bspwm Tiling window manager

START HERE

`bspwm`
Start the WM (from .xinitrc)

`bspc node -d <desktop>`
Send window to a desktop

`sxhkd &`
Start the hotkey daemon

`bspc desktop -f <desktop>`
Go to a desktop

`bspc node -f <dir>`
Focus a neighbour

`bspc node -t floating`
Float the window

`bspc node -s <dir>`
Swap with a neighbour

`bspc node -c`
Close the window

sxhkd hotkey daemon → runs → **bspc** client → socket → **bspwm** window tree
How a keypress becomes a layout change

CONCEPTS

bspwm only manages windows. Keys come from sxhkd, which runs bspc commands; bspc talks to bspwm over a socket.

Monitor physical screen
Desktop workspace
Node window or split
Hierarchy

Each desktop holds a binary tree: leaves are windows, inner nodes are splits. Most commands rotate, flip or resize subtrees.

Prefix a selector modifier with ! to negate it, and chain modifiers with dots: next.local.!floating.

FOCUS AND MOVE

`bspc node -f <dir>`
Focus window by direction (north/south/east/west)

`bspc node -f next.local.!hidden.window`
Cycle windows on this desktop

`bspc node -f last`
Focus the previously focused window

`bspc node -s <dir>`
Swap with the window in a direction

`bspc node -s biggest.local`
Swap with the biggest window

`bspc node -n <dir>`
Move window onto the neighbour's position

`bspc node -d <desktop>`
Send window to a desktop

`bspc node -d <desktop> --follow`
Send window and follow it

`bspc node -c`
Close window politely

`bspc node -k`
Kill window

STATE AND FLAGS

`bspc node -t tiled`
Make the window tiled

`bspc node -t floating`
Make the window floating

STATE AND FLAGS (cont.)

`bspc node -t ~fullscreen`
Toggle fullscreen
A leading ~ toggles: if the state already matches, it returns to the last state.

`bspc node -g sticky`
Toggle sticky (follows desktop changes)

`bspc node -g marked`
Toggle mark for a deferred move

`bspc node -v <dx> <dy>`
Move a floating window by pixels

`bspc node -z <side> <dx> <dy>`
Resize by dragging a side or corner

SPLITS AND LAYOUT

`bspc node -p <dir>`
Preselect where the next window opens

`bspc node -p cancel`
Cancel the preselection

`bspc node -r <ratio>`
Set the split ratio of the node

`bspc node -r +20`
Grow the split by pixels (or -20)

`bspc node @/ -R 90`
Rotate the whole desktop tree

`bspc node @/ -F horizontal`
Mirror the desktop tree

`bspc desktop -l next`
Toggle tiled/monocle layout

DESKTOPS

`bspc desktop -f <desktop>`
Focus a desktop by name

`bspc desktop -f ^<n>`
Focus the nth desktop

`bspc desktop -f next.local`
Next desktop on this monitor

`bspc desktop -f last`
Back to the previous desktop

`bspc desktop -m <monitor>`
Move desktop to another monitor

MONITORS

`bspc monitor -d I II III IV V`
Name this monitor's desktops

`bspc monitor <name> -d <names>...`
Set desktops for a given monitor

MONITORS (cont.)

`bspc monitor -f <dir>`
Focus a monitor by direction

QUERY

`bspc query -N`
List node IDs

`bspc query -D --names`
List desktop names

`bspc query -N -n .floating`
Nodes matching a modifier

`bspc query -T -d`
Dump a desktop tree as JSON

RULES

`bspc rule -a <Class> state=floating`
Float windows of a class

`bspc rule -a <Class> desktop=^2 follow=on`
Open on a desktop and follow

`bspc rule -a <Class>:<inst>`
Match on instance too

`bspc rule -a <Class> -o`
One-shot rule, removed after first match

`bspc rule -a <Class> manage=off`
Leave windows unmanaged

`bspc rule -a <Class> center=on`
Center floating windows

CONFIG

`bspc config window_gap <px>`
Gap between windows

`bspc config border_width <px>`
Window border width

`bspc config focused_border_color '#RRGGBB'`
Focused border colour

`bspc config focus_follows_pointer true`
Focus under the mouse

`bspc config pointer_modifier mod4`
Mouse drag modifier

`bspc config pointer_action3 resize_corner`
Modifier + right button action

`bspc config automatic_scheme spiral`
New window placement (also alternate, longest_side)

CONFIG (cont.)

`bspc config top_padding <px>`
Reserve space for a bar

SXHKD BINDINGS

`super + Return`
Launch a terminal

`super + {h,j,k,l}`
Focus west/south/north/east
Braces expand to one binding per entry, in order; the same braces on the command line pick the matching one.

`super + shift + {h,j,k,l}`
Swap in a direction

`super + {_,shift + } {1-9,0}`
Go to / send to desktop

`super + alt + {h,j,k,l}`
Preselect a direction

`super + {t,shift + t,s,f}`
Set state tiled/pseudo/float/full

`super + m`
Toggle monocle layout

`super + alt + Escape`
Quit bspwm

`super + Escape`
Reload sxhkd
Bind pkill -USR1 -x sxhkd to reload the config.

EVENTS

`bspc subscribe report`
Stream a status line on every change

RECIPES

Minimal bspwmrc

```
#!/bin/sh
pgrep -x sxhkd >/dev/null || sxhkd &
bspc monitor -d I II III IV V
bspc config border_width 2
bspc config window_gap 10
bspc config focus_follows_pointer true
bspc rule -a Gimp state=floating
```

Dual monitor desktops

```
bspc monitor HDMI-1 -d 1 2 3 4 5
bspc monitor eDP-1 -d 6 7 8 9 10
```

Send window to next desktop and follow

```
d=$(bspc query -D -d next.local --names)
bspc node -d "$d" --follow
```