

mv Cheatsheet

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Quick reference for moving and renaming files and directories with mv in Linux

The `mv` command moves or renames files and directories in Linux. This cheatsheet covers common `mv` patterns for renaming, moving, overwrite control, backups, and safe bulk operations.

Basic Syntax

Core command forms for move and rename operations.

<code>mv [OPTIONS] SOURCE DEST</code>	Move or rename one file/directory
<code>mv [OPTIONS] SOURCE... DIRECTORY</code>	Move multiple sources into destination directory
<code>mv file.txt newname.txt</code>	Rename file in same directory
<code>mv dir1 dir2</code>	Rename directory

Move Files

Move files between directories.

<code>mv file.txt /tmp/</code>	Move one file to another directory
<code>mv file1 file2 /backup/</code>	Move multiple files
<code>mv *.log /var/log/archive/</code>	Move files matching pattern
<code>mv /src/file.txt /dest/newname.txt</code>	Move and rename in one step

Move Directories

Move or rename complete directory trees.

<code>mv project/ /opt/</code>	Move directory to another location
<code>mv olddir newdir</code>	Rename directory
<code>mv dir1 dir2 /dest/</code>	Move multiple directories
<code>mv /src/dir /dest/dir-new</code>	Move and rename directory

Overwrite Behavior

Control what happens when destination already exists.

<code>mv -i file.txt /dest/</code>	Prompt before overwrite
<code>mv -n file.txt /dest/</code>	Never overwrite existing file
<code>mv -f file.txt /dest/</code>	Force overwrite without prompt
<code>mv -u file.txt /dest/</code>	Move only if source is newer

Backup and Safety

Protect destination files while moving.

<code>mv -b file.txt /dest/</code>	Create backup of overwritten destination
<code>mv --backup=numbered file.txt /dest/</code>	Numbered backups (<code>~1~</code> , <code>~2~</code>)
<code>mv -v file.txt /dest/</code>	Verbose output
<code>mv -iv file.txt /dest/</code>	Interactive + verbose

Useful Patterns

Common real-world `mv` command combinations.

<code>mv -- *.txt archive/</code>	Move files when names may start with -
<code>mv "My File.txt" /dest/</code>	Move file with spaces in name
<code>find . -maxdepth 1 -name '*.tmp' -exec mv -t /tmp/archive {} +</code>	Move matched files safely with find
<code>mv /path/file{,.bak}</code>	Quick rename via brace expansion

Troubleshooting

Quick checks for common move/rename errors.

No such file or directory	Verify source path with <code>ls -l source</code>
Permission denied	Check destination permissions and ownership
Wrong file overwritten	Use <code>-i</code> or <code>-n</code> for safer moves
Wildcard misses hidden files	* does not match dotfiles by default
Option-like filename fails	Use <code>--</code> before source names

Related Guides

Use these guides for detailed move and rename workflows.

[How to Move Files in Linux with mv Command](#)

Full mv guide with examples

[How to Rename Files in Linux](#)

File renaming patterns and tools

[How to Rename Directories in Linux](#)

Directory rename methods

[Cp Command in Linux: Copy Files and Directories](#)

Compare copy vs move workflows