

**NAME**

xkeyboard-config – XKB data description files

**DESCRIPTION**

xkeyboard-config provides the description files for the X Keyboard Extension (XKB). The configuration options below are usually applied with `setxkbmap(1)`.

**MODELS**

## LAYOUTS

## OPTIONS

### Switching to another layout

Option	Description
<b>grp:switch</b>	Right Alt (while pressed)
<b>grp:lswitch</b>	Left Alt (while pressed)
<b>grp:lwin_switch</b>	Left Win (while pressed)
<b>grp:rwin_switch</b>	Right Win (while pressed)
<b>grp:win_switch</b>	Any Win (while pressed)
<b>grp:menu_switch</b>	Menu (while pressed), Shift+Menu for Menu
<b>grp:caps_switch</b>	Caps Lock (while pressed), Alt+Caps Lock for the original Caps Lock action
<b>grp:rctrl_switch</b>	Right Ctrl (while pressed)
<b>grp:toggle</b>	Right Alt
<b>grp:lalt_toggle</b>	Left Alt
<b>grp:caps_toggle</b>	Caps Lock
<b>grp:shift_caps_toggle</b>	Shift+Caps Lock
<b>grp:shift_caps_switch</b>	Caps Lock to first layout; Shift+Caps Lock to last layout
<b>grp:win_menu_switch</b>	Left Win to first layout; Right Win/Menu to last layout
<b>grp:lctrl_rctrl_switch</b>	Left Ctrl to first layout; Right Ctrl to last layout
<b>grp:alt_caps_toggle</b>	Alt+Caps Lock
<b>grp:shifts_toggle</b>	Both Shift together
<b>grp:alts_toggle</b>	Both Alt together
<b>grp:ctrls_toggle</b>	Both Ctrl together
<b>grp:ctrl_shift_toggle</b>	Ctrl+Shift
<b>grp:lctrl_lshift_toggle</b>	Left Ctrl+Left Shift
<b>grp:rctrl_rshift_toggle</b>	Right Ctrl+Right Shift
<b>grp:ctrl_alt_toggle</b>	Alt+Ctrl
<b>grp:alt_shift_toggle</b>	Alt+Shift
<b>grp:lalt_lshift_toggle</b>	Left Alt+Left Shift
<b>grp:alt_space_toggle</b>	Alt+Space
<b>grp:menu_toggle</b>	Menu
<b>grp:lwin_toggle</b>	Left Win
<b>grp:win_space_toggle</b>	Win+Space
<b>grp:rwin_toggle</b>	Right Win
<b>grp:lshift_toggle</b>	Left Shift
<b>grp:rshift_toggle</b>	Right Shift
<b>grp:lctrl_toggle</b>	Left Ctrl
<b>grp:rctrl_toggle</b>	Right Ctrl
<b>grp:sclk_toggle</b>	Scroll Lock
<b>grp:lctrl_lwin_rctrl_menu</b>	Left Ctrl+Left Win to first layout; Right Ctrl+Menu to second layout
<b>grp:lctrl_lwin_toggle</b>	Left Ctrl+Left Win

### Key to choose the 3rd level

Option	Description
<b>lv3:switch</b>	Right Ctrl
<b>lv3:menu_switch</b>	Menu
<b>lv3:win_switch</b>	Any Win
<b>lv3:lwin_switch</b>	Left Win
<b>lv3:rwin_switch</b>	Right Win
<b>lv3:alt_switch</b>	Any Alt
<b>lv3:lalt_switch</b>	Left Alt
<b>lv3:ralt_switch</b>	Right Alt
<b>lv3:ralt_switch_multikey</b>	Right Alt; Shift+Right Alt as Compose
<b>lv3:ralt_alt</b>	Right Alt never chooses 3rd level
<b>lv3:enter_switch</b>	Enter on keypad
<b>lv3:caps_switch</b>	Caps Lock
<b>lv3:bksl_switch</b>	Backslash
<b>lv3:lsgt_switch</b>	<Less/Greater>
<b>lv3:caps_switch_latch</b>	Caps Lock; acts as onetime lock when pressed together with another 3rd-level chooser
<b>lv3:bksl_switch_latch</b>	Backslash; acts as onetime lock when pressed together with another 3rd level chooser
<b>lv3:lsgt_switch_latch</b>	<Less/Greater>; acts as onetime lock when pressed together with another 3rd level chooser

