

SIGMA CONSULTING SERVICES, INC.
A Technical Service & Software Provider

Presents

For What It's Worth

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Here's a handful of ARRIS odd and ends that I've accumulated over the last month or so that you might find useful. Some might be old and forgotten, and some are fairly new and unique to the latest release of ARRIS. Hopefully there's at least one or two you didn't know.

More Mnemonics

- atx* **automatic text** Creates a linear array of text at a user -specified spacing. Useful for sequentially entering multiple lines of vertical or horizontally spaced text in a grid or table.
- dld* **display line data** Displays the length of any line selected with your cursor in ghost text above the line. The display disappears after a redraw.
- sld* **single line data** Displays the length of any line selected with your cursor. The display *does not* disappear after a redraw but instead a single string of text is inserted above each line using the current text parameters.
- ald* **auto line data** Displays the lengths of all lines within a fenced area. The display *does not* disappear after a redraw but instead a single string of text is inserted above each line using the current text parameters.
- ldp* **line data parameters** Sets the offset distance (and other parameters) which affect the text position relative to the line for the 3 commands listed above.
- dfr* **display reference** Flashes the location of the current reference point on the screen.
- dpea* **display everything in area** Displays (redraws) only entities in a user -specified window without redrawing any items outside the window. Speeds up redraws for large drawings with lots of cross-hatching or details.
- err* **error** Displays the two most recent error messages for review.
- rist* **repeated item library status** Displays a list of all the repeated item libraries accessible to the currently opened drawing or sheet. Handy for quick review of loaded RI libraries.
- which* Locates **which** pathname is associated with the name of any repeated item, command, menu or file. Useful for determining from which sigma command library a command is coming or from which repeated item library an RI originates (this command is unique to ARRIS 8).

ARRIS Trivia

□ Using Negative Scale Factors to Mirror X and Mirror Y

Many of us *old* ARRIS users having been using a cool trick for years that a few of you newer ARRIS users still might not know about. That is, using a negative scale factor (such $-1,1$ or $1,-1$) to move or copy entities rather than using the *Mirror X* and *Mirror Y* commands from the Edit and Copy menus.

Here's how it works: Let's say you wanted to copy half of a roof section so that it would be mirrored on the Y-axis. You could go all the way up to the Copy menu and select the appropriate *Entity Type*, *Search Mode* and *Copy Mirror* boxes, then fence in the desired entities, ... **or** ...

You could hold down your left mouse button, drag it left (or right) until you captured the desired entities in a *dynamic edit fence*, then set the *Scale* box from the Match Entity menu to $-1,1$ then select the *Copy Scl/Rot* button from the Match Entity menu, give a reference point for the copy, and **presto!** the selected entities are mirrored in the Y-axis.

A scale setting of $1, -1$ would have resulted in the entities being mirrored in the X-axis. And finally, a scale factor of $-1, -1$ gives you a double mirror (in both the X and Y axes).

If it seems backwards that a negative scale value in the X position will result in a mirroring along the Y-axis, it's because all of the selected points are being moved (or copied) from positive X values to negative X values which appears to move them from one side of the Y axis to the other. Still confused? Doesn't matter, just believe it!

Bonus Usage: If you want to mirror a 3D repeated item (or any 3D objects) using this method, be sure and include a positive 1 value in the Z-axis such as $-1,1,1$. This will serve to keep the Z-axis *heads up* so the depth (height?) of the 3D RI doesn't get turned upside down when it's mirrored (you may have to experiment with this one to see what I mean).

□ A Technique For Lining Up Viewports On A Sheet

A number of users have asked me how to precisely line up 2 or more viewports on a sheet, either vertically or horizontally. Although there may be more sophisticated methods, here's at least one method that works for me:

1. Using a pen 0 construction line, select the *Single Line* button from the *Draw* menu. When prompted for *First point of line*, go to the *Find* menu and select the *Snap To Point In Viewport* button (the icon looks like a box with a diagonal line running through it). Now, using your left mouse button (yes, I said *left*), snap to a point in your first viewport at a location where you would like to line up one or more viewports. Now enter the *End point of the line* any a short distance away, keeping it contained within the viewport boundary if possible.
2. Repeat this step for the additional viewports making sure to snap your first line end point to a point in the viewport that you will use to align it with other viewports.

When finished, you should end up with a series of short line segments that will serve as *handles* for alignment. Remember, you are really drawing these lines in *sheet*

space with one end point attached to a coordinate that also happens to be in *model space*.

3. Using the *Move Area* command, place an edit fence around any viewport to be aligned, then use *Double Reference Point* on the line *handle* to line it up with another viewport (or with any other reference point on your sheet).

□ Extra Copies of noname.db

I find it very useful to distribute an extra copy of *noname.db* to each of my project directories.

Opening a copy of *noname.db* in one of my project directories quickly sets my project (aka *working*) directory in ARRIS without having to open an actual drawing or sheet from that project.

This is particularly helpful when you would like to perform any number of project -related administrative functions such as removing lock files from a project database, creating new RI libraries, importing and exporting drawings and debugging troublesome layers from project databases. It also gives me instant access to open any databases in the project directory without having to *browse* unnecessarily through other project subdirectories.

Did You Know?

- Did you know that a *right-click* on the RI Select menu button always brings up the RI Pager menu in *catalog* mode, regardless of the current *library* or *catalog* mode setting?
- Did you know that a *right-click* on either the pen *or* the color icons from any Edit menu will change the selected entity's pen *and* color to the current pen *and* color simultaneously?
- Did you know that a new symbol number 30 was recently added to the available arrowhead and text leader symbols? It is single line *chevron* style arrowhead that can be selected via the dimension or text leader setup menus.
- Did you now that you can modify the ARRIS shortcut icon in Windows so that ARRIS will start up in your favorite directory? Just right-click on the ARRIS shortcut icon, choose *Properties*, then the *Shortcut* tab. Type in the desired start up (Projects?) directory in the *Start In* box.
- Did you know you could turn *on* the *MS Window Ctrl Key Mapping* function from the *Preferences* menu in ARRIS 8? This allows you to do things like *save* by using a *Ctrl S* and invoke the *Plot* menu by using a *Ctrl P* for example. Some of my other favorites are *Ctrl V* for *pasting* from the ARRIS Clipboard, and *Ctrl O* for opening the *Drawing/Sheet Select* menu.
- Did you know that in ARRIS 8 you can use the ↑ and ↓ arrows on your keyboard to cycle forwards and backwards through your keyboard input including mnemonics and names and descriptions of layers and use the ← and → arrows to move left & right without erasing text?

Well fellow users, I hope you found this first issue of **For What It's Worth** to be informative. Stay tuned for next month's issue where I'll spend a little time on smart wall trivia.

If you ever have any questions about ARRIS software, data conversion services, technical support, evaluation software, updates, 3rd party applications or freelance drafting services, please don't hesitate to call the number listed below... *operators are standing by!*