

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

Presents

For What It's Worth

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Here's another handful of ARRIS odds and ends that I've accumulated since my previous newsletter that you might find useful. Some might be old and forgotten, but some are fairly new and unique to the current release of ARRIS. Hopefully there's at least one or two you didn't know.

Layer Menu Trivia

Although the Layer menu is arguably the most commonly used ARRIS menu in any ARRIS session, I'm often surprised (appalled?) at the number of buttons from this menu that have never been explored by many users. To benefit the members of that select group, I have compiled a brief summary of several of the more overlooked layer functions. So if you haven't tried all of these, would it kill you to press a few new buttons now and then?

□ Coloring Layers By Their Mode Settings

Below each of the *E*, *S*, & *D* columns on the *Layer* menu are three buttons labeled *DB*. If you select the *DB* button below the *S* column, you will notice that the *Default Color For Searchable Layers* menu will pop up along with a prompt asking you if you want to *Override display color for mode SD layers?*

What does this mean? It means if you select a color from the menu, say color 29, then all the entities on all the layers which are turned on for *Display and Search* (but not *Edit*) will be temporarily displayed as gray (or color 29) after you select the *Exit & Display* button.

Why do this, you ask? Well, suppose you were working on a roof framing plan and you wanted to have the layer that contains the first floor walls displayed in some neutral color as a background. Just turn the wall layer on for *Display and Search* and follow the steps outlined above and it will suddenly be displayed as gray...along with any other layers that have only *Display and Search* turned *On*. If you need more layers to be highlighted, turn them *On* for *Display* only and select a new color to represent these layers by selecting the *DB* button below the *D* column. When you are ready to turn this feature off, simply *right-click* on any of the three *DB* or *Color Number* buttons (referenced in the first paragraph) and the colors will all be returned to their original *database* colors. See, wasn't that painless?

□ Load

Although you might think the meaning of the *Load* function would be kind of obvious, I have encountered lots of users who have never pressed this button. Too bad, it's an incredibly powerful option that can be used to *link* layers to your current drawing or viewport without having to access the dreaded *Drawing Layer Manager* menu or redefine the viewport.

The layer *Load* button is similar in function to AutoCAD's *X-Ref* feature. It lets you *load* (or link to) another layer into your current drawing or viewport. This loaded layer can come from your current database or from any other database in your project directory. However unlike a

copied layer that is detached from the original, this layer is really a *link* to its source. If you make a change from the linked database, the change is also reflected at the source.

Put simply, any changes made to a *loaded* layer are reflected in every location where that layer is referenced. For this reason, the *Load* option lets you specify the permissions of the layer being loaded as *RO*, *RW* or *TMP* so that the layer can easily be protected from accidental modifications if it is only needed as a background. By the way, if a layer is assigned a *TMP* status, it will only be a temporary member of the drawing or viewport into which it was loaded. When you exit the drawing, a *TMP* layer will no longer reappear as a member of that drawing or viewport (hence the word *TMP*, got it?).

□ External Database

If you would like to see a list of all the layers that are *linked* to (see above) a database other than the current database, select the *External Database* button. The source database(s) will be listed on the right side of the *Layer* menu where the layer modes are typically displayed. If this menu section is blank, there are no layers loaded from an external database.

□ Remove

It is a common misconception that this button will *delete* a layer from the current drawing or viewport. In reality, the *Remove* button only removes the specified layer(s) from the current drawing or viewport layer list. This is very useful if you've loaded a number of extraneous layers using the *Load* option (see above) and now you'd prefer they go away. Remember, the only way to permanently delete databases, drawings, sheets or layers is to select the *Delete* option (big red X) from the *File* menu and follow the prompts.

□ #Prompt#

When creating new layers, many users have never used the #PROMPT# option in the *Number*, *Name* and/or *Description* fields. By setting the *Number*, *Name* and *Description* values to #PROMPT# (an option from the prompt line), then selecting *OK* from the *Layer* menu, you can quickly enter a long list of new layer names and descriptions sequentially from the prompt line without having to manually reselect those boxes from the menu each time.

□ R/O Update

For users working in a multi-user environment, the *Read Only Update* button can be used to instantly update all the *read only* layers in your current drawing or viewport without having to reload it from disk. This can be used to view any modifications that were made by your fellow users working simultaneously on those same read only layers in the background. It also saves you from having to yell across the office to see if any updates were made in the third cubicle over from yours (**warning**: for some reason other users tend to frown on this).

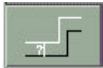
Did You Know?

- Almost everybody has discovered that you can use the *zflat* command to quickly flatten elements with 3D coordinates (such as topo maps) into 2D coordinates with a Z value of 0. But did you know that you could also use the *zflat* command to quickly generate *foreshortened* elements in your exterior elevations?

Lets say you have angled bay window on your floor plan that you need to draw a front elevation of but you dread having to project all those angled window mullions down to represent the window(s) at a 45 angle. Instead, just draw the window (or place a window RI) on the flat X,Y plane. Using *Move/Scal Rot*, rotate the window about the Y-axis to represent the angle of your bay window (example: rotation = 0,45,0). (**Note**: If you used an RI to represent your window, freeze the RI before continuing on to the next step).

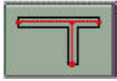
Now type the *zflat* command, fence-in your rotated window element and accept the default value of 0. Voila! Your window has been “flattened” to the X,Y plane and can now be easily moved or copied to it’s proper new location. (Thanks to Keith Kirsch for this handy time saver).