### Ctrl position

Option	Description
<b>ctrl:nocaps</b>	Caps Lock as Ctrl
<b>ctrl:lctrl_meta</b>	Left Ctrl as Meta
<b>ctrl:swpcaps</b>	Swap Ctrl and Caps Lock
<b>ctrl:ac_ctrl</b>	At left of 'A'
<b>ctrl:aa_ctrl</b>	At bottom left
<b>ctrl:rctrl_ralt</b>	Right Ctrl as Right Alt
<b>ctrl:menu_rctrl</b>	Menu as Right Ctrl
<b>ctrl:swap_lalt_lctl</b>	Swap Left Alt with Left Ctrl
<b>ctrl:swap_lwin_lctl</b>	Swap Left Win with Left Ctrl
<b>ctrl:swap_rwin_rctl</b>	Swap Right Win with Right Ctrl
<b>ctrl:swap_lalt_lctl_lwin</b>	Left Alt as Ctrl, Left Ctrl as Win, Left Win as Left Alt

### Use keyboard LED to show alternative layout

Option	Description
<b>grp_led:num</b>	Num Lock
<b>grp_led:caps</b>	Caps Lock
<b>grp_led:scroll</b>	Scroll Lock

### Layout of numeric keypad

Option	Description
<b>keypad:legacy</b>	Legacy
<b>keypad:oss</b>	Unicode additions (arrows and math operators)
<b>keypad:future</b>	Unicode additions (arrows and math operators; math operators on default level)
<b>keypad:legacy_wang</b>	Legacy Wang 724
<b>keypad:oss_wang</b>	Wang 724 keypad with Unicode additions (arrows and math operators)
<b>keypad:future_wang</b>	Wang 724 keypad with Unicode additions (arrows and math operators; math operators on default level)
<b>keypad:hex</b>	Hexadecimal
<b>keypad:atm</b>	ATM/phone-style

### Numeric keypad Delete behavior

Option	Description
<b>kpdl:dot</b>	Legacy key with dot
<b>kpdl:comma</b>	Legacy key with comma
<b>kpdl:dotoss</b>	Four-level key with dot
<b>kpdl:dotoss_latin9</b>	Four-level key with dot, Latin-9 only
<b>kpdl:commaoss</b>	Four-level key with comma
<b>kpdl:momayyezoss</b>	Four-level key with momayyez
<b>kpdl:kposs</b>	Four-level key with abstract separators
<b>kpdl:semi</b>	Semicolon on third level

### Caps Lock behavior

Option	Description
<b>caps:internal</b>	Caps Lock uses internal capitalization; Shift "pauses" Caps Lock
<b>caps:internal_nocancel</b>	Caps Lock uses internal capitalization; Shift does not affect Caps Lock
<b>caps:shift</b>	Caps Lock acts as Shift with locking; Shift "pauses" Caps Lock
<b>caps:shift_nocancel</b>	Caps Lock acts as Shift with locking; Shift does not affect Caps Lock
<b>caps:capslock</b>	Caps Lock toggles normal capitalization of alphabetic characters
<b>caps:shiftlock</b>	Caps Lock toggles ShiftLock (affects all keys)
<b>caps:swapescape</b>	Swap ESC and Caps Lock
<b>caps:escape</b>	Make Caps Lock an additional Esc
<b>caps:backspace</b>	Make Caps Lock an additional Backspace
<b>caps:super</b>	Make Caps Lock an additional Super
<b>caps:hyper</b>	Make Caps Lock an additional Hyper
<b>caps:menu</b>	Make Caps Lock an additional Menu key
<b>caps:numlock</b>	Make Caps Lock an additional Num Lock
<b>caps:ctrl_modifier</b>	Caps Lock is also a Ctrl
<b>caps:none</b>	Caps Lock is disabled

