

# Keyboard Navigation

## 1. Introduction

This document lists all JavaFX UI Controls including their shortcuts and keyboard navigation.

## 2. Global Navigation

The following shortcuts may apply to all or some controls.

CTRL-C	Copy to the clipboard. Use CMD-C on Mac.
CTRL-V	Paste from the clipboard. Use CMD-V on Mac.
CTRL-X	Copy to the clipboard and cut. Use CMD-X on Mac.
CTRL-Z	If available, undo changes. Use CMD-Z on Mac.
SHIFT-F10	Display an associated pop-up menu.

## 3. Mnemonics

Mnemonics are alphanumeric keys used with the ALT key to activate a control. Mnemonics appear as underlined letters on a menu or UI control.

Apart from using ALT key, users can also use F10 key that shows mnemonics and moves selection to the menu bar. For showing mnemonics in pop-up menus, users can use SHIFT+F10 key combination.

### Windows

On Windows, if "Underline keyboard shortcuts and access keys" is set to ON, mnemonics should always be visible in JavaFX apps.

The following table describes how the following keystrokes should be processed in a dialog:

ALT (press)	Set mnemonics to ON in the dialog.
ALT + MNEMONIC	Activate the control.

The following table describes how the following keystrokes should be processed in an application with a menu bar:

ALT (press)	Set mnemonics to ON everywhere.
ALT (release)	Set mnemonics to ON everywhere. Select the first menu in the menu bar. Releasing ALT key for the second time removes the selection from the menu bar and sets mnemonics to OFF everywhere.
F10 (press)	Set mnemonics to ON everywhere.
F10 (release)	Set mnemonics to ON everywhere. Select the first menu in the menu bar. Releasing F10 key for the second time removes the selection from the menu bar and sets mnemonics to OFF everywhere.
SHIFT + F10 (release)	Open context menu and set mnemonics to ON everywhere. Releasing SHIFT+F10 keys for the second time selects the first menu item in the menu bar; mnemonics stay visible everywhere. Releasing SHIFT+F10 keys for the third time removes the selection from the menu bar and sets mnemonics to OFF everywhere.

MNEMONIC	<p>If the first menu in the menu bar is selected and a mnemonic is assigned to a menu, open the corresponding menu. Otherwise remove the selection from the menu bar and set mnemonics to OFF everywhere.</p> <p>If a menu or pop-up menu is open, activate the corresponding control. Otherwise do nothing.</p>
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If an application that contains a menu bar also contains a toolbar with actions that have mnemonics assigned, users must hold ALT and press a corresponding mnemonic to activate the control in the toolbar.

Also note that the mnemonics are canceled when JavaFX app loses focus.

## Linux

The following table describes how the following keystrokes should be processed:

ALT (press)	Set mnemonics to ON everywhere.
ALT (release)	Set mnemonics to OFF everywhere.
ALT + MNEMONIC	Activate the control.
F10 (release)	Open the first menu in the menu bar and set its mnemonics to ON.
SHIFT+F10 (release)	Open an associated pop-up menu and set its mnemonics to ON.
MNEMONIC	If a menu or pop-up menu is open, activate the corresponding control.

## Mac

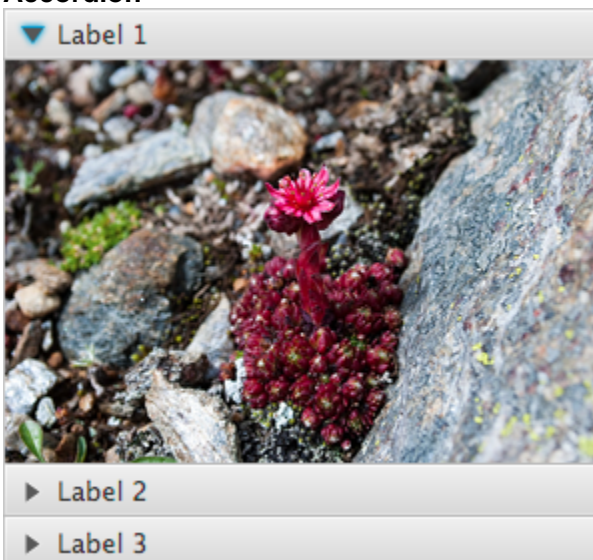
Please note that there is no mnemonic support on Mac.

The following table describes how the following keystrokes should be processed:

CTRL + F10 (release)	<p>Always select the first menu in the menu bar.</p> <p>Please note that another release of CTRL+F10 keys removes the selection from the menu bar.</p>
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## 4. Keyboard Navigation

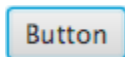
### Accordion



The following table describes how keystrokes should be processed when an Accordion is focused:

DOWN /RIGHT Arrow	If focus is on a header, move focus to the next header. Wrap from last to first. Do not collapse the expanded panel.
UP/LEFT Arrow	If focus is on a header, move focus to the previous header. Wrap from first to last. Do not collapse the expanded panel.
PAGE UP	If focus is on a header, move focus to the previous header and expand its corresponding panel. Wrap from first to last.
PAGE DOWN	If focus is on a header, move focus to the next header and expand its corresponding panel. Wrap from last to first.
HOME	If focus is on a header, move focus to the very first header and expand its corresponding panel.
END	If focus is on a header, move focus to the very last header and expand its corresponding panel.
ENTER /SPACEBAR	When focus is on a header, expand/collapse its corresponding panel.
TAB	When focus is on a header and its corresponding panel is expanded, move focus to the first focusable control in the panel. If focus is on the last focusable control in the panel, move focus to the next focusable control outside the Accordion.  When focus is on a header and its corresponding panel is collapsed, move focus to the next focusable control outside the Accordion. <a href="#">RT-31057</a>
SHIFT-TAB	When focus is on a focusable control in an expanded panel, move focus on previous focusable control in the panel. If focus is on the very first focusable control in the panel, move focus to the corresponding header.  When focus is on a header, move focus to the previous focusable control outside the Accordion. <a href="#">RT-31057</a>
CTRL-TAB/ CTRL-PAGE DOWN	Move focus to the next header and expand its corresponding panel. Wrap from last to first.  Use CMD-TAB or CTRL-PAGE DOWN on Mac.
CTRL-SHIFT-TAB/ CTRL-PAGE UP	Move focus to the previous header and expand its corresponding panel. Wrap from first to last.  Use CMD-SHIFT-TAB or CTRL-PAGE UP on Mac.

## Button



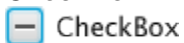
The following table describes how keystrokes should be processed when a Button is focused:

SPACEBAR	Activate button that has the keyboard focus.
ENTER	Activate the default button (does not require keyboard focus).
ESC	Activate Cancel button (does not require keyboard focus).
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.

## Charts

There is no keyboard navigation support for these controls.

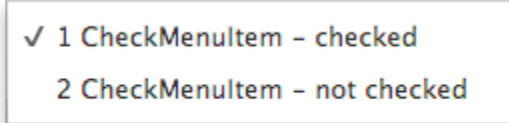
## CheckBox



The following table describes actions that are performed when a CheckBox is focused and users press the following keys:

SPACEBAR	Toggle state (checked, not checked, mixed).
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.

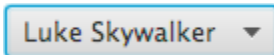
## Check Menu Item



The following table describes actions that are performed when a Menu with CheckMenuItems is opened and users press the following keys:

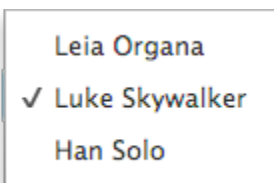
UP Arrow	In a first level menu with no selection yet, select the last menu item. Otherwise move selection one item up (and scroll one item if needed). If the first item is selected, select the last item.
DOWN Arrow	In a first level menu with no selection yet, select the first menu item. Otherwise move selection one item down (and scroll one item if needed). If the last item is selected, select the first item.
SPACEBAR /ENTER	Toggle state (checked, not checked, mixed) and close the menu.
ESC	Close the menu.

## ChoiceBox



The following table describes actions that are performed when a ChoiceBox is focused and users press the following keys:

SPACEBAR	Open the menu.
ESC	Close the menu.
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.



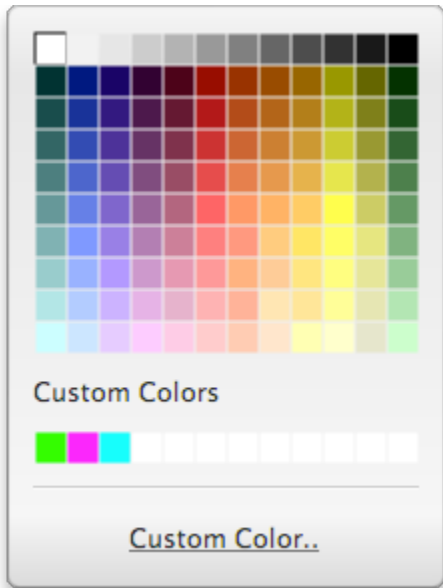
The following table describes actions that are performed when an item in the menu of a ChoiceBox is focused and users press the following keys:

UP/DOWN Arrow	Move focus up/down. Wrap from first/last to last/first.
SPACEBAR/ENTER	Select focused item.
ESC	Close the menu.

