

IT 4100: File Systems

FAT Filesystems

Due according to date on Canvas

Assignment

Begin by downloading the image found [here](#). This is an image of a FAT filesystem that I have created.

Create a partition (of 100M), copy that image into the new partition. (Hint: Use the `dd` command). (I.e. on a new partition that is unmounted, do `dd if=fattest.img of=/dev/sda25`)

Mount the partition.

After you have mounted it, create a simple text submission file and answer the following questions:

1. How many bytes per logical sector?
2. How many bytes per cluster?
3. How many sectors per cluster?
4. How many hidden sectors? What is a hidden sector?
5. How many 1K blocks(clusters) does the OS recognize of that partition?
6. How many blocks(clusters) have been used on that partition?
7. How many clusters does the file foo.txt in the filesystem take up?
8. What is the actual file size of foo.txt?
9. How much slack space (if any) does the largest.img have?

Submission and Passoff

- Use the [Submissions link](#) at the top of the page to submit your text file to the `Fat` assignment.