

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

Key to choose the 3rd level

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

Ctrl position

Option	Description
ctrl:nocaps	Caps Lock as Ctrl
ctrl:lctrl_meta	Left Ctrl as Meta
ctrl:swapcaps	Swap Ctrl and Caps Lock
ctrl:swapcaps_hyper	Caps Lock as Control, Control as Hyper
ctrl:ac_ctrl	At left of 'A'
ctrl:aa_ctrl	At bottom left
ctrl:rctrl_ralt	Right Ctrl as Right Alt
ctrl:menu_rctrl	Menu as Right Ctrl
ctrl:swap_lalt_lctl	Swap Left Alt with Left Ctrl
ctrl:swap_lwin_lctl	Swap Left Win with Left Ctrl
ctrl:swap_rwin_rctl	Swap Right Win with Right Ctrl
ctrl:swap_lalt_lctl_lwin	Left Alt as Ctrl, Left Ctrl as Win, Left Win as Left Alt

Use keyboard LED to show alternative layout

Option	Description
grp_led:num	Num Lock
grp_led:caps	Caps Lock
grp_led:scroll	Scroll Lock

Use keyboard LED to indicate modifiers

Option	Description
mod_led:compose	Compose

Layout of numeric keypad

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

Numeric keypad Delete behavior

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

Caps Lock behavior

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

Alt/Win key behavior

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

Position of Compose key

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

Miscellaneous compatibility options

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

Adding currency signs to certain keys

Option	Description
eurosign:e	Euro on E
eurosign:2	Euro on 2
eurosign:4	Euro on 4
eurosign:5	Euro on 5
rupeesign:4	Rupee on 4

Key to choose 5th level

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

Using space key to input non-breaking space

Option	Description
nbsp:none	Usual space at any level
nbsp:level2	Non-breaking space at the 2nd level
nbsp:level3	Non-breaking space at the 3rd level
nbsp:level3s	Non-breaking space at the 3rd level, nothing at the 4th level
nbsp:level3n	Non-breaking space at the 3rd level, thin non-breaking space at the 4th level
nbsp:level4	Non-breaking space at the 4th level
nbsp:level4n	Non-breaking space at the 4th level, thin non-breaking space at the 6th level
nbsp:level4nl	Non-breaking space at the 4th level, thin non-breaking space at the 6th level (via Ctrl+Shift)
nbsp:zwnj2	Zero-width non-joiner at the 2nd level
nbsp:zwnj2zwnj3	Zero-width non-joiner at the 2nd level, zero-width joiner at the 3rd level
nbsp:zwnj2zwnj3nb4	Zero-width non-joiner at the 2nd level, zero-width joiner at the 3rd level, non-breaking space at the
nbsp:zwnj2nb3	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level
nbsp:zwnj2nb3s	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, nothing at the 4th level
nbsp:zwnj2nb3zwnj4	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, zero-width joiner at the
nbsp:zwnj2nb3nnb4	Zero-width non-joiner at the 2nd level, non-breaking space at the 3rd level, thin non-breaking space
nbsp:zwnj3zwnj4	Zero-width non-joiner at the 3rd level, zero-width joiner at the 4th level

Japanese keyboard options

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

Korean Hangul/Hanja keys

Option	Description
korean:ralt_hangul	Make right Alt a Hangul key
korean:rctrl_hangul	Make right Ctrl a Hangul key
korean:ralt_hanja	Make right Alt a Hanja key
korean:rctrl_hanja	Make right Ctrl a Hanja key

Adding Esperanto supersigned letters

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

Maintain key compatibility with old Solaris keycodes

Option	Description
solaris:sun_compat	Sun Key compatibility

Key sequence to kill the X server

Option	Description
terminate:ctrl_alt_bksp	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)