- ❑ This may be a familiar behavior to many ARRIS users, but did you know that the two -point distance command when applied to opposite corners of a box displays the distance measurement of both sides of the box as well as the distance between the corners? The vertical and horizontal leg distance s are show as the *Delta X* and *Delta Delta Y* values respectively. You can also use this trick to measure the thickness of a window frame in the X and Y directions by getting the distance between any two inside and outside corner points.
- ❑ Did you know that in ARRIS 8, the *Layer Retain* option was added to the *Match Entity* menu to facilitate copying without having to go all the way up to the desktop *Copy* menu? Well I didn’t until very recently – d’oh!
- ❑ Did you know a right-click on the *Trim or Extend Line* button will shortcut you to the tool which allows you to trim or extend a line or circle using *distance* instead?
- ❑ Did you know there was a *Search Method* option on the *Edit* menu called *Select Single Entity From Inside Of Fence*? It can be used to cycle through multiple entities that share the same data point, such as RI’s, so you can select only the one you wish to edit. How long has this option been on the *Edit* menu? Well, at least since ARRIS 2001 I’m embarrassed to report.
- ❑ Have you ever drawn a box and wanted to draw another offset box 2’ larger without having to use *New Ref* with coordinates or (4) offset lines which have to be joined at the ends? There is a great *Offset Lines/Curves* button under the *Line Tools* menu that will do the job faster. The *Offset* button (see icon below) has 3 prompts.



Offset Line/Circle Button

- 1) *Offset distance? positive value offsets to right, negative to left.* Enter [2] for a 2-foot offset.
 - 2) *1st bndry pt (F4:chase, F:10 new offset):* [Select the right vertical line near the bottom corner using your F4 key]
 - 3) *Select end point (F10 for auto-chase):* [Press F10 key]. A new box 2’ larger than the old box should appear. If the new box was drawn 2’ smaller (inside) the existing box, your cursor wasn’t close enough to the lower half of the line. Just select *Undo* and try it again. With a little practice, you can get it right first time. Also try experimenting using [-2] for a box that is 2’ smaller than the existing box. (**Note**: this command will offset any combination of contiguous lines, circles or lines *and* circles (closed or open) not just boxes!
- ❑ If you’ve never used the *Display Wall Points* button to highlight the reference lines and intersections of smart walls you’re missing out on a great troubleshooting and training



Display Wall Points Button

tool (see icon above). This button is located in the *Wall Tools* menu along with many other useful smart wall tools. I use this button so often that I've added it my TOOLBAR menu. However, I got tired of responding to the *Selection Method* prompt with *all*, so I modified the TOOLBAR command to `:mn_wlpts;all` so that the *all* response was automatic.

- Did you know there's a powerful new feature under the ARRIS 8.x *Copy* menu called *Copy to Clipboard* and *Paste from Clipboard*? If you haven't tried using it yet, you're missing out on a really powerful feature. Be sure and pay attention to the *Layer Retain* status, it will determine upon which layers the copied and pasted entities are eventually placed. (**Note:** You can even use *Ctrl V* to paste the copied entities from the clipboard!).

Software Buzz

ARRIS 8.1 is now shipping!

- If you haven't upgraded to ARRIS 8.1, visit www.sigmaserv.com/ArrisNews.html and check out the *ARRIS 8.1 New Features* PDF file or contact me for details.
- New seats of **ARRIS 8.1** can now be purchased for the unbelievably low price of **\$995!** In addition to receiving the entire **ARRIS Architect Studio**, this price also includes a free 1-year **ARRIS Maintenance Subscription** and free 1-year **eZ Subscription**.
- Sigma Design and @ Last Software have joined forces to create one of the most compelling CAD/Design offerings available today. For the low price of **\$1295**, ARRIS customers receive the complete **ARRIS 8.1 Architect Studio** and a complete, full version of the award winning 3D design software, **SketchUp**. This bundle also includes all of the additional items mentioned above and is available for purchase immediately. For more information on the powerful SketchUp software, visit www.sketchup.com. ARRIS 8.1 users can also purchase a copy of **SketchUp** directly from Sigma Design through the end of April for **\$329**.
- Stay tuned for the upcoming release of the **7.3 Translator** from Expert Infocad. It is a great new release that will provide support for ARRIS 8.1 and AutoCAD 2004. It was rewritten from scratch in C++ to be able to support more advanced AutoCAD features. For the first time, it will be translating *SOLID3D* entities (ACIS format) and *Spline* entities (NURBS curves) from AutoCAD to ARRIS. New seats are priced at **\$275**, upgrades from ARRIS 8.0 at **\$150** and upgrades from 2001 at **\$175**. Versions older than 2001 need to purchase a new seat.
- A new version of Jeff Small's **ARRIS++** has been issued to correspond to the ARRIS 8.1 release. This works with ARRIS spin #101 and #103. You can read about all of the new features at: http://cjsa.home.comcast.net/aplus/APLUS/ap_chg08.html

Well fellow users, I hope you found this issue of **For What It's Worth** to be informative. Stay tuned for the next issue where I'll review some of the new 8.1 features.

Until then, if you have any questions about ARRIS or eZ software, the Expert Translator, training, data conversion services, technical support, evaluation software, