

cd Cheatsheet

By Dejan Panovski • Updated on May 3, 2026 • [Download PDF](#)

Quick reference for changing directories with cd in Linux

The `cd` command changes the current working directory in Linux shells. This cheatsheet covers everyday navigation, parent paths, home directory shortcuts, previous-directory jumps, symbolic link handling, and common errors.

Basic Syntax

Core command forms for changing directories.

<code>cd [DIRECTORY]</code>	Change to a directory
<code>cd</code>	Change to your home directory
<code>cd -- DIRECTORY</code>	Change to a directory whose name may start with -
<code>pwd</code>	Print the current working directory

Everyday Navigation

Common ways to move around the filesystem.

<code>cd /etc</code>	Change to an absolute path
<code>cd Downloads</code>	Change to a relative path
<code>cd ..</code>	Move up one directory
<code>cd ../../</code>	Move up two directories
<code>cd ./scripts</code>	Change to a directory under the current directory

Home Directories

Use shell shortcuts for your home directory and other users' homes.

<code>cd ~</code>	Change to your home directory
<code>cd ~/Downloads</code>	Change to Downloads inside your home directory
<code>cd ~username</code>	Change to another user's home directory
<code>cd "\$HOME"</code>	Change to the directory stored in \$HOME

Relative Paths

Build paths from your current directory.

<code>cd .</code>	Stay in the current directory
<code>cd ..</code>	Move to the parent directory
<code>cd ../src</code>	Move up one level, then into <code>src</code>
<code>cd ../../var</code>	Move up two levels, then into <code>var</code>
<code>cd project/docs</code>	Move through nested directories

Previous Directory

Switch between recently used directories.

<code>cd -</code>	Change to the previous working directory
<code>echo "\$OLDPWD"</code>	Show the previous working directory
<code>cd "\$OLDPWD"</code>	Change to the previous directory without using <code>cd -</code>
<code>pushd /path</code>	Change directory and save the old one on the stack
<code>popd</code>	Return to a directory from the stack

Paths with Spaces

Quote or escape paths that contain spaces or shell metacharacters.

<code>cd "Project Files"</code>	Quote a directory name with spaces
<code>cd 'Project Files'</code>	Use single quotes for a literal path
<code>cd Project\ Files</code>	Escape the space with a backslash
<code>cd -- "-reports"</code>	Enter a directory whose name starts with <code>-</code>

Symlinks and Physical Paths

Control whether `cd` follows logical or physical paths.

<code>cd -L linkdir</code>	Follow symbolic links (default in Bash)
<code>cd -P linkdir</code>	Resolve to the physical directory path
<code>pwd</code>	Show the shell's logical current directory
<code>pwd -P</code>	Show the physical current directory
<code>cd -P ..</code>	Move using the physical directory structure

CDPATH

Search extra base directories when changing by name.

<code>export CDPATH=.:~/projects:/opt</code>	Search current directory, <code>~/projects</code> , and <code>/opt</code>
<code>cd myapp</code>	Try matching <code>myapp</code> in each <code>CDPATH</code> entry
<code>unset CDPATH</code>	Disable <code>CDPATH</code> for the current shell
<code>CDPATH= cd myapp</code>	Run one <code>cd</code> command without <code>CDPATH</code>

Troubleshooting

Quick checks for common directory-change errors.

No such file or directory	Verify the path with <code>ls -ld path</code>
Permission denied	Check execute permission on the directory
Path with spaces fails	Quote the path or escape spaces
<code>cd -</code> fails	<code>\$OLDPWD</code> is not set yet
Unexpected target with <code>CDPATH</code>	Run <code>unset CDPATH</code> or use an absolute path
Symlink path looks different	Compare <code>pwd</code> and <code>pwd -P</code>

Related Guides

Use these guides for detailed directory navigation workflows.

cd Command in Linux: Change Directories	Full <code>cd</code> guide with examples
How to Get the Current Working Directory in Linux	Use <code>pwd</code> and understand the current directory
pushd and popd Commands in Linux	Work with the directory stack
Linux Commands Cheatsheet	General Linux command quick reference