

# tmux Quick Reference

Sessions, windows, panes, copy mode, configuration

## Session Management

### Creating & Attaching

```
tmux # new session
tmux new -s work # new named session
tmux attach -t work # attach to session
tmux attach -dt work # detach others, attach
```

### Session Commands

```
tmux ls List all sessions
tmux kill-session -t work Kill a named session
tmux kill-server Kill the tmux server and all sessions

tmux rename-session -t old new Rename a session
Prefix d Detach from current session
Prefix $ Rename current session
Prefix s List sessions (interactive)
```

Default prefix is Ctrl-b

## Windows

### Window Key Bindings

```
Prefix c Create new window
Prefix , Rename current window
Prefix & Close current window (confirm)
Prefix n Next window
Prefix p Previous window
Prefix 0-9 Switch to window by number
Prefix w List windows (interactive picker)
Prefix l Toggle to last active window
```

### Window Commands

```
tmux new-window -t work # new window in session
tmux swap-window -t 0 # move window to index 0
tmux move-window -t 3 # renumber to index 3
```

## Panes

### Splitting & Closing

```
Prefix % Split horizontally (left | right)
Prefix " Split vertically (top / bottom)
Prefix x Close current pane (confirm)
Prefix ! Break pane into its own window
Prefix z Toggle pane zoom (full window)
```

### Resizing Panes

```
Prefix Ctrl-Arrow Resize by 1 cell
Prefix Alt-Arrow Resize by 5 cells
Prefix Space Cycle through layouts
```

Layouts: even-horizontal, even-vertical, main-horizontal, main-vertical, tiled

## Navigation

### Moving Between Panes

```
Prefix Arrow Move to pane in direction
Prefix o Cycle to next pane
Prefix q Show pane numbers, then press number to jump
Prefix { Swap pane with previous
Prefix } Swap pane with next
```

### Moving Between Sessions

```
Prefix ( Switch to previous session
Prefix ) Switch to next session
Prefix s Session picker (tree view)
Prefix w Window picker across all sessions
```

## Copy Mode

### Entering & Navigating

```
Prefix [ Enter copy mode
q Exit copy mode
Arrow / hjkl Move cursor (vi mode)
Ctrl-u / Ctrl-d Page up / page down
g / G Jump to top / bottom
/ Search forward
? Search backward
n / N Next / previous search match
```

### Selecting & Copying

```
Space Start selection (vi mode)
Enter Copy selection and exit
Prefix ] Paste buffer
v Toggle rectangle selection (vi mode)
```

Enable vi mode: set -g mode-keys vi

## Configuration

### Common Settings (~/.tmux.conf)

```
set -g mouse on # enable mouse
set -g base-index 1 # windows start at 1
set -g renumber-windows on # renumber on close
set -g default-terminal "tmux-256color"
set -g history-limit 50000
```

### Reload Config

```
tmux source-file ~/.tmux.conf # from shell
# or Prefix : then type:
source-file ~/.tmux.conf
```

## Status Bar

### Status Bar Options

```
set -g status-position top
set -g status-style "bg=black,fg=white"
set -g status-left "[#S] "
set -g status-right "%H:%M %d-%b"
set -g status-interval 5
```

### Format Variables

```
#S Session name
#I Window index
#W Window name
#P Pane index
#H Hostname
#T Pane title
```

## Key Bindings

### Custom Bindings

```
# change prefix to Ctrl-a
unbind C-b
set -g prefix C-a
bind C-a send-prefix
# vim-style pane navigation
bind h select-pane -L
bind j select-pane -D
bind k select-pane -U
bind l select-pane -R
```

## Binding Syntax

```
bind X command Bind Prefix + X to command
bind -n M-Left prev Bind without prefix (Alt-Left)
bind -r H resize-pane -L 5 Repeatable binding
unbind X Remove a binding
Prefix ? List all current key bindings
```

## Scripting

### Scripted Layouts

```
tmux new-session -d -s dev
tmux send-keys -t dev "vim" Enter
tmux split-window -h -t dev
tmux send-keys -t dev "npm run dev" Enter
tmux attach -t dev
```

### Useful Commands

```
tmux send-keys -t sess 'cmd' Enter Send keystrokes to a session
tmux capture-pane -p Print pane contents to stdout
tmux display-message '#S' Show a message / variable
tmux set-environment -g VAR val Set an environment variable
tmux list-keys List all key bindings
```

## Common Patterns

### Recommended ~/.tmux.conf

```
set -g mouse on
set -g base-index 1
set -g mode-keys vi
set -g status-position top
set -g history-limit 50000
bind | split-window -h -c "#{pane_current_path}"
bind - split-window -v -c "#{pane_current_path}"
```

### Quick Recipes

```
Survive SSH disconnect tmux new -s work → disconnect → tmux attach -t work
Share session Both users tmux attach -t same (read-only: -r)
Save scrollbar tmux capture-pane -S -3000 -p > log.txt
Kill stuck pane Prefix x, or tmux kill-pane -t %N
Reorder windows :swap-window -s 3 -t 1
```