

Seven standard file types



1. Regular files (-)
2. Directory files (d)
3. Symbolic link files (l)
4. Character special device files (c)
5. Block special device files (b)
6. Named pipe files (p)
7. Socket files (s)

In Linux, there are seven standard file types, each with its own purpose and behavior.

Here's a breakdown of each type:

1. Regular files (-)

- These are the most common type and contain actual data, such as text documents, images, executable programs, and libraries.
- They are denoted by a hyphen (-) symbol.

2. Directory files (d)

- These represent folders that organize other files and subdirectories.
- They are identified by a lowercase "d" symbol.

3. Symbolic link files (l)

- These are special files that act as shortcuts to other files or directories. They point to the actual location of the target file or directory without containing any data themselves.

- Represented by a lowercase “l” symbol.

4. Character special device files (c)

- These represent hardware devices that interact with the system on a character-by-character basis, such as terminals and keyboards.
- They are denoted by a lowercase “c” symbol.

5. Block special device files (b)

- These represent hardware devices that transfer data in blocks, such as hard drives, CD-ROMs, and flash drives.
- They are identified by a lowercase “b” symbol.

6. Named pipe files (p)

- These act as temporary communication channels between processes. They allow data to be written to one end of the pipe and read from the other end, like a communication tunnel.
- Represented by a lowercase “p” symbol.

7. Socket files (s)

- These are used for network communication and provide a way for processes to communicate over the network.
- They are denoted by a lowercase “s” symbol.