## ColorPicker

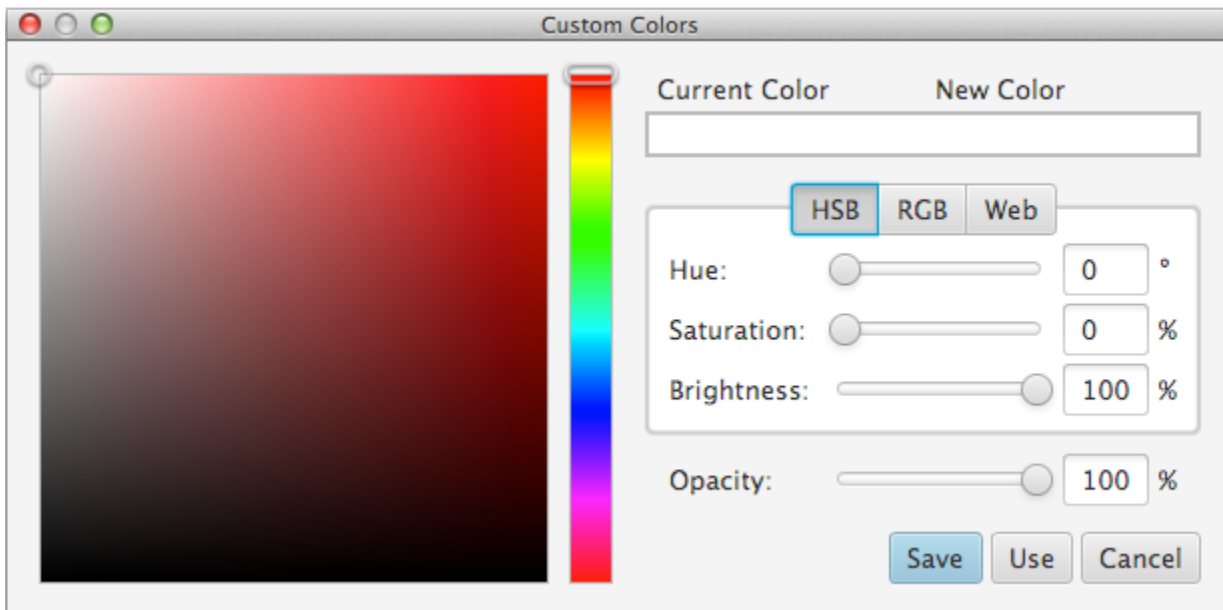


Depending on use cases, ColorPicker can be available as a button, split menu button, or combo box. For keyboard navigation, see Button, SplitMenuButton, and ComboBox.



The following table describes actions that are performed when the color palette is open and users press the following keys:

UP Arrow	Move focus one item up.
DOWN Arrow	Move focus one item down.
LEFT Arrow	Move focus one item left.
RIGHT Arrow	Move focus one item right.
DELETE	If a custom color is focused, remove the color from Custom Colors area.
SPACEBAR	If Custom Color... link is focused, activate the link and open Custom Color dialog.
ENTER	If a color is focused, apply the color. Update the color picker. Close the color palette.
ESC	Close the menu.
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.

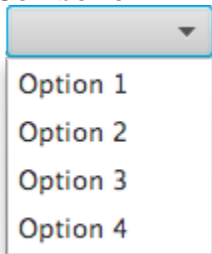


The following table describes actions that are performed when a control in the Custom Color dialog is focused and users press the following keys:

LEFT Arrow	If a slider is focused, decrease the value of the slider by one step. If a text field is focused, move the caret left by one position.
RIGHT Arrow	If a slider is focused, increase the value of the slider by one step. If a text field is focused, move the caret right by one position.
SPACEBAR	If a button is focused, perform the action associated with the button.
ENTER	Save the new color to the Custom Colors area in the color palette. Close the dialog. Close the color palette. Update the color picker. Apply the color.
ESC	Discard all changes and close the dialog.
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.

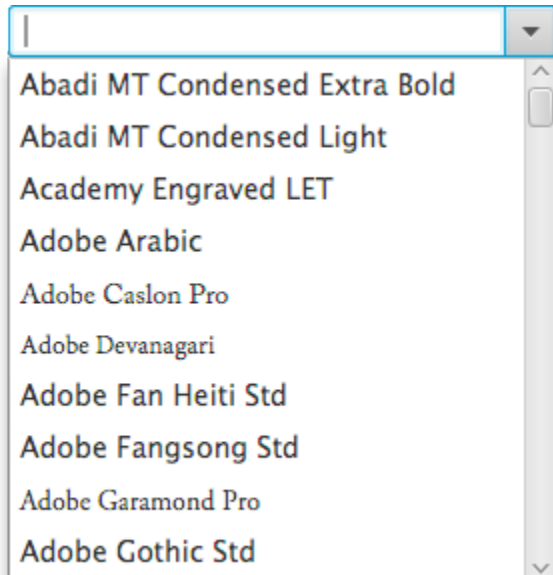
See TextField chapter for more keyboard navigation when a text field is focused.

## ComboBox



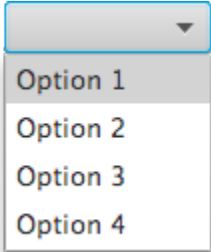
The following table describes actions that are performed when a non-editable ComboBox is focused and users press the following keys:

F4	Open/Close the active list. Item that is displayed in the field is selected when the active list is open.
ALT-UP/DOWN Arrow	Open/Close the active list. Item that is displayed in the field is selected when the active list is open.
UP/DOWN Arrow	When a ComboBox is focused, pressing up/down keys changes items in the field.
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.



The following table describes actions that are performed when an editable ComboBox is focused and users press the following keys:

F4	Open/Close the active list. Item that is displayed in the field is selected when the active list is open.
ALT-UP/DOWN Arrow	Open/Close the active list. Item that is displayed in the field is selected when the active list is open.
LEFT/RIGHT Arrow	Move the caret within the field left/right.
TAB	Move focus to the next focusable component.
SHIFT-TAB	Move focus to the previous focusable component.



The following table describes actions that are performed when an item in the list of a ComboBox is focused and users press the following keys:

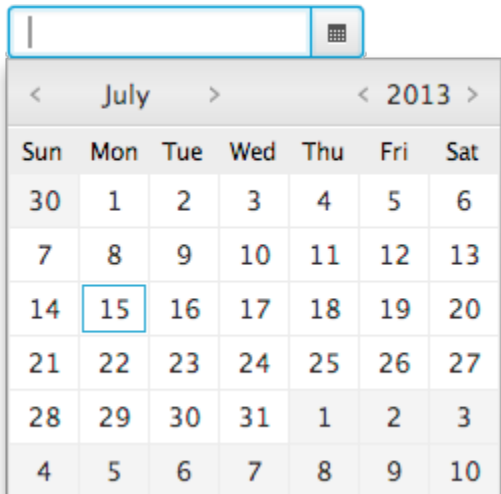
UP/DOWN Arrow	Move the selection one item up/down and update the value in the field.
SPACEBAR/ ENTER/ESC	Close the active list.

## DatePicker



The following table describes actions that are performed when a DatePicker is focused:

F4	If the calendar does not open automatically, pressing F4 key opens/closes the calendar. Date that is displayed in the field is highlighted when the calendar is open.
ALT-UP/DOWN Arrow	If the calendar does not open automatically, pressing F4 key opens/closes the calendar. Date that is displayed in the field is highlighted when the calendar is open.
LEFT/RIGHT Arrow	Move the caret within the field left/right.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.



The following table describes actions that are performed when a date in the calendar of a DatePicker is focused:

ESC	Close the calendar without updating the field.
ENTER	Update the field with focused date and close the calendar.
SPACE	Update the field with focused date and close the calendar.
UP Arrow	When focus is on a day in a week, move focus to the same day in previous week. When focus is on a day in the first week of a month, move focus to the same day in the last week of previous month. In addition, update name of the month and days in the calendar.
DOWN Arrow	When focus is on a day in a week, move focus to the same day in next week. When focus is on a day in the last week of a month, move focus to the same day in the first week of next month. In addition, update name of the month and days in the calendar.
LEFT Arrow	When focus is on a day, move focus left by one item. When focus is on the first day of a week, move focus to the last day of previous week. When focus is on the first day of a month, move focus to the last day of previous month. In addition, update name of the month and days in the calendar.
RIGHT Arrow	When focus is on a day, move focus right by one item. When focus is on the last day of a week, move focus to the first day of next week. When focus is on the last day of a month, move focus to the first day of next month. In addition, update name of the month and days in the calendar.
PAGE UP	Move focus to the same day in the previous month.
PAGE DOWN	Move focus to the same day in the next month.
CTRL- PAGE UP	Move focus to the same day in the previous year. Use CMD-PAGE UP on Mac.
CTRL- PAGE DOWN	Move focus to the same day in the next year. Use CMD-PAGE DOWN on Mac.
HOME	Go to today.
TAB	Move focus to next focusable control.
SHIFT- TAB	Move focus to previous focusable control.

## HTMLTextEditor



The following table describes actions that are performed when a RichTextEditor is focused and users press the following keys:

CTRL-B	Bold text.
CTRL-I	Italic text.
CTRL-U	Underlined text.
CTRL-SHIFT-M	Outdent.
CTRL-M	Indent.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

See TextArea chapter for more keyboard navigation.

## Hyperlink



I am a hyperlink!

The following table describes actions that are performed when a Hyperlink is focused and users press the following keys:

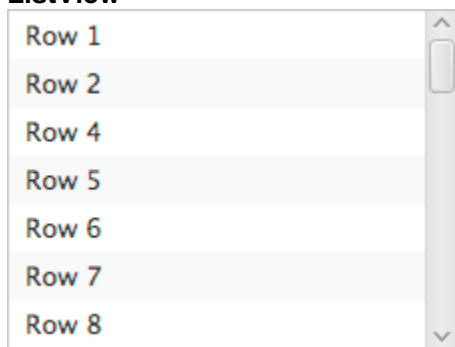
SPACEBAR	Activate the hyperlink.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## Label

There is no keyboard navigation support for this control.

