**Readme**

FIN-Helper (version 1.0)

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**Overview**

FIN-Helper is a program written with the AutoHotKey language. It is a small GUI that works alongside the Siemens FIN|lite program and adds time-saving shortcuts and functionality to the graphic creation process.

FIN-Helper is intended to interact with "Siemens FIN | lite". FIN|lite must be open for F.H. to work correctly.

\* If FIN-Helper gets stuck in a loop, or starts to act crazy, you can PAUSE the current routine with (Ctrl + Esc) or RELOAD with (Ctrl + R).

During a “Drag Clones” routine, you may just hold the escape key to deselect the clone and stop the routine.

Of course, you can always use (Ctrl + Alt + Delete)! Then hit the “RLD” button in F.H.

**FH Screen Searching**

Some F.H. functions like the “Drag Clones”, and “DRAG”(attachments) functions rely on image searches of the screen. Ensure that the desired elements are currently visible before attempting to perform searching/dragging F.H. routines.

Since F.H. relies on screen searches for certain images whithin FIN|lite, be careful not to delete/corrupt any of the PNG files in the "FIN Search Images" folder. It is recommended to look in the "FIN Search Images" folder to understand what FIN-Helper is actually searching for during the searching/dragging-routines.

OR... if you're feeling brave, you may attempt to replace the PNG files with your own cropped screenshots. Just make sure it has the same name as the original PNG image. You may want to make a copy of the unedited "FIN Search Images" folder before tinkering.

\* Some Search images assume that the background in FIN|lite is white. If the background is not white, F.H. may not work correctly.

**Actions**

Actions are usually performed on the currently selected item in FIN|lite.

**Clone**: Simply sends a quick "copy" then "paste" command. (Alt+D)

**Cut, Copy, Paste, Undo, and Redo:** Simply sends the corresponding keyboard shortcuts for those actions.

**Actions: Move**

**Move:** Moves selected item with the arrow keys.

Similarly, the “**-15**” and “**+15**” buttons simply send 15 arrow keys.

\* Since the “Move” action is simply sending a defined number of arrow keys, FIN|lite will respond accordingly.

**Mouse Move:** Searches for a selection box ( ) in FIN|lite, then clicks and drags the selection by an accurate amount of pixels.



\* “Mouse Move” does not work with increments less than 3 pixels, andwill not work correctly if the selected item has a width of less than 20px, or a height of less than 10px.

**Actions: Edit Properties**

**Edit WHXY:** Searches for the images of “Width:” “Height:” “W:” “H:” “X:” “Y:” in FIN|lite and clicks in the field to the right of them. Then sends the new value. Then sends “Tab”.

\* When editing the "W" and "H" properties, if nothing is currently selected in FIN|lite, the canvas Width and Height will be changed.

**To Zeros:** Searches for images of ”X:” and “Y:” in Fin|lite and clicks in the field to the right of them. Then sends “0”. Then sends “Tab”.

**Actions: Select All**

\* Some Search images assume that the background in FIN|lite is white. If the background is not white, F.H. may not work correctly.

\* When selecting all Value Labels or FIN Buttons, if they are in close proximity to each other, not all may be selected. This is because the selection box nodes will get in the way of finding the exact image.

**<value> Labels:** Searches for part of a “<value” Label ( ), or a bold font “<value> Label (), holds the **Ctrl** key, clicks, and repeats the process until the image is not found.



\* The “FINvalue.png” and “FINvalueBold.png” are precisely cropped so that once the label is selected the top-middle selection box node will change its appearance. Changing these .PNG images may result in an endless loop of clicking Labels.

**Actions: Dragging Clones**

A “clone” is a duplicate of the currently selected item in FIN|lite.

**Drag Clones to Blank Fields:** This action is a loop that will clone the currently selected “<value>” Label and drag it into position on the first found blank field.

\* The searched for image “FINselBox.png” will be dragged to all found “FINfield.png”( C:\Users\grimel.DAC-INC\AppData\Local\Microsoft\Windows\INetCache\Content.Word\FINfield.png) or “FINfield2.png” (C:\Users\grimel.DAC-INC\AppData\Local\Microsoft\Windows\INetCache\Content.Word\FINfield2.png) images. Notice these fields have a light blue border and white fill. You may want to crop a small screenshot of the exact top-left corner of **YOUR Current target** fields to modify either “FINfield.png” or “FINfield2.png”.