### Alt/Win key behavior

Option	Description
<b>altwin:menu</b>	Add the standard behavior to Menu key
<b>altwin:meta_alt</b>	Alt and Meta are on Alt
<b>altwin:alt_win</b>	Alt is mapped to Win and the usual Alt
<b>altwin:ctrl_win</b>	Ctrl is mapped to Win and the usual Ctrl keys
<b>altwin:ctrl_alt_win</b>	Ctrl is mapped to Alt; Alt is mapped to Win
<b>altwin:meta_win</b>	Meta is mapped to Win
<b>altwin:left_meta_win</b>	Meta is mapped to Left Win
<b>altwin:hyper_win</b>	Hyper is mapped to Win
<b>altwin:alt_super_win</b>	Alt is mapped to Right Win, Super to Menu
<b>altwin:swap_lalt_lwin</b>	Left Alt is swapped with Left Win
<b>altwin:swap_alt_win</b>	Alt is swapped with Win
<b>altwin:prtsc_rwin</b>	Win is mapped to PrtSc and the usual Win

### Position of Compose key

Option	Description
<b>compose:ralt</b>	Right Alt
<b>compose:lwin</b>	Left Win
<b>compose:lwin-altgr</b>	3rd level of Left Win
<b>compose:rwin</b>	Right Win
<b>compose:rwin-altgr</b>	3rd level of Right Win
<b>compose:menu</b>	Menu
<b>compose:menu-altgr</b>	3rd level of Menu
<b>compose:lctrl</b>	Left Ctrl
<b>compose:lctrl-altgr</b>	3rd level of Left Ctrl
<b>compose:rctrl</b>	Right Ctrl
<b>compose:rctrl-altgr</b>	3rd level of Right Ctrl
<b>compose:caps</b>	Caps Lock
<b>compose:caps-altgr</b>	3rd level of Caps Lock
<b>compose:102</b>	<Less/Greater>
<b>compose:102-altgr</b>	3rd level of <Less/Greater>
<b>compose:paus</b>	Pause
<b>compose:prsc</b>	PrtSc
<b>compose:sclk</b>	Scroll Lock

### Miscellaneous compatibility options

Option	Description
<b>numpad:pc</b>	Default numeric keypad keys
<b>numpad:mac</b>	Numeric keypad always enters digits (as in macOS)
<b>numpad:microsoft</b>	Num Lock on: digits; Shift for arrow keys. Num Lock off: arrow keys (as in Windows)
<b>numpad:shift3</b>	Shift does not cancel Num Lock, chooses 3rd level instead
<b>srvrkeys:none</b>	Special keys (Ctrl+Alt+<key>) handled in a server
<b>apple:alupckey</b>	Apple Aluminium: emulate PC keys (PrtSc, Scroll Lock, Pause, Num Lock)
<b>shift:breaks_caps</b>	Shift cancels Caps Lock
<b>misc:typo</b>	Enable extra typographic characters
<b>shift:both_capslock</b>	Both Shift together enable Caps Lock
<b>shift:both_capslock_cancel</b>	Both Shift together enable Caps Lock; one Shift key disables it
<b>shift:both_shiftlock</b>	Both Shift together enable Shift Lock
<b>keypad:pointerkeys</b>	Shift + Num Lock enables PointerKeys
<b>grab:break_actions</b>	Allow breaking grabs with keyboard actions (warning: security risk)
<b>grab:debug</b>	Allow grab and window tree logging

### Adding currency signs to certain keys

Option	Description
<b>eurosign:e</b>	Euro on E
<b>eurosign:2</b>	Euro on 2
<b>eurosign:4</b>	Euro on 4
<b>eurosign:5</b>	Euro on 5
<b>rupeesign:4</b>	Rupee on 4