However, it is possible to link a label to a control it is labeling, e.g. a TextField, with a mnemonic on the label that brings focus to the linked control. For more info, see [labelFor](#) property.

## ListView

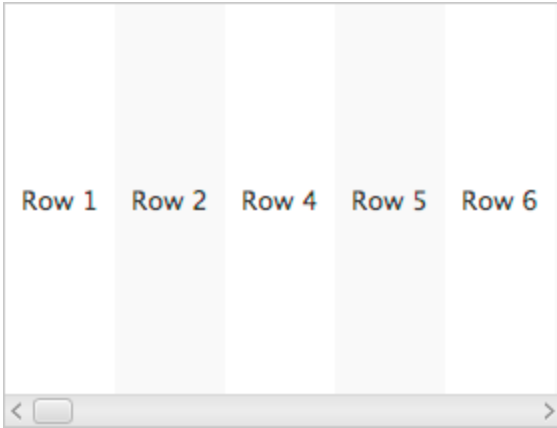


The following table describes actions that are performed when a ListView in vertical orientation is focused and users press the following keys:

UP Arrow	Move focus & selection up one item. Create anchor. All previous selections are canceled.
DOWN Arrow	Move focus & selection down one item. Create anchor. All previous selections are canceled.
CTRL-UP Arrow	Move focus up without changing selection. Use CMD-UP Arrow on Mac.
CTRL-DOWN Arrow	Move focus down without changing selection. Use CMD-DOWN Arrow on Mac.
SHIFT-UP Arrow	Expand or contract selection up by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Up Arrow key should be processed. See description of Up Arrow behavior for more details.
SHIFT-DOWN Arrow	Expand or contract selection down by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Down Arrow key should be processed. See description of Down Arrow behavior for more details.
SPACEBAR	Select focused item if it is not selected. Create anchor.
CTRL-SPACEBAR	Select focused item if it is not selected. Deselect focused item if it is selected. Create anchor. Use CMD-CTRL-SPACEBAR on Mac.

SHIFT-SPACEBAR	<p>Select all items between anchor and focused item. Focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Spacebar key should be processed. See description of Spacebar behavior for more details.</p>
F2	Edit selected item.
HOME	Move focus & selection to the first item. Create anchor.
END	Move focus & selection to the last item. Create anchor.
SHIFT-HOME	<p>Select all items between anchor and the first item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Home key should be processed. See description of Home behavior for more details.</p>
SHIFT-END	<p>Select all items between anchor and the last item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only End key should be processed. See description of End behavior for more details.</p>
CTRL-HOME	<p>Move focus to the first item.</p> <p>Use CMD-Home on Mac.</p>
CTRL-END	<p>Moves focus to the last item.</p> <p>Use CMD-END on Mac.</p>
PAGE UP	<p>Move the selection up on the first fully visible item on the current page. If the first fully visible item is selected, move the selection on the first fully visible item on the previous page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
PAGE DOWN	<p>Move the selection down on the last fully visible item on the current page. If the last fully visible item is selected, move the selection on the last fully visible item on the next page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
SHIFT-PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Up key should be processed. See description of Page Up behavior for more details.</p>
SHIFT-PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Down key should be processed. See description of Page Down behavior for more details.</p>
CTRL-PAGE UP	<p>Move focus up on the first fully visible item on the current page. If the first fully visible item is focused, move focus on the first fully visible item on the previous page.</p> <p>Use CMD-PAGE UP on Mac.</p>
CTRL-PAGE DOWN	<p>Move focus down on the last fully visible item on the current page. If the last fully visible item is focused, move focus on the last fully visible item on the next page.</p> <p>Use CMD-PAGE DOWN on Mac.</p>
CTRL-A	<p>Select entire list. Focus remains on the same item. In multi-selection mode only.</p> <p>Use CMD-A on Mac.</p>
ESC	Cancel editing.
ENTER	Confirm editing (depends on the cell editor).

<p>CTRL-SHIFT-UP Arrow</p>	<p>Expand selection up by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-UP Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl+Up Arrow (Cmd+Up Arrow) should be processed. See description of Ctrl+Up Arrow behavior for more details.</p>
<p>CTRL-SHIFT-DOWN Arrow</p>	<p>Expand selection down by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-DOWN Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl+Down Arrow (Cmd+Down Arrow) should be processed. See description of Ctrl+Down Arrow behavior for more details.</p>
<p>CTRL-SHIFT-SPACEBAR</p>	<p>Select all items between anchor and focused item. Focused item is also included in the selection. Create anchor. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-SPACEBAR on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl+Spacebar (Cmd+Spacebar) should be processed. See description of Ctrl+Spacebar behavior for more details.</p>
<p>CTRL-SHIFT-HOME</p>	<p>Select all items between anchor and the first item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-HOME on Mac.</p>
<p>CTRL-SHIFT-END</p>	<p>Select all items between anchor and the last item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-END on Mac.</p>
<p>CTRL-SHIFT-PAGE UP</p>	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE UP on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl+Page Up (Cmd+Page Up) should be processed. See description of Ctrl+Page Up behavior for more details.</p>
<p>CTRL-SHIFT-PAGE DOWN</p>	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE DOWN on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl+Page Down (Cmd+Page Down) should be processed. See description of Ctrl+Page Down behavior for more details.</p>
<p>TAB</p>	<p>Move focus to next focusable control.</p>
<p>SHIFT-TAB</p>	<p>Move focus to previous focusable control.</p>



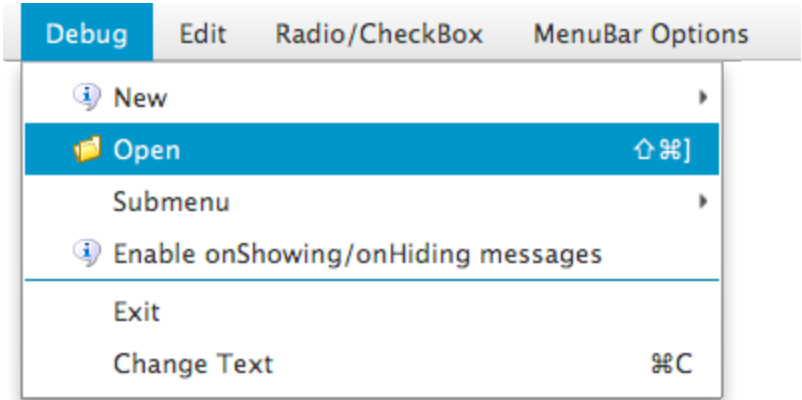
The following table describes actions that are performed when a ListView in horizontal orientation is focused and users press the following keys:

LEFT Arrow	Move focus & selection left one item. Create anchor. All previous selections are canceled.
RIGHT Arrow	Move focus & selection right one item. Create anchor. All previous selections are canceled.
CTRL- LEFT Arrow	Move focus left without changing selection. Use CMD-LEFT Arrow on Mac.
CTRL- RIGHT Arrow	Move focus right without changing selection. Use CMD-RIGHT Arrow on Mac.
SHIFT- LEFT Arrow	Expand or contract selection left by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Left selects all items between anchor and the item which is on left of the focused item. The item which is on the left of the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Left Arrow key should be processed. See description of Left Arrow behavior for more details.
SHIFT- RIGHT Arrow	Expand or contract selection right by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Right selects all items between anchor and the item which is on right of the focused item. The item which is on the right of the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Right Arrow key should be processed. See description of Right Arrow behavior for more details.
SPACEBAR	Select focused item if it is not selected. Create anchor.
CTRL- SPACEBAR	Select focused item if it is not selected. Deselect focused item if it is selected. Create anchor. Use CMD-CTRL-SPACEBAR on Mac.
SHIFT- SPACEBAR	Select all items between anchor and focused item. Focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Spacebar key should be processed. See description of Spacebar behavior for more details.
F2	Edit selected item.
HOME	Move focus & selection to the first item. Create anchor.
END	Move focus & selection to the last item. Create anchor.
SHIFT- HOME	Select all items between anchor and the first item. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Home key should be processed. See description of Home behavior for more details.