**Drag Clones to Button Pics:** This action is a loop that will clone the currently selected button and drag it into position on the first found top-left corner of a button image (on the background).

\* The searched for image “FINselBox.png” will be dragged to all found “buttonPic.png”( C:\Users\grimel.DAC-INC\Desktop\AHK\Fin-Helper\FIN Search Images\buttonPic.png ) or “buttonPic2.png” (C:\Users\grimel.DAC-INC\Desktop\AHK\Fin-Helper\FIN Search Images\buttonPic2.png ) images. Notice the corners of these button pics are a specific light-grey. You may want to crop a small screenshot of the exact top-left corner of **YOUR Current target** buttons to modify either “buttonPic.png” or “buttonPic2.png”.

**Tweak Clone Placement:** These values modify where the “Drag Clones” routines will place the clones. You should check the “One Clone at a Time” box to test where your clones will land, then tweak accordingly.

\* Sometimes if a clone (usually a button) is too narrow, tweaks may be necessary.

**Attach**

Attachment is achieved by finding and dragging points in the FIN | lite "Panels" sidebar, to attachment XY-coordinates on the screen.

Each ROW represents the description of a "point" in the Siemens Controller (TC) as well the coordinates for the point to be dragged and dropped (attached).

FIN-Helper can attach a batch of up to 40 points in one routine!

**Less, More:** Vertically contracts/expands the F.H. window by 5 rows.

\* Rows that are not currently visible are “active” and will still be considered by routines.

**Clear:**  Clears all attachment fields. A prompt will verify.

**The checkbox:** is used to determine which points will be attached when you hit the "DRAG" button. If the box is unchecked, the attachment will be omitted from the routine.

**The "T.C." field:** indicates which controller the point is in. "1" would indicate the top-most controller.

**The "notes" field:** is for your own use. You may want to briefly describe the point being attached for your own future reference.

**The "Category" field:** describes if the point is considered a "Local" point, "Trends" point, "Schedules" point, "Graphics" point, "FLN (1)", or "FLN (2)" point.

\* "Category" must not be blank.

**The "Device #" field:** is only used with the "FLN" categories. It describes the position of the target device in the currently selected TC hierarchy. This would be like indicating which DXR the point is in.

\* If you do not want the "FLN" Category, LEAVE IT BLANK.

**The "Point Type"field:** indicates AI, AO, AV, BI, BO, BV, MI, MO, MV, Gfx (graphic page).

\* "Point Type" must not be blank.

**The "Point #" field:** specifies the location of the actual desired attachment point within it's hierachy.

\* If you enter a number greater than the last point in the hierarchy, the attachment will not be accurate.

**The "To X:" and "To Y:" fields:** specify WHERE the desired point will be dragged-and-dropped. Simply hit the corresponding "Listen" button, then click the point's attachment location on the screen. This is best done in fullscreen. You may also use the "Show Mouse Position" option in the "Options" Tab.

The "DRAG" button will initiate the attachment routine. It will select and drag each checked-point to their specified attachment coordinates. FIN-Helper goes through a 12-step process of selecting and sending arrow keys before clicking and dragging the blue highlighted item in the FIN | lite "Panels" sidebar.

The "Save" button will save all of the attachment input fields to a .INI file in the "FH Attachment Files" folder. You can easily edit the .INI file with a text editor.

The "Load" button will populate all of the attachment fields from a .INI file in the "FH Attachment Files" folder.

The "More" and "Less" buttons will show 5 more/less attachment point rows.

For both the "Device #" and "Point #" fields, be sure to specify the number of the device/point from the TOP of the respective hierarchy. Enter "3" for the third item in the hierarchy; for the top-most device, enter "1".

>>> Keep in mind! F.H. is just navigating the FIN | lite point hierarchy by searching for the current blue selection in the "Panels" sidebar, and by clicking and sending arrow keys. F.H. is NOT searching/processing the point's NAME!`n`nDuring/After the routine, be sure to watch/verify that the correct points are being attached!

Publish - - - - - - - - - -

Currently, the "Publish" functionality of FIN-Helper is specifically geared toward the main Denver City ISD jobsite.