# tmux Terminal multiplexer

Prefix key `Ctrl+b`

**START HERE**

`tmux new -s <name>`
Start a named session

`prefix` `%`
Split left / right

`prefix` `d`
Detach, keep it running

`prefix` `"`
Split top / bottom

`tmux a -t <name>`
Attach again

`prefix` `z`
Zoom a pane

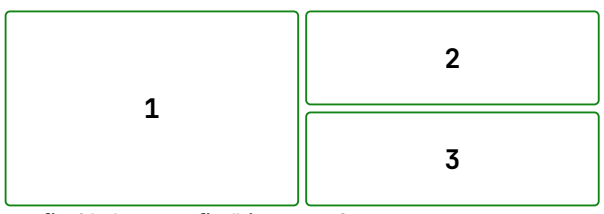
`prefix` `c`
New window

`prefix` `[`
Scroll back / copy

**Session** survives detach
**Window** full-screen tab
**Pane** one shell in a split

**Target syntax (-t)**

| Target | Means |
|---|---|
| `dev` | session dev |
| `dev:2` | window 2 of dev |
| `dev:2.1` | pane 1 of that window |



prefix % then prefix " in pane 2

## CONCEPTS

Shortcuts marked prefix: press Ctrl+b, release, then press the key.

Sessions keep running after you close the terminal or lose your SSH connection.

Closing the last pane closes its window; closing the last window ends the session.

Inside a nested tmux (e.g. over SSH) press the prefix twice to reach the inner one.

## SESSIONS

`tmux new -s <name>`
New named session
*Without -s the session is just numbered 0, 1, 2 ...*

`tmux ls`
List sessions

`tmux a -t <name>`
Attach to session
*tmux a on its own attaches to the most recent session.*

`prefix` `d`
Detach from session
*Programs inside keep running; reattach any time.*

`prefix` `$` Rename session

`prefix` `s`
Choose session from list
*Shows a live preview of each window; Enter switches.*

`tmux kill-session -t <name>`
Kill session

`tmux new -As <name>`
Attach, or create if missing
*Ideal for shell aliases: attaches if the session exists.*

`prefix` `(` / `)`
Previous / next session

`tmux a -d -t <name>`
Attach and detach other clients

## WINDOWS `prefix +`

`c` Create window
*Starts in the session directory unless you bind it with -c.*

`n` / `p`
Next / previous window

`0-9` Jump to window number

`w` Choose window from list

## WINDOWS (cont.) `prefix +`

`,` Rename window

`l` Last used window

`&` Close window

`f` Find window by name

`.`
Move window to another index

`Alt` + `n` / `Alt` + `p`
Next / previous window with alert

`Tab` / `Shift` + `Tab`
Fast window and session switcher (3.8+)

`'` Jump to window by index
*Needed for windows 10 and above.*

## PANES `prefix +`

`%` Split left / right
*Mnemonic: % looks like two panes side by side.*

`"` Split top / bottom
*Mnemonic: the two dots are stacked, one above the other.*

`Arrows` Move between panes

`z` Zoom pane (toggle)
*A Z appears in the status bar while zoomed; press again to restore.*

`x` Close pane
*Asks for confirmation (y/n) first.*

`o` Cycle to next pane

`!`
Break pane into own window
*Undo it with join-pane -s <window>.*

`Ctrl` + `Arrow`
Resize pane (hold)
*Repeat within about half a second without pressing the prefix again.*

`Space` Cycle pane layouts
*Cycles even-horizontal, even-vertical, main-horizontal, main-vertical, tiled (3.5+ adds mirrored main layouts).*

`q` Show pane numbers

`{` / `}`
Swap pane with prev / next

## PANE TRICKS

`prefix` `;`
Jump to last active pane
*Toggles between your two most recently used panes.*

## PANE TRICKS (cont.)

`prefix` `*`
New floating pane (3.7+)

`prefix` `E`
Spread panes evenly

`prefix` `Alt` + `Arrow`
Resize pane in bigger steps

`prefix` `Alt` + `1-7`
Apply a preset layout

`prefix` `Ctrl` + `o`
Rotate panes in window

`join-pane -s <src>`
Pull a pane into this window
*Source is window.pane, for example -s :2.1.*

## COPY MODE

`prefix` `[`
Enter copy / scroll mode
*Scroll with PageUp/PageDown or the arrow keys; q leaves.*

`q` Quit copy mode

`Space` Start selection (vi)

`Enter`
Copy selection and exit (vi)

`prefix` `]` Paste last buffer
*Pastes tmux's own buffer, not the system clipboard; set -s set-clipboard on or copy-pipe to xclip reaches that.*

`/` / `?`
Search forward / backward (vi)

`n` / `N` Next / previous match

Copy mode uses emacs keys by default (vi if $EDITOR or $VISUAL contains vi). Add setw -g mode-keys vi for the vi keys shown here.

`g` / `G`
Jump to top / bottom (vi)

`Ctrl` + `u` / `Ctrl` + `d`
Half page up / down (vi)

`prefix` `=`
Choose buffer to paste

`prefix` `PageUp`
Enter copy mode, scroll up

**Copy mode keys: emacs vs vi**

| Action | emacs | vi |
|---|---|---|
| Select | `Ctrl+Space` | `Space` |
| Copy | `Alt+w` | `Enter` |
| Find down | `Ctrl+s` | `/` |
| Find up | `Ctrl+r` | `?` |
| Top / end | `Alt+< / Alt+>` | `g / G` |
| Quit | `Esc / q` | `q` |

## COMMAND MODE

`prefix` `:`
Open command prompt
*The same commands as the tmux CLI, without the leading tmux.*

`set -g mouse on`
Enable mouse support
*On by default since 3.8. Click panes, drag borders, scroll; hold Shift (Option on macOS) to select text natively.*

`source ~/.tmux.conf`
Reload configuration
*Or ~/.config/tmux/tmux.conf if you use the XDG location.*

`setw synchronize-panes`
Type into all panes at once
*Run again to switch off; handy for several servers at once.*

`list-keys`
Show all key bindings

`send-keys -t <pane> "cmd" Enter`
Run a command in another pane
*Great for starting dev servers in a prepared layout.*

## RECIPES

**Starter ~/.tmux.conf**

```
# ~/.tmux.conf
set -g mouse on
set -g history-limit 50000
set -g prefix C-a
unbind C-b
bind C-a send-prefix
set -g base-index 1
setw -g pane-base-index 1
set -g renumber-windows on
setw -g mode-keys vi
bind r source-file ~/.tmux.conf
\; display "reloaded"
bind | split-window -h -c
"#{pane_current_path}"
bind - split-window -v -c
"#{pane_current_path}"
```

**Run a long job and leave**

```
tmux new -s build
make all
# prefix d to detach
tmux a -t build  # back later
```

**Pair on one session**

```
# terminal 1
tmux new -s pair
# terminal 2, same user
tmux a -t pair
```

## HELP

`prefix` `?`
List all key bindings

`man tmux`
Full manual

`prefix` `t` Show clock