SHIFT-END	<p>Select all items between anchor and the last item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only End key should be processed. See description of End behavior for more details.</p>
CTRL-HOME	<p>Move focus to the first item.</p> <p>Use CMD-Home on Mac.</p>
CTRL-END	<p>Moves focus to the last item.</p> <p>Use CMD-END on Mac.</p>
PAGE UP	<p>Move the selection up on the first fully visible item on the current page. If the first fully visible item is selected, move the selection on the first fully visible item on the previous page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
PAGE DOWN	<p>Move the selection down on the last fully visible item on the current page. If the last fully visible item is selected, move the selection on the last fully visible item on the next page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
SHIFT-PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Up key should be processed. See description of Page Up behavior for more details.</p>
SHIFT-PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Down key should be processed. See description of Page Down behavior for more details.</p>
CTRL-PAGE UP	<p>Move focus up on the first fully visible item on the current page. If the first fully visible item is focused, move focus on the first fully visible item on the previous page.</p> <p>Use CMD-PAGE UP on Mac.</p>
CTRL-PAGE DOWN	<p>Move focus down on the last fully visible item on the current page. If the last fully visible item is focused, move focus on the last fully visible item on the next page.</p> <p>Use CMD-PAGE DOWN on Mac.</p>
CTRL-A	<p>Select entire list. Focus remains on the same item. In multi-selection mode only.</p> <p>Use CMD-A on Mac.</p>
ESC	<p>Cancel editing.</p>
ENTER	<p>Confirm editing (depends on the cell editor).</p>
CTRL-SHIFT-LEFT Arrow	<p>Expand selection left by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Left selects all items between anchor and the item which is on left side of the focused item. The item which is on left side of the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-LEFT Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Left Arrow (Cmd-Left Arrow) should be processed. See description of Ctrl-Left Arrow behavior for more details.</p>
CTRL-SHIFT-RIGHT Arrow	<p>Expand selection right by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Right selects all items between anchor and the item which is on right side of the focused item. The item which is on right side of the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-RIGHT Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Right Arrow (Cmd-Right Arrow) should be processed. See description of Ctrl-Right Arrow behavior for more details.</p>

CTRL-SHIFT-SPACEBAR	<p>Select all items between anchor and focused item. Focused item is also included in the selection. Create anchor. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-SPACEBAR on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Spacebar (Cmd-Spacebar) should be processed. See description of Ctrl-Spacebar behavior for more details.</p>
CTRL-SHIFT-HOME	<p>Select all items between anchor and the first item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-HOME on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Home (Cmd-Home) should be processed. See description of Ctrl-Home behavior for more details.</p>
CTRL-SHIFT-END	<p>Select all items between anchor and the last item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-END on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-End (Cmd-End) should be processed. See description of Ctrl-End behavior for more details.</p>
CTRL-SHIFT-PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE UP on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Up (Cmd-Page Up) should be processed. See description of Ctrl-Page Up behavior for more details.</p>
CTRL-SHIFT-PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE DOWN on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Down (Cmd-Page Down) should be processed. See description of Ctrl-Page Down behavior for more details.</p>
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

### Menu



The following table describes actions that are performed when an item in a Menu is selected and users press the following keys:

UP Arrow	In a first level menu with no selection yet, select the last menu item. Otherwise move selection one item up (and scroll one item if needed). If the first item is selected, select the last item.
DOWN Arrow	In a first level menu with no selection yet, select the first menu item. Otherwise move selection one item down (and scroll one item if needed). If the last item is selected, select the first item.

LEFT Arrow	If selection is in a submenu, clear selection in the submenu and move selection to the parent menu. If there is no submenu, pressing the left arrow key opens the menu of previous menu bar item.
RIGHT Arrow	If a submenu item is selected, select the first item in the submenu. If there is no submenu, pressing the right arrow key opens the menu of next menu bar item.
SPACEBAR /ENTER	Commit the value if the item is enabled. If the selected item is a submenu item, open the submenu and select the first item in the submenu.
ESC	Close the menu. If it is a submenu, close the submenu and move selection to parent menu.

## MenuBar



The following table describes actions that are performed when a MenuBar item is selected and the Menu is not open and users press the following keys:

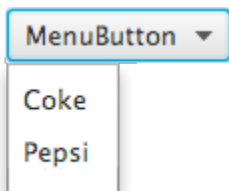
LEFT Arrow	Move selection one item left. When the very first menu bar item is selected, move the selection on the very last menu bar item.
RIGHT Arrow	Move selection one item right. When the very last menu bar item is selected, move the selection on the very first menu bar item.
DOWN Arrow	Open a menu associated with selected menu bar item.

## MenuButton



The following table describes actions that are performed when a MenuButton is focused and users press the following keys:

SPACEBAR/ENTER	Open the menu.
UP Arrow	If Up Arrow icon is available on the menu button and the menu is not open, open the menu.
DOWN Arrow	If Down Arrow icon is available on the menu button and the menu is not open, open the menu.
LEFT Arrow	If Left Arrow icon is available on the menu button and the menu is not open, open the menu.
RIGHT Arrow	If Right Arrow icon is available on the menu button and the menu is not open, open the menu.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.



The following table describes actions that are performed when a menu of a MenuButton is opened and users press the following keys:

UP Arrow	With no selection yet, select the last menu item. Otherwise move selection one item up (and scroll the menu if needed). If the first item is selected, select the last item.
DOWN Arrow	With no selection yet, select the first menu item. Otherwise move selection one item down (and scroll the menu if needed). If the last item is selected, select the first item.
SPACEBAR /ENTER	Commit the value if the item is enabled. Close the menu.
ESC	Close the menu.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## Menu Item

see Menu

## Pagination



The following table describes actions that are performed when a page button in a Pagination is focused and users press the following keys:

LEFT Arrow	Select the previous page button and display its corresponding page. Do nothing if the very first page button is selected.  When the first page button in a set is selected, pressing left arrow key brings up the previous set. The last page button in the set is selected and its corresponding page is displayed.
RIGHT Arrow	Select the next page button and display its corresponding page. Do nothing if the very last page button is selected.  When the last page button in a set is selected, pressing right arrow key brings up the next set. The first page button in the set is selected and its corresponding page is displayed.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## PasswordField



The following table describes actions that are performed when a PasswordField is focused and users press the following keys:

UP Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret to the beginning of the line.
DOWN Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret to the beginning of the line.
LEFT Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret by one character left. Do nothing if the caret is positioned to the left of the first entered character.
RIGHT Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret by one character right. Do nothing if the caret is positioned to the right of the last entered character.
SHIFT-UP Arrow	Extend/Contract selection to the beginning of the line.
SHIFT-DOWN Arrow	Extend/Contract selection to the end of the line.
SHIFT-LEFT Arrow	Extend/Contract selection one character left.
SHIFT-RIGHT Arrow	Extend/Contract selection one character right.
HOME	Move the caret to the beginning of the line.  Use HOME/CMD-LEFT Arrow on Mac.
END	Move the caret to the end of the line.  Use HOME/CMD-RIGHT Arrow on Mac.
SHIFT-HOME	Extend selection to the beginning of the line.
SHIFT-END	Extend selection to the end of the line.
CTRL-V	Paste the current clipboard contents into the PasswordField, if the content's format is applicable (e.g. text).  Use CMD-V on Mac.



CTRL-A	Select all text. Use CMD-A on Mac.
BACKSPACE	Delete the character to the left of the caret or delete the current selection.
DELETE	Delete the character to the right of the caret or delete the current selection.
SPACEBAR	Enter a space character as part of the password. If there is a selection, remove the selection and replace it with a space character.
ANY CHARACTER	Enter a character as part of the password. If there is a selection, remove the selection and replace it with a character.
ENTER	Entered password is returned to the calling application.
ESC	Do nothing.
CAPS LOCK	Display a visual indicator. Enter capital letters only.
NUM LOCK	Display a visual indicator. Enter numbers only.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## Pop-up Menu

Undo	⌘Z
Redo	⌘Y
Disabled	
Copy	shortcut=C
Paste	⌘V
Delete	⌘D
Help	F1

The following table describes actions that are performed when a Pop-up Menu is opened and users press the following keys:

UP Arrow	In a first level menu with no selection yet, select the last menu item. Otherwise move selection one item up (and scroll one item if needed). If the first item is selected, select the last item.
DOWN Arrow	In a first level menu with no selection yet, select the first menu item. Otherwise move selection one item down (and scroll one item if needed). If the last item is selected, select the first item.
LEFT Arrow	If selection is in a submenu, clear selection in the submenu and move selection to the parent menu. Do nothing if there is no submenu.
RIGHT Arrow	If a submenu item is selected, select the first item in the submenu. Do nothing if there is no submenu.
SPACEBAR /ENTER	Commit the value if the item is enabled. If the selected item is a submenu item, open the submenu and select the first item in the submenu.
ESC	Close the menu. If it is a submenu, close the submenu and move selection to parent menu.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

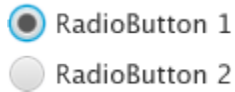
## ProgressBar

There is no keyboard navigation support for this control.

## ProgressIndicator

There is no keyboard navigation support for this control.

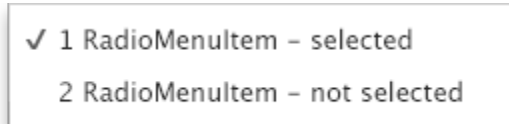
## RadioButton



The following table describes actions that are performed when a RadioButton group is focused and users press the following keys:

UP/LEFT Arrow	Move focus to the previous radio button in the group and select that button. If focus is on the first radio button, move focus to the last radio button in the group and select that button.
DOWN /RIGHT Arrow	Move focus to the next radio button in the group and select that button. If focus is on the last radio button, move focus to the first radio button in the group and select that button.
SPACEBAR	Select the focused radio button.
TAB	When users tab into the group, focus goes to the selected button. If no radio button is selected, focus goes to the first radio button in the group. Pressing Tab again moves focus out of the group to the next focusable control.  Move focus to next focusable control.
SHIFT-TAB	When users shift-tab into the group, focus goes to the selected button. If no radio button is selected, focus goes to the last radio button in the group. Pressing Shift-Tab again moves focus out of the group to the previous focusable control.  Move focus to previous focusable control.

## Radio Menu Item



The following table describes actions that are performed when a Menu with RadioMenuItems is opened and users press the following keys:

UP Arrow	In a first level menu with no selection yet, select the last menu item. Otherwise move selection one item up (and scroll one item if needed). If the first item is selected, select the last item.
DOWN Arrow	In a first level menu with no selection yet, select the first menu item. Otherwise move selection one item down (and scroll one item if needed). If the last item is selected, select the first item.
SPACEBAR /ENTER	Select/Deselect the radio menu item if it is enabled. Commit the value. Close the menu.
ESC	Close the menu. If it is a submenu, close the submenu and move selection to parent menu.

