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

MONITORS (cont.)

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

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

CONFIG (cont.)

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

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
```