

# Disk Utilities

Disk utilities are essential tools for managing and analyzing disk space on your computer. In this section, we will explore three important disk utilities: df, du, and fdisk. These utilities provide valuable information about disk space usage and allow you to manipulate disk partitions.



# df

## 1 Description

Displays information about disk space usage of mounted file systems.

## 2 Syntax

df [OPTION]... [FILE]...

## 3 Options

-h: Print sizes in human-readable format (e.g., MB, GB).

## 4 Example

df -h



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# du

1

## Description

Estimates and displays the space used by files and directories.

2

## Syntax

du [OPTION]... [FILE]...

3

## Options

-s: Display only the total size.

-h: Print sizes in human-readable format.

4

## Example

du -sh /path/to/directory



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# fdisk

## 1 Description

A command-line utility for managing disk partitions.

## 2 Syntax

```
fdisk [OPTION]... DEVICE
```

## 3 Options

Various options for working with partitions (e.g., -l to list partitions).

## 4 Example

```
sudo fdisk /dev/sda
```

```
-rwxrwxrwx 1 cyrwl cyrwl 22 Jul 5 14:11 .ghci  
drwxrwxrwx 2 cyrwl cyrwl 0 Jul 6 16:34 git  
-rw-rw-rw- 1 cyrwl cyrwl 107 Jul 5 14:11 .gitconfig.cygwin  
-rw-rw-rw- 1 cyrwl cyrwl 656 Jul 5 14:11 .gitconfig.includes.common  
-rw-rw-rw- 1 cyrwl cyrwl 225 Jul 5 14:11 .gitconfig.includes.cygwin  
-rw-rw-rw- 1 cyrwl cyrwl 822 Jul 5 14:11 .gitconfig.includes.mac  
-rw-rw-rw- 1 cyrwl cyrwl 106 Jul 5 14:11 .gitconfig.linux  
-rw-rw-rw- 1 cyrwl cyrwl 176 Jul 5 14:11 .gitconfig.linux.private  
-rw-rw-rw- 1 cyrwl cyrwl 104 Jul 5 14:11 .gitconfig.mac  
-rw-rw-rw- 1 cyrwl cyrwl 28 Jul 5 14:11 .gitignore  
-rw-rw-rw- 1 cyrwl cyrwl 2.7K Jul 5 14:11 .gitmodules  
-rw-rw-rw- 1 cyrwl cyrwl 2.6K Jul 5 14:11 .kdiff3rc  
-rw-rw-rw- 1 cyrwl cyrwl 35K Jul 5 14:11 LICENSE  
drwxrwxrwx 2 cyrwl cyrwl 0 Jul 5 14:11 local  
drwxrwxrwx 2 cyrwl cyrwl 0 Jul 5 14:11 mac  
-rw-rw-rw- 1 cyrwl cyrwl 539 Jul 5 14:11 .minttyrc  
drwxrwx--- 2 cyrwl cyrwl 0 Jul 5 14:46 .oh-my-zsh  
drwxrwx--- 2 cyrwl cyrwl 0 Jul 5 14:11 .oh-my-zsh-plugins
```

# Process Utilities

In addition to disk utilities, process utilities are crucial for monitoring and managing processes running on your system. Let's explore three important process utilities: ps, top, and kill. These utilities provide insights into the running processes and allow you to terminate processes when needed.



# ps

## 1 Description

Displays information about currently running processes.

## 2 Syntax

ps [OPTION]...

## 3 Options

aux: Show detailed information about all processes.

## 4 Example

ps aux

# top

## 1 Description

An interactive utility that continuously updates process information.

## 2 Syntax

```
top
```

## 3 Options

Various interactive options for sorting and filtering processes.

## 4 Example

```
top
```



# kill

## 1 Description

Used to terminate processes gracefully or forcefully.

## 2 Syntax

```
kill [OPTION] PID...
```

## 3 Options

-9: Send a SIGKILL signal for a forceful termination.

## 4 Example

```
kill -9 12345
```

# Wrap Up

Disk utilities such as df, du, and fdisk help you manage and analyze disk space, while process utilities such as ps, top, and kill allow you to monitor and control running processes. Armed with these handy tools, you'll have greater control and understanding of your system's resources.