## ScrollBar

There is no keyboard navigation support for this control.

## ScrollPane



The following table describes actions that are performed when a ScrollView is focused and users press the following keys:

UP Arrow	Scroll the content one row up.
DOWN Arrow	Scroll the content one row down.
LEFT Arrow	Scroll the content one column left.
RIGHT Arrow	Scroll the content one column right.
PAGE UP	Scroll the content one page up.
PAGE DOWN	Scroll the content one page down.
CTRL-PAGE UP	Scroll the content one page left. <a href="#">RT-32462</a>
CTRL-PAGE DOWN	Scroll the content one page right. <a href="#">RT-32462</a>
HOME	Scroll the content to the top.
END	Scroll the content to the bottom.
SPACEBAR	Scroll the content one row down.
TAB	Move focus to next focusable control. If a scrolled-out control inside the scroll view receives focus, scroll to make the newly focused control visible.
SHIFT-TAB	Move focus to previous focusable control. If a scrolled-out control inside the scroll view receives focus, scroll to make the newly focused control visible.

## Separator

There is no keyboard navigation support for this control.

## Slider



The following table describes actions that are performed when a Slider in horizontal orientation is focused and users press the following keys:

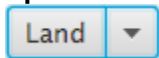
LEFT Arrow	Decrease the value of the slider by one step.
RIGHT Arrow	Increase the value of the slider by one step.
PAGE UP	Increase the value of the slider by a chunk. <a href="#">RT-32463</a>
PAGE DOWN	Decrease the value of the slider by a chunk. <a href="#">RT-32463</a>
HOME	Set the min value of the slider.
END	Set the max value of the slider.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.



The following table describes actions that are performed when a Slider in vertical orientation is focused and users press the following keys:

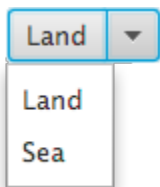
UP Arrow	Increase the value of the slider by one step.
DOWN Arrow	Decrease the value of the slider by one step.
PAGE UP	Increase the value of the slider by a chunk. <a href="#">RT-32463</a>
PAGE DOWN	Decrease the value of the slider by a chunk. <a href="#">RT-32463</a>
HOME	Set the min value of the slider.
END	Set the max value of the slider.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## SplitMenuButton



The following table describes actions that are performed when a SplitMenuButton is focused and users press the following keys:

SPACEBAR/ENTER	Performs action that is available on the main button.
UP Arrow	If Up Arrow icon is available on the menu button and the menu is not open, open the menu.
DOWN Arrow	If Down Arrow icon is available on the menu button and the menu is not open, open the menu.
LEFT Arrow	If Left Arrow icon is available on the menu button and the menu is not open, open the menu.
RIGHT Arrow	If Right Arrow icon is available on the menu button and the menu is not open, open the menu.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

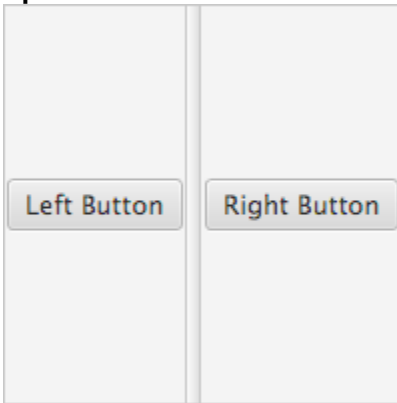


The following table describes actions that are performed when a menu of a SplitMenuButton is opened and users press the following keys:

UP Arrow	With no selection yet, select the last menu item. Otherwise move selection one item up (and scroll the menu if needed). If the first item is selected, select the last item.
DOWN Arrow	With no selection yet, select the first menu item. Otherwise move selection one item down (and scroll the menu if needed). If the last item is selected, select the first item.
SPACEBAR /ENTER	Commit the value if the item is enabled. Close the menu.
ESC	Close the menu.

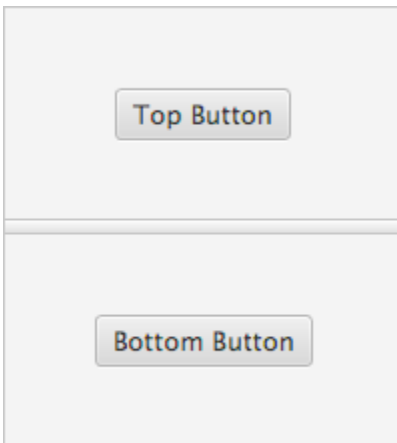
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## SplitPane



The following table describes actions that are performed when a vertical divider of a SplitPane is focused and users press the following keys:

LEFT/UP Arrow	Move the divider by one step left.
RIGHT/DOWN Arrow	Move the divider by one step right.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.



The following table describes actions that are performed when a horizontal divider of a SplitPane is focused and users press the following keys:

DOWN/RIGHT Arrow	Move the divider by one step down.
UP/LEFT Arrow	Move the divider by one step up.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## TableView

Inv...	Name		Email	Country
	First	Last		
<input checked="" type="checkbox"/>	Jacob	Smith Smith Smith	jacob.smith<at>example.com	New Zealand
<input type="checkbox"/>	Isabella	Johnson	isabella.johnson<at>example.com	New Zealand
<input checked="" type="checkbox"/>	Ethan	Williams	ethan.williams<at>example.com	New Zealand
<input type="checkbox"/>	Emma	Jones	emma.jones<at>example.com	New Zealand
<input checked="" type="checkbox"/>	Michael	Brown	michael.brown<at>example.com	New Zealand
<input type="checkbox"/>	Olivia	Davis	olivia.davis<at>example.com	New Zealand
<input checked="" type="checkbox"/>	Alexander	Miller	alexander.miller<at>example.com	New Zealand
<input type="checkbox"/>	Sophia	Wilson	sophia.wilson<at>example.com	New Zealand
<input checked="" type="checkbox"/>	William	Moore	william.moore<at>example.com	New Zealand

The following table describes actions that are performed when a TableView is focused and users press the following keys:

UP Arrow	Move focus & selection up one item. Create anchor. All previous selections are canceled.
DOWN Arrow	Move focus & selection down one item. Create anchor. All previous selections are canceled.
CTRL-UP Arrow	Move focus up without changing selection. Use CMD-UP Arrow on Mac.
CTRL-DOWN Arrow	Move focus down without changing selection. Use CMD-DOWN Arrow on Mac.
SHIFT-UP Arrow	Expand or contract selection up by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Up Arrow key should be processed. See description of Up Arrow behavior for more details.
SHIFT-DOWN Arrow	Expand or contract selection down by one item. Only in multi-selection modes.  When focus is on an unselected item, pressing Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Down Arrow key should be processed. See description of Down Arrow behavior for more details.
SPACEBAR	Select focused item if it is not selected. Create anchor.
CTRL-SPACEBAR	Select focused item if it is not selected. Deselect focused item if it is selected. Create anchor. Use CMD-CTRL-SPACEBAR on Mac.
SHIFT-SPACEBAR	Select all items between anchor and focused item. Focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Spacebar should be processed. See description of Spacebar behavior for more details.
F2	Edit selected item.
HOME	Move focus & selection to the first item. Create anchor.
END	Move focus & selection to the last item. Create anchor.

SHIFT-HOME	<p>Select all items between anchor and the first item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Home key should be processed. See description of Home behavior for more details.</p>
SHIFT-END	<p>Select all items between anchor and the last item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only End key should be processed. See description of End behavior for more details.</p>
CTRL-HOME	<p>Move focus to the first item.</p> <p>Use CMD-Home on Mac.</p>
CTRL-END	<p>Moves focus to the last item.</p> <p>Use CMD-END on Mac.</p>
PAGE UP	<p>Move the selection up on the first fully visible item on the current page. If the first fully visible item is selected, move the selection on the first fully visible item on the previous page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
PAGE DOWN	<p>Move the selection down on the last fully visible item on the current page. If the last fully visible item is selected, move the selection on the last fully visible item on the next page.</p> <p>In multi-selection mode, it cancels all previous selections. Create anchor.</p>
SHIFT-PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Up key should be processed. See description of Page Up behavior for more details.</p>
SHIFT-PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Down key should be processed. See description of Page Down behavior for more details.</p>
CTRL-PAGE UP	<p>Move focus up on the first fully visible item on the current page. If the first fully visible item is focused, move focus on the first fully visible item on the previous page.</p> <p>Use CMD-PAGE UP on Mac.</p>
CTRL-PAGE DOWN	<p>Move focus down on the last fully visible item on the current page. If the last fully visible item is focused, move focus on the last fully visible item on the next page.</p> <p>Use CMD-PAGE DOWN on Mac.</p>
CTRL-A	<p>Select entire table. Focus remains on the same item. In multi-selection mode only.</p> <p>Use CMD-A on Mac.</p>
ESC	<p>Cancel editing.</p>
ENTER	<p>Confirm editing (depends on the cell editor).</p>
CTRL-SHIFT-UP Arrow	<p>Expand selection up by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-UP Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Up Arrow (Cmd-Up Arrow) should be processed. See description of Ctrl-Up Arrow behavior for more details.</p>

CTRL-SHIFT-DOWN Arrow	<p>Expand selection down by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-DOWN Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Down Arrow (Cmd-Down Arrow) should be processed. See description of Ctrl-Down Arrow behavior for more details.</p>
CTRL-SHIFT-SPACEBAR	<p>Select all items between anchor and focused item. Focused item is also included in the selection. Create anchor. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-SPACEBAR on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Spacebar (Cmd-Spacebar) should be processed. See description of Ctrl-Spacebar behavior for more details.</p>
CTRL-SHIFT-HOME	<p>Select all items between anchor and the first item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-HOME on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Home (Cmd-Home) should be processed. See description of Ctrl-Home behavior for more details.</p>
CTRL-SHIFT-END	<p>Select all items between anchor and the last item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-END on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-End (Cmd-End) should be processed. See description of Ctrl-End behavior for more details.</p>
CTRL-SHIFT-PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE UP on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Up (Cmd-Page Up) should be processed. See description of Ctrl-Page Up behavior for more details.</p>
CTRL-SHIFT-PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE DOWN on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Down (Cmd-Page Down) should be processed. See description of Ctrl-Page Down behavior for more details.</p>
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

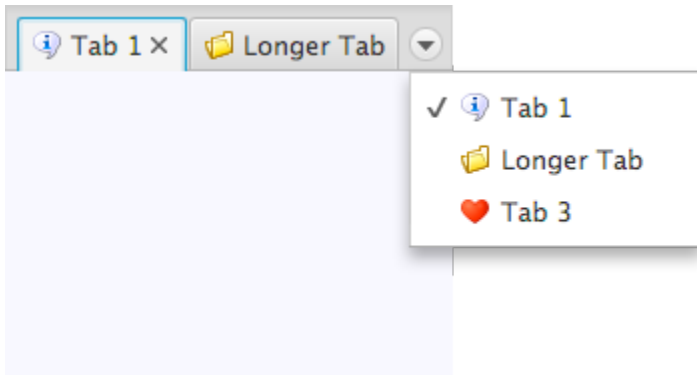
## TabPane



The following table describes actions that are performed when a TabPane is focused and users press the following keys:



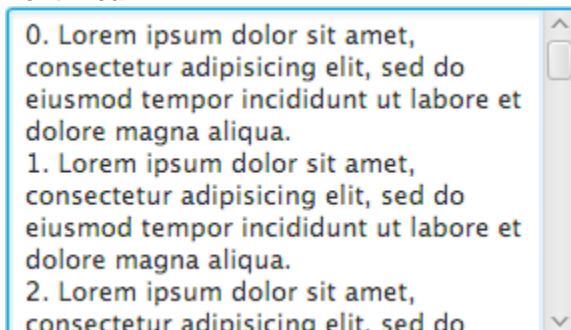
LEFT/UP Arrow	When focus is on a tab in the TabPane header, move focus to the previous tab and display its corresponding page.
RIGHT /DOWN Arrow	When focus is on a tab in the TabPane header, move focus to the next tab and display its corresponding page.
HOME	When focus is on a tab in the TabPane header, move focus to the first tab and display its corresponding page.
END	When focus is on a tab in the TabPane header, move focus to the last tab and display its corresponding page.
CTRL-TAB/ CTRL-PAGE DOWN	Move focus to the next tab and display its corresponding page. Wrap from last to first.
CTRL-SHIFT-TAB/ CTRL-PAGE UP	Move focus to the previous tab and display its corresponding page. Wrap from first to last.
TAB	Move focus to the next control in selected tab. If focus is on the last control, move focus to the next focusable control outside the TabPane.
SHIFT-TAB	Moves focus to the previous control in selected tab. If focus is on the first control, move focus to the selected tab in the TabPane header. If focus is on the selected tab, move focus to the previous focusable control outside the TabPane.



The following table describes actions that are performed when a pop-up menu in a TabPane is opened and users press the following keys:

UP Arrow	With no selection yet, select the last menu item. Otherwise move selection one item up (and scroll the menu if needed). If the first item is selected, select the last item.
DOWN Arrow	With no selection yet, select the first menu item. Otherwise move selection one item down (and scroll the menu if needed). If the last item is selected, select the first item.
SPACEBAR /ENTER	Move focus to the selected tab and display its corresponding page. Close the menu.
ESC	Close the menu.

## TextArea



The following table describes actions that are performed when a TextArea is focused and users press the following keys:

UP Arrow	If nothing has been entered in the area, do nothing. Otherwise move the caret one line up.
DOWN Arrow	If nothing has been entered in the area, do nothing. Otherwise move the caret one line down.
LEFT Arrow	If nothing has been entered in the area, do nothing. Otherwise move the caret by one character left. Do nothing if the caret is positioned to the left of the first entered character.
RIGHT Arrow	If nothing has been entered in the area, do nothing. Otherwise move the caret by one character right. Do nothing if the caret is positioned to the right of the last entered character.
CTRL-UP Arrow	Move the caret to the beginning of the previous paragraph. If the caret is in the middle of a paragraph, move the caret to the beginning of the paragraph.  Use OPTION-UP Arrow on Mac.
CTRL-DOWN Arrow	Move the caret to the beginning of the next paragraph. If the caret is placed somewhere in the last paragraph, move the caret to the end of the paragraph.  On Mac, use OPTION-DOWN Arrow. This key combination moves the caret to the end of the next paragraph. If the caret is in the middle of a paragraph, move the caret to the end of the paragraph.
CTRL-LEFT Arrow	Move the caret to the beginning of the previous word. If the caret is in the middle of a word, move the caret to the beginning of the word.  Use OPTION-LEFT Arrow on Mac.
CTRL-RIGHT Arrow	Move the caret to the beginning of the next word.  On Mac, use OPTION-RIGHT Arrow. This key combination moves the caret to the end of the next word. If the caret is in the middle of a word, move the caret to the end of the word.
SHIFT-UP Arrow	Extend selection one line up.
SHIFT-DOWN Arrow	Extend selection one line down.
SHIFT-LEFT Arrow	Extend selection one character left.
SHIFT-RIGHT Arrow	Extend selection one character right.
CTRL-SHIFT-UP Arrow	Extend selection to the beginning of the current paragraph.  Use OPTION-SHIFT-UP Arrow on Mac.
CTRL-SHIFT-DOWN Arrow	Extend selection to the end of the current paragraph.  Use OPTION-SHIFT-DOWN Arrow on Mac.
CTRL-SHIFT-LEFT Arrow	Extend selection to the beginning of the previous word. If the caret is in the middle of a word, extend selection to the beginning of the word.  Use OPTION-SHIFT-LEFT Arrow on Mac.
CTRL-SHIFT-RIGHT Arrow	Extend selection to the beginning of the next word.  On Mac, use OPTION-SHIFT-RIGHT Arrow. This key combination extends selection to the end of the next word. If the caret is in the middle of a word, extend selection to the end of the word.
HOME	Move the caret to the beginning of the line.  Use HOME/CMD-LEFT Arrow on Mac.
END	Move the caret to the end of the line.  Use HOME/CMD-RIGHT Arrow on Mac.
CTRL-HOME	Move the caret to the very beginning of the entered text.  Use CMD-HOME on Mac.
CTRL-END	Move the caret to the very end of the entered text.  Use CMD-END on Mac.
SHIFT-HOME	Extend selection to the beginning of the line.  Use SHIFT-HOME/CMD-SHIFT-LEFT Arrow on Mac.

SHIFT-END	Extend selection to the end of the line. Use SHIFT-HOME/CMD-SHIFT-LEFT Arrow on Mac.
CTRL-SHIFT-HOME	Extend selection to the very beginning of the text. Use CMD-SHIFT-HOME/CMD-SHIFT-UP Arrow on Mac.
CTRL-SHIFT-END	Extend selection to the very end of the text. Use CMD-SHIFT-END/CMD-SHIFT-DOWN Arrow on Mac.
PAGE UP	Move the caret one page up.
PAGE DOWN	Move the caret one page down.
SHIFT-PAGE UP	Extend selection one page up.
SHIFT-PAGE DOWN	Extend selection one page down.
CTRL-C	Copy selected text to the clipboard. Use CMD-C on Mac.
CTRL-V	Paste the current clipboard contents into the PasswordField, if the content's format is applicable (e.g. text). Use CMD-V on Mac.
CTRL-X	Copy selected text to the clipboard and remove it from the TextField. Use CMD-X on Mac.
CTRL-A	Select all text. Use CMD-A on Mac.
BACKSPACE	Delete the character to the left of the caret or delete the current selection.
CTRL-BACKSPACE	Delete the word to the left of the caret. Use OPTION-BACKSPACE on Mac to delete the word to the left of the caret. Use CMD-BACKSPACE on Mac to delete the line to the left of the caret.
DELETE	Delete the character to the right of the caret or delete the current selection.
CTRL-DELETE	Delete the word to the right of the caret. Use OPTION-DELETE on Mac.
SPACEBAR	Enter a space character as part of the entered text. If there is a selection, remove the selection and replace it with a space character.
ENTER	Insert a line break in the text being entered. If there is a selection, remove the selection and replace it with a line break.
ANY CHARACTER	Enter a character. If there is a selection, remove the selection and replace it with a character.
ESC	Do nothing.
TAB	Insert a tab into the text of the TextArea. In case of read-only text box, move focus to the next focusable control.
CTRL-TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

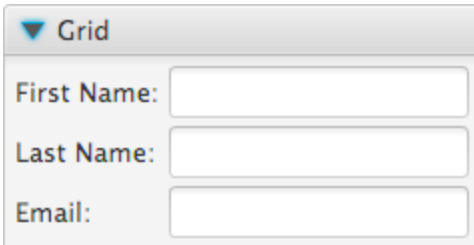
## TextField

The following table describes actions that are performed when a TextField is focused and users press the following keys:

