Key Mapping

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| BS | Backspace-into | **Icon cursor:** Opens up the icon before the cursor for editing. For parens/brackets/braces, removes pair.  **Icon selection:** Deletes selected icons  **Text cursor:** Remove the character to the left of the cursor. If typed at the beginning of the entry icon, completes the existing text and returns to an icon cursor. If the text cannot be entered, deletes beyond the bounds of the entry icon, concatenating the deleted text before the cursor  **Text selection:** Single character backspace |
| Shift+BS |  | Available |
| Ctrl+BS | Delete-Left-Icon | **Icon cursor:** Delete the entire icon left of the cursor.  **Icon selection:** Deletes selection (same as BS)  **Text cursor:** Word backspace  **Text selection:** Deletes selection (same as BS) |
| Alt+BS |  | **Icon cursor:** Opens the icon to the left for editing and merges  the text with the current entry text  **Icon selection:** Deletes selection (same as BS)  **Text cursor:** Available  **Text selection:** Available |
| DEL | Delete-into | **Icon cursor:** Opens up the icon right of the cursor for editing.  For parens/brackets/braces, removes pair.  **Icon selection:** Deletes selection (same as BS)  **Text cursor:** Delete the character to the right of the cursor. If typed at the right of the entry icon, opens the icon to the right for editing and merges the text with the current entry text. For example, type “.” then DEL before a variable to turn it to an attribute.  **Text selection:** Deletes selection (same as BS) |
| Shift+DEL |  | Available |
| Ctrl+DEL | Delete-Right-Icon | **Icon cursor:** Deletes the entire icon after the cursor  **Icon selection:** Deletes selection (same as BS)  **Text cursor:** Deletes the word to the right of the cursor  **Text selection:** Deletes selection (same as BS) |
| Shift |  | Shift is a modifier key and normally does nothing when pressed in isolation. However, during an icon drag, while the icon(s) are snapped to a replace site, engages drag target selection mode until released.  In general, the shift modifier creates or extends a selection to the cursor or mouse |
| Arrow |  | **Icon cursor:** Left and right arrows move the cursor lexically left and right per the text flow. Up and down arrows move the cursor geometrically up or down to the nearest site in that direction.  **Icon selection:** Cancel selection and move cursor lexically left or right edge of the (first) selected range, or up or down to the nearest site in that direction from the corresponding end of the selection.  **Text cursor:** Move the cursor left, right, up, or down within the existing text, exiting the text-editing mode if that crosses the icon boundary.  **Text selection:** Cancel the selection and move the cursor to the corresponding end of the selection |
| Ctrl+Arrow |  | **Icon cursor:** For left and right arrows, move the cursor to the nearest site to the physical left or of its current location, rather than following the text flow (which might otherwise wrap in a different direction). For up and down arrows, same as Arrow.  **Text cursor:** For left and right arrows, move left or right by one word. For up and down arrows, same as Arrow. |
| Alt+Arrow |  | **Icon cursor:** For left and right arrows, opens up the icon to the left or right of the cursor for editing, or skips over if it cannot be opened. For up and down arrows, same as Arrow.  **Icon selection:** For a single selected icon, clears the selection and opens the (formerly) selected icon for editing, placing the cursor at the left or right end (in the direction of the arrow). Otherwise clears the selection and moves the cursor to the directed end.  **Text cursor or selection:** Available (currently same as Arrow) |
| ESC |  | **Icon cursor:** Currently erases cursor … but probably shouldn’t  **Icon selection:** Clear selection  **Text cursor or selection in entry icon:** Removes entire icon, including both text and pending arguments  **Text selection in string or comment:** Clear selection |
| Return |  | **Icon cursor:** Go to sequence site below (currently inserts an entry icon, but just going there might be preferable) |
| Ctrl+Return |  | Execute single statement, including the code block that it owns |
| Ctrl+Shift+Return |  | Execute from the current statement until end of block |
| Space |  | **Icon cursor:** Does nothing, absorbing unnecessary whitespace for those of us who can’t unlearn conventional editing.  **Text cursor in string:** Insert a space character  **Text cursor in entry icon:** Attempt to complete the current entry text. On success, move out of text in forward direction. This action is delayed to the next character in the case that you have typed ‘is’ or ‘in’, to allow you to create the ‘is not’ and ‘not in’ comparison operators.  **Text selection in string:** Replace the selected characters with a space character. |

Mouse Mapping

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| Left Click |  | Context sensitive:  **Near icon site (no selection):** Move icon cursor to site. If the cursor was already at the site, do selection actions (On icon, below) for icon under cursor  **On icon:** Select icon. If the icon is already selected, enlarge the selection (see below). If the selection is already at its max, unselect the adjacent selection.  **On Icon body (not near site)**: Select icon |
| Alt+Left Click |  | **On icon:** Open the clicked icon for text editing, placing the cursor at the clicked location |
| Ctrl+Left Click |  | **On icon:** Toggle icon selection  **On text:** Available |
| Shift+Left Click |  | **On icon:** Extend the selection from the nearest selected region or from the cursor if there is no selection  **On text:** Extend the selection from the nearest selected character range or from the (text) cursor if there is no selection |
| Left Drag |  | **On icon:** drags icon hierarchy  **On window background:** Starts rectangular selection.  **On text:** Begins character selection |
| Shift+Left Drag |  | **On icon:** Begins lexical drag selection. Note that counter to text editor conventions, this always begins a new selection, erasing any previous selection  **On text:** (maybe) Extends the selection from the nearest selected character range or from the (text) cursor if there is no selection, and continues character selection drag. |
| Ctrl+Left Drag |  | **On icon:** (maybe) begins lexical selection in toggle mode  **On window background**: Begins rectangular selection in toggle mode.  **On text:** Available (maybe lexical word selection) |
| Ctrl+Shift+Left Drag |  | **On icon:** (maybe) Extends selection in lexical drag mode (since shift clears original selection, and don’t want to bind this to Ctrl+Drag because accidentally dragging Ctrl+Click will confuse) |
| Alt+Left Drag |  | **On icon:** Open the clicked icon for editing and begin a text drag |
| Right Click |  | **All contexts:** Pops up context-sensitive menu. |
| Ctrl+Right Click |  | **On icon:** Copy the hierarchy beneath the clicked icon to the cursor, or if there is a selection, to replace the selection.  **On window background**: available.  **On selected text:** Copy (clicked) selected text to the cursor |
| Shift+Right Click |  | Available |
| Alt+Right Click |  | Available |
| Right Drag |  | **On icon:** Drag a copy of hierarchy beneath dragged icon, or the selection if a selected icon is dragged.  **On window background:** available  **On text:** begin an ‘immediate’ lexical drag selection, and upon release, inserts the text at the cursor. |
| Ctrl+Right Drag |  | **On icon:** Begin an ‘immediate’ drag-selection that will paste to the cursor or replace the primary-selection on mouse-up. Note that the selection method is lexical in the forward and/or down directions, and hierarchical in the left and up direction (the same as drag target selection).  **On window background**: Begin a rectangular ‘immediate’ selection that will paste to the cursor or replace the primary-selection on mouse-up. |
| Shift+Right Drag |  | Available |
| Alt+Right Drag |  | Available |