating a File System~~
4. The Linux File System for humans
5. The Linux File System – Explained.

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1. The first thing to do is to decide what kind of filesystem is going to be created.

   ○ Here I've created an extended filesystem version 4.

   ```
   mkfs.ext4  /dev/sda1
   ```

2. The next thing to do is to mount the filesystem in your OS.

   ```
   mkdir /mnt/mnt_sda1
   ls /mnt_sda1
   mount -t ext4 /dev/sda1
   df -h
   ```

3. Next edit the the `/etc/fstab` file to include your mount information

```
UUID=fe9be78a-30e6-4c16-b703-1825073c9e83 /mnt/mnt_sda1/ ext4 defaults 0 0
```

4. Then you umount it.

```
                                                     2 / 2
umount /mnt/mnt_sda1/
mount -a
df -h
```

5. Check mount location

```
mount | grep ^/dev/sd
```

References

Kulkarni, K. V. (2019, April 1). How to create a filesystem on a linux partition or logical volume.
Opensource.com. Retrieved September 5, 2022, from https://opensource.com/article/19/4/create-filesystem-linux-partition