UP Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret to the beginning of the line.
DOWN Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret to the end of the line.
LEFT Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret by one character left. Do nothing if the caret is positioned to the left of the first entered character.
RIGHT Arrow	If nothing has been entered in the field, do nothing. Otherwise move the caret by one character right. Do nothing if the caret is positioned to the right of the last entered character.
CTRL-LEFT Arrow	Move the caret to the beginning of the previous word. If the caret is in the middle of a word, move the caret to the beginning of the word.  Use OPTION-LEFT Arrow on Mac.
CTRL-RIGHT Arrow	Move the caret to the beginning of the next word.  On Mac, use OPTION-RIGHT Arrow. This key combination moves the caret to the end of the next word. If the caret is in the middle of a word, move the caret to the end of the word.
SHIFT-UP Arrow	Extend selection to the beginning of the line.
SHIFT-DOWN Arrow	Extend selection to the end of the line.
SHIFT-LEFT Arrow	Extend selection one character left.
SHIFT-RIGHT Arrow	Extend selection one character right.
CTRL-SHIFT-LEFT Arrow	Extend selection to the beginning of the previous word. If the caret is in the middle of a word, extend selection to the beginning of the word.  Use OPTION-SHIFT-LEFT Arrow on Mac.
CTRL-SHIFT-RIGHT Arrow	Extend selection the the beginning of the next word.  On Mac, use OPTION-SHIFT-RIGHT Arrow. This key combination extends selection to the end of the next word. If the caret is in the middle of a word, extend selection to the end of the word.
HOME	Move the caret to the beginning of the line.  Use CMD-LEFT Arrow on Mac.
END	Move the caret to the end of the line.  Use CMD-RIGHT Arrow on Mac.
CTRL-HOME	Moves the caret to the beginning of the line.  Use CMD-HOME on Mac.
CTRL-END	Moves the caret to the end of the line.  Use CMD-END on Mac.
SHIFT-HOME	Extend selection to the beginning of the line.  Use SHIFT-HOME/CMD-SHIFT-LEFT Arrow on Mac.
SHIFT-END	Extend selection to the end of the line.  Use SHIFT-HOME/CMD-SHIFT-LEFT Arrow on Mac.
CTRL-SHIFT-HOME	Extend selection to the beginning of the line.  Use CMD-SHIFT-UP Arrow on Mac.
CTRL-SHIFT-END	Extend selection to the end of the line.  Use CMD-SHIFT-DOWN Arrow on Mac.
CTRL-C	Copy selected text to the clipboard.  Use CMD-C on Mac.
CTRL-V	Paste the current clipboard contents into the PasswordField, if the content's format is applicable (e.g. text).  Use CMD-V on Mac.

CTRL-X	Copy selected text to the clipboard and remove it from the TextField. Use CMD-X on Mac.
CTRL-A	Select all text. Use CMD-A on Mac.
BACKSPACE	Delete the character to the left of the caret or delete the current selection.
CTRL-BACKSPACE	Delete the word to the left of the caret. Use OPTION-BACKSPACE on Mac to delete the word to the left of the caret. Use CMD-BACKSPACE on Mac to delete the line to the left of the caret.
DELETE	Delete the character to the right of the caret or delete the current selection.
CTRL-DELETE	Delete the word to the right of the caret. Use OPTION-DELETE on Mac.
SPACEBAR	Enter a space character as part of the entered text. If there is a selection, remove the selection and replace it with a space character.
ANY CHARACTER	Enter a character. If there is a selection, remove the selection and replace it with a character.
ESC	Do nothing.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## TitledPane



Grid

First Name:

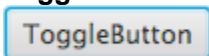
Last Name:

Email:

The following table describes actions that are performed when a TitledPane is focused and users press the following keys:

ENTER /SPACEBAR	When focus is on the header, expand/collapse its corresponding panel.
TAB	When focus is on the header and its corresponding panel is expanded, move focus to the first focusable control in the panel. If focus is on the last focusable control in the panel, move focus to the next focusable control outside the TitledPane. When focus is on a header and its corresponding panel is collapsed, move focus to the next focusable control outside the TitledPane.
SHIFT-TAB	When focus is on a focusable control in an expanded panel, move focus on previous focusable control in the panel. If focus is on the very first focusable control in the panel, move focus to the corresponding header. When focus is on a header, move focus to the previous focusable control outside the TitledPane.

## ToggleButton

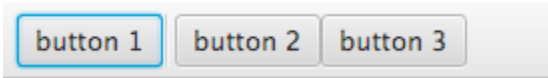


The following table describes actions that are performed when a TitledPane is focused and users press the following keys:

SPACEBAR	Activate/Deactivate the button.
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TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

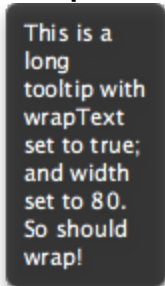
## ToolBar



The following table describes actions that are performed when a control in the ToolBar is focused and users press the following keys:

UP Arrow	If the focused toolbar control does not consume the pressed navigation key, move focus up following the 2D traversal policy.
DOWN Arrow	If the focused toolbar control does not consume the pressed navigation key, move focus down following the 2D traversal policy.
LEFT Arrow	If the focused toolbar control does not consume the pressed navigation key, move focus left following the 2D traversal policy.
RIGHT Arrow	If the focused toolbar control does not consume the pressed navigation key, move focus right following the 2D traversal policy.
ESC	Close the pop-up toolbar if it is open.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## Tooltip



The following table describes actions that are performed when a Tooltip is displayed and users press the following keys:

ESC	Dismiss the tooltip.
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## TreeTableView

Name	Size	Modified
▼ /		Wed, Oct 31, 2012
▶ \$Recycle.Bin		Mon, Oct 15, 2012
▶ backup		Sat, Sep 22, 2012
bootmgr	398,156 KB	Thu, Jul 26, 2012
BOOTNXT	1 KB	Sun, Jun 3, 2012
▶ Config.Msi		Thu, Jan 1, 1970
▶ dell		Fri, Jul 13, 2012
▶ Documents and Settings		Thu, Aug 30, 2012

The following table describes actions that are performed when a TreeTableView is focused and users press the following keys:

UP Arrow	Move focus & selection up by one item. Create anchor. Cancel all previous selections.
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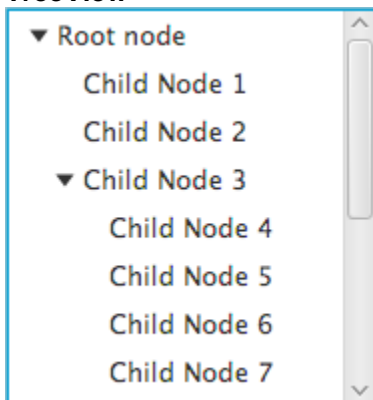
DOWN Arrow	Move focus & selection down by one item. Create anchor. Cancel all previous selections.
LEFT Arrow	Row: Collapse current selection or go to the parent node. Cell: Move selection & focus left by one item. Cancel all previous selections.
RIGHT Arrow	Row: Expand current selection or go to the first child node. Cell: Move selection & focus right by one item. Cancel all previous selections.
CTRL-UP Arrow	Move focus up by one item without changing selection. Use CMD-UP Arrow on Mac.
CTRL-DOWN Arrow	Move focus down by one item without changing selection. Use CMD-DOWN Arrow on Mac.
SHIFT-UP Arrow	Expand or contract selection up by one item. Only in multi-selection modes.  If focus is on an unselected item, pressing Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Up Arrow key should be processed. See description of Up Arrow behavior for more details.
SHIFT-DOWN Arrow	Expand or contract selection down by one item. Only in multi-selection modes.  If focus is on an unselected item, pressing Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Down Arrow key should be processed. See description of Down Arrow behavior for more details.
CTRL-SHIFT-UP Arrow	Expand/Contract selection up by one item. Only in multi-selection modes.  If focus is on an unselected item, pressing Ctrl-Shift-Up Arrow selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. Available in multi-selection mode only.  Use CMD-SHIFT-UP Arrow on Mac.  In single selection mode, Shift key should be ignored and only Ctrl-Up Arrow (Cmd-Up Arrow) should be processed. See description of Ctrl-Up Arrow behavior for more details.
CTRL-SHIFT-DOWN Arrow	Expand/Contract selection down by one item. Only in multi-selection modes.  If focus is on an unselected item, pressing Ctrl-Shift-Down Arrow selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. Available in multi-selection mode only.  Use CMD-SHIFT-DOWN Arrow on Mac.  In single selection mode, Shift key should be ignored and only Ctrl-Down Arrow (Cmd-Down Arrow) should be processed. See description of Ctrl-Down Arrow behavior for more details.
HOME	Move focus & selection to the first item. Create anchor.
END	Move focus & selection to the last item. Create anchor.
CTRL-HOME	Move focus to the first item. Use CMD-HOME on Mac.
CTRL-END	Move focus to the last item. Use CMD-END on Mac.
SHIFT-HOME	Select all items between anchor and the first item. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Home key should be processed. See description of Home behavior for more details.

