

# LIN: Fdisk partycjonowanie

Wylistowanie dostępnych dysków:

```
kacper@dell:~$ sudo fdisk -l

Disk /dev/sdb: 28,88 GiB, 31004295168 bytes, 60555264 sectors
Disk model: USB DISK 3.0
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x45e29cc2
kacper@dell:~$
```

Wybieramy dysk który chcemy sformatować /dev/sdb

```
kacper@dell:~$ sudo fdisk /dev/sdb

Welcome to fdisk (util-linux 2.39.3).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Command (m for help): m

Help:

DOS (MBR)
 a  toggle a bootable flag
 b  edit nested BSD disklabel
 c  toggle the dos compatibility flag

Generic
 d  delete a partition
 F  list free unpartitioned space
 l  list known partition types
 n  add a new partition
 p  print the partition table
 t  change a partition type
 v  verify the partition table
 i  print information about a partition

Misc
 m  print this menu
 u  change display/entry units
 x  extra functionality (experts only)

Script
```

```
I load disk layout from sfdisk script file
O dump disk layout to sfdisk script file
```

#### Save & Exit

```
w write table to disk and exit
q quit without saving changes
```

#### Create a new label

```
g create a new empty GPT partition table
G create a new empty SGI (IRIX) partition table
o create a new empty MBR (DOS) partition table
s create a new empty Sun partition table
```

Command (m for help): g

Created a new GPT disklabel (GUID: 812597D3-03AF-4EAE-878A-5895036EDE60).  
The device contains 'dos' signature and it will be removed by a write  
command. See fdisk(8) man page and --wipe option for more details.

Command (m for help): n

Partition number (1-128, default 1):

First sector (2048-60555230, default 2048):

Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048-60555230, default  
60553215): +12G

Created a new partition 1 of type 'Linux filesystem' and of size 12 GiB.

Command (m for help): w

The partition table has been altered.

Calling ioctl() to re-read partition table.

Syncing disks.

kacper@dell:~\$

#### Nadawanie systemu plików

```
kacper@dell:~$ sudo mkfs.ext4 /dev/sdb1
```

```
mke2fs 1.47.0 (5-Feb-2023)
```

```
Creating filesystem with 3145728 4k blocks and 786432 inodes
```

```
Filesystem UUID: a50e3ba3-e594-4a46-a147-82d235c6b2f6
```

```
Superblock backups stored on blocks:
```

```
32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208
```

```
Allocating group tables: done
```

```
Writing inode tables: done
```

```
Creating journal (16384 blocks): done
```

```
Writing superblocks and filesystem accounting information: done
```

```
kacper@dell:~$
```

#### Montowanie dysku:

```
kacper@dell:~$ mkdir disk
kacper@dell:~$ sudo mount /dev/sdb1 ./disk/
kacper@dell:~$ lsblk
NAME                                MAJ:MIN RM   SIZE RO TYPE  MOUNTPOINTS
sdb                                  8:16   1  28,9G  0 disk
└─sdb1                               8:17   1    12G  0 part
/home/kacper/disk
kacper@dell:~$
```

Jeżeli chcemy żeby dysk był montowany razem z uruchomieniem systemu operacyjnego to wpisujemy go do pliku fstab.

```
kacper@dell:~$ sudo nano /etc/fstab

# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options>          <dump> <pass>
# / was on /dev/nvme0n1p2 during installation
UUID=db7ddba8-c421-47d7-a760-eb7f39eelcee /
errors=remount-ro 0      1
# /boot/efi was on /dev/nvme0n1p1 during installation
UUID=361E-C212 /boot/efi      vfat    umask=0077      0      1
/swapfile
0      0
none      none      swap      sw

/dev/sdb1 /home/kacper/disk ext4    auto,user,exec,rw,async,atime 0
0
```

Żeby przetestować wpis fstab można wykonać polecenie `sudo mount -a`