### Key to choose 5th level

Option	Description
<b>lv5:lsgt_switch_lock</b>	<Less/Greater> chooses 5th level; acts as onetime lock when pressed together with another 5th level
<b>lv5:ralt_switch_lock</b>	Right Alt chooses 5th level; acts as onetime lock when pressed together with another 5th level
<b>lv5:lwin_switch_lock</b>	Left Win chooses 5th level; acts as onetime lock when pressed together with another 5th level
<b>lv5:rwin_switch_lock</b>	Right Win chooses 5th level; acts as onetime lock when pressed together with another 5th level

### Using space key to input non-breaking space

Option	Description
<b>nbspc:none</b>	Usual space at any level
<b>nbspc:level2</b>	Non-breaking space at the 2nd level
<b>nbspc:level3</b>	Non-breaking space at the 3rd level
<b>nbspc:level3s</b>	Non-breaking space at the 3rd level, nothing at the 4th level
<b>nbspc:level3n</b>	Non-breaking space at the 3rd level, thin non-breaking space at the 4th level
<b>nbspc:level4</b>	Non-breaking space at the 4th level
<b>nbspc:level4n</b>	Non-breaking space at the 4th level, thin non-breaking space at the 6th level
<b>nbspc:level4nl</b>	Non-breaking space at the 4th level, thin non-breaking space at the 6th level (via Ctrl+Shift)
<b>nbspc:zwnj2</b>	Zero-width non-joiner at the 2nd level
<b>nbspc:zwnj2zwnj3</b>	Zero-width non-joiner at the 2nd level, zero-width joiner at the 3rd level
<b>nbspc:zwnj2zwnj3njb4</b>	Zero-width non-joiner at the 2nd level, zero-width joiner at the 3rd level, non-breaking space at the 4th level
<b>nbspc:zwnj2njb3</b>	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level
<b>nbspc:zwnj2njb3s</b>	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, nothing at the 4th level
<b>nbspc:zwnj2njb3zwnj4</b>	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, zero-width joiner at the 4th level
<b>nbspc:zwnj2njb3njb4</b>	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, thin non-breaking space at the 4th level
<b>nbspc:zwnj3zwnj4</b>	Zero-width non-joiner at the 3rd level, zero-width joiner at the 4th level

### Japanese keyboard options

Option	Description
<b>japan:kana_lock</b>	Kana Lock key is locking
<b>japan:nicola_f_bs</b>	NICOLA-F style Backspace
<b>japan:hztg_escape</b>	Make Zenkaku Hankaku an additional Esc

### Korean Hangul/Hanja keys

Option	Description
<b>korean:ralt_rctrl</b>	Right Alt as Hangul, right Ctrl as Hanja
<b>korean:rctrl_ralt</b>	Right Ctrl as Hangul, right Alt as Hanja

### Adding Esperanto supersigned letters

Option	Description
<b>esperanto:qwerty</b>	To the corresponding key in a QWERTY layout
<b>esperanto:dvorak</b>	To the corresponding key in a Dvorak layout
<b>esperanto:colemak</b>	To the corresponding key in a Colemak layout

### Maintain key compatibility with old Solaris keycodes



Option	Description
<b>solaris:sun_compat</b>	Sun Key compatibility

**Key sequence to kill the X server**

Option	Description
<b>terminate:ctrl_alt_bksp</b>	Ctrl+Alt+Backspace

**FILES**

/usr/share/X11/xkb/compat  
/usr/share/X11/xkb/compiled  
/usr/share/X11/xkb/geometry  
/usr/share/X11/xkb/keycodes  
/usr/share/X11/xkb/keymap  
/usr/share/X11/xkb/rules  
/usr/share/X11/xkb/semantics  
/usr/share/X11/xkb/symbols  
/usr/share/X11/xkb/types

**SEE ALSO**

setxkbmap(1)