SHIFT- END	<p>Select all items between anchor and the last item. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only End key should be processed. See description of End behavior for more details.</p>
CTRL- SHIFT- HOME	<p>Select all items between anchor and the first item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-HOME on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Home (Cmd-Home) should be processed. See description of Ctrl-Home behavior for more details.</p>
CTRL- SHIFT- END	<p>Select all items between anchor and the last item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-END on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-End (Cmd-End) should be processed. See description of Ctrl-End behavior for more details.</p>
PAGE UP	<p>Move the selection up on the first fully visible item on the current page. If the first fully visible item is selected, move the selection on the first fully visible item on the previous page.</p> <p>In multi-selection mode, it cancels all previous selections. Creates anchor.</p>
PAGE DOWN	<p>Move the selection down on the last fully visible item on the current page. If the last fully visible item is selected, move the selection on the last fully visible item on the next page.</p> <p>In multi-selection mode, it cancels all previous selections. Creates anchor.</p>
CTRL- PAGE UP	<p>Move focus up on the first fully visible item on the current page. If the first fully visible item is focused, move focus on the first fully visible item on the previous page.</p> <p>Use CMD-PAGE UP on Mac.</p>
CTRL- PAGE DOWN	<p>Move focus down on the last fully visible item on the current page. If the last fully visible item is focused, move focus on the last fully visible item on the next page.</p> <p>Use CMD-PAGE DOWN on Mac.</p>
SHIFT- PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Up key should be processed. See description of Page Up behavior for more details.</p>
SHIFT- PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Down key should be processed. See description of Page Down behavior for more details.</p>
CTRL- SHIFT- PAGE UP	<p>Select all items between anchor and the first fully visible item on the current page. If the first fully visible item is already included in the selection, extend the selection to the first fully visible item on the previous page. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE UP on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Up (Cmd-Page Up) should be processed. See description of Ctrl-Page Up behavior for more details.</p>
CTRL- SHIFT- PAGE DOWN	<p>Select all items between anchor and the last fully visible item on the current page. If the last fully visible item is already included in the selection, extend the selection to the last fully visible item on the next page. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE DOWN on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Down (Cmd-Page Down) should be processed. See description of Ctrl-Page Down behavior for more details.</p>
CTRL-A	<p>Select entire tree table. Focus remains on the same item. In multi-selection mode only.</p> <p>Use CMD-A on Mac.</p>
F2	<p>Edit selected node.</p>
ENTER	<p>Perform the default action on selected node or save changes made to the selected node.</p>



ESC	Cancel changes made to the selected node.
+ (numlock)	When a parent node is selected, expand the node.
- (numlock)	When a parent node is selected, collapse the node.
* (numlock)	When a node is selected, expand all nodes.
SPACEBAR	Select focused item if it is not selected. Create anchor.
CTRL-SPACEBAR	Select focused item if it is not selected. Deselect focused item if it is selected. Create anchor. Use CTRL-CMD-SPACEBAR on Mac.
SHIFT-SPACEBAR	Select all items between anchor and focused item. Focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.  In single selection mode, Shift key should be ignored and only Spacebar key should be processed. See description of Spacebar behavior for more details.
CTRL-SHIFT-SPACEBAR	Select all items between anchor and focused item. Focused item is also included in the selection. Create anchor. Available in multi-selection mode only. Use CMD-SHIFT-SPACEBAR on Mac.  In single selection mode, Shift key should be ignored and only Ctrl-Spacebar (Cmd-Spacebar) should be processed. See description of Ctrl-Spacebar behavior for more details.
TAB	Move focus to next focusable control.
SHIFT-TAB	Move focus to previous focusable control.

## TreeView



The following table describes actions that are performed when a TreeView is focused and users press the following keys:

UP Arrow	Move selection one node up. Create anchor.
DOWN Arrow	Move selection one node down. Create anchor.
LEFT Arrow	Collapse current selection or go to parent node.
RIGHT Arrow	Expand current selection or go to first child node.
CTRL-UP Arrow	Move focus up by one item without changing selection. Use CMD-UP Arrow on Mac.
CTRL-DOWN Arrow	Move focus down by one item without changing selection. Use CMD-DOWN Arrow on Mac.

SHIFT-UP Arrow	<p>Expand or contract selection up by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Shift-Up selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Up Arrow key should be processed. See description of Up Arrow behavior for more details.</p>
SHIFT-DOWN Arrow	<p>Expand or contract selection down by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Shift-Down selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Down Arrow key should be processed. See description of Down Arrow behavior for more details.</p>
CTRL-SHIFT-UP Arrow	<p>Expand/Contract selection up by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Up Arrow selects all items between anchor and the item which is right above the focused item. The item which is right above the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-UP Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Up Arrow (Cmd-Up Arrow) should be processed. See description of Ctrl-Up Arrow behavior for more details.</p>
CTRL-SHIFT-DOWN Arrow	<p>Expand/Contract selection down by one item. Only in multi-selection modes.</p> <p>If focus is on an unselected item, pressing Ctrl-Shift-Down Arrow selects all items between anchor and the item which is right below the focused item. The item which is right below the focused item is also included in the selection. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-DOWN Arrow on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Down Arrow (Cmd-Down Arrow) should be processed. See description of Ctrl-Down Arrow behavior for more details.</p>
HOME	Move focus & selection to the first node in the tree. Create anchor.
END	Move focus & selection to the last node in the tree. Create anchor.
CTRL-HOME	<p>Move focus to the first node in the tree.</p> <p>Use CMD-HOME on Mac.</p>
CTRL-END	<p>Move selection to the last node in the tree.</p> <p>Use CMD-END on Mac.</p>
SHIFT-HOME	<p>Select all items between anchor and the first node in the tree. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Home key should be processed. See description of Home behavior for more details.</p>
SHIFT-END	<p>Select all items between anchor and the last node in the tree. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only End key should be processed. See description of End behavior for more details.</p>
CTRL-SHIFT-HOME	<p>Select all items between anchor and the first item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-HOME on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Home (Cmd-Home) should be processed. See description of Ctrl-Home behavior for more details.</p>
CTRL-SHIFT-END	<p>Select all items between anchor and the last item. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-END on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-End (Cmd-End) should be processed. See description of Ctrl-End behavior for more details.</p>

PAGE UP	<p>Move the selection up on the first fully visible node on the current page. If the first fully visible node is selected, move the selection on the first fully visible node on the previous page.</p> <p>In multi-selection mode, it cancels all previous selections. Creates anchor.</p>
PAGE DOWN	<p>Move the selection down on the last fully visible node on the current page. If the last fully visible node is selected, move the selection on the last fully visible node on the next page.</p> <p>In multi-selection mode, it cancels all previous selections. Creates anchor.</p>
CTRL-PAGE UP	<p>Move focus up on the first fully visible node on the current page. If the first fully visible node is focused, move focus on the first fully visible node on the previous page.</p> <p>Use CMD-PAGE UP on Mac.</p>
CTRL-PAGE DOWN	<p>Move focus down on the last fully visible node on the current page. If the last fully visible node is focused, move focus on the last fully visible node on the next page.</p> <p>Use CMD-PAGE DOWN on Mac.</p>
SHIFT-PAGE UP	<p>Select all nodes between anchor and the first fully visible node on the current page. If the first fully visible node is already included in the selection, extend the selection to the first fully visible node on the previous page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Up key should be processed. See description of Page Up behavior for more details.</p>
SHIFT-PAGE DOWN	<p>Select all nodes between anchor and the last fully visible node on the current page. If the last fully visible node is already included in the selection, extend the selection to the last fully visible node on the next page.</p> <p>All previous selections, if applicable, are canceled. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Page Down key should be processed. See description of Page Down behavior for more details.</p>
CTRL-SHIFT-PAGE UP	<p>Select all nodes between anchor and the first fully visible node on the current page. If the first fully visible node is already included in the selection, extend the selection to the first fully visible node on the previous page. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE UP on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Up (Cmd-Page Up) should be processed. See description of Ctrl-Page Up behavior for more details.</p>
CTRL-SHIFT-PAGE DOWN	<p>Select all nodes between anchor and the last fully visible node on the current page. If the last fully visible node is already included in the selection, extend the selection to the last fully visible node on the next page. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-PAGE DOWN on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Page Down (Cmd-Page Down) should be processed. See description of Ctrl-Page Down behavior for more details.</p>
CTRL-A	<p>Select entire tree. Focus remains on the same item. In multi-selection mode only.</p> <p>Use CMD-A on Mac.</p>
F2	<p>Edit selected node.</p>
ENTER	<p>Perform the default action on selected node or save changes made to the selected node.</p>
ESC	<p>Cancel changes made to the selected node.</p>
+ (numlock)	<p>When a parent node is selected, expand the node.</p>
- (numlock)	<p>When a parent node is selected, collapse the node.</p>
* (numlock)	<p>When a node is selected, expand all nodes.</p>
SPACEBAR	<p>Select focused item if it is not selected. Create anchor.</p>
CTRL-SPACEBAR	<p>Select focused item if it is not selected. Deselect focused item if it is selected. Create anchor.</p> <p>Use CTRL-CMD-SPACEBAR on Mac.</p>
SHIFT-SPACEBAR	<p>Select all items between anchor and focused item. Focused item is also included in the selection. All previous selections are canceled, if applicable. Available in multi-selection mode only.</p> <p>In single selection mode, Shift key should be ignored and only Spacebar key should be processed. See description of Spacebar behavior for more details.</p>

CTRL-SHIFT-SPACEBAR	<p>Select all items between anchor and focused item. Focused item is also included in the selection. Create anchor. Available in multi-selection mode only.</p> <p>Use CMD-SHIFT-SPACEBAR on Mac.</p> <p>In single selection mode, Shift key should be ignored and only Ctrl-Spacebar (Cmd-Spacebar) should be processed. See description of Ctrl-Spacebar behavior for more details.</p>
TAB	<p>Move focus to next focusable control.</p>
SHIFT-TAB	<p>Move focus to previous focusable control.</p>

## Virtual Keyboard

There is no keyboard navigation support for this control.