fdisk Disk partitioning

CONCEPTS

> Triple-check the device name with lsblk before you write. Writing a partition table to the wrong disk destroys its data.

> fdisk keeps every change in memory until you press w. q leaves without touching the disk.

Partition table fdisk / sfdisk
↓ `partprobe`
Partition /dev/sdb1
↓ `mkfs`
Filesystem ext4, xfs, swap
↓ `mount`
Mount point /mnt/data

INSPECT

`lsblk`
Tree of disks and partitions

`lsblk -f`
Add filesystem type, label, UUID

`sudo fdisk -l`
List partition tables of all disks

`sudo fdisk -l <disk>`
List one disk's table

INTERACTIVE FDISK

`sudo fdisk <disk>`
Edit a disk's partition table

`m`
Show the command menu

`p`
Print the table as edited so far

`g`
New empty GPT table

`o`
New empty MBR (DOS) table

`n`
Add a partition

INTERACTIVE FDISK (cont.)

`d`
Delete a partition

`t`
Change partition type

`w`
Write changes and exit

`q`
Quit without saving

CREATING A PARTITION

`n Enter Enter +<size>`
Next number, first free sector, given size

`n Enter Enter Enter`
Use all remaining space

`t <n> linux`
Linux filesystem type (alias)

APPLY AND FORMAT

`sudo partprobe <disk>`
Tell the kernel about new partitions

`sudo mkfs.ext4 <part>`
Format as ext4

`sudo mount <part> <dir>`
Mount it

SFDISK (SCRIPTING)

`sudo sfdisk -d <disk> > <file>`
Dump the table to a file

`sudo sfdisk <disk> < <file>`
Restore or apply a layout

SAFETY AND CLEANUP

`sudo umount <part>`
Unmount before editing

> fdisk will not stop you from deleting a mounted or used partition. Unmount first, and keep a table dump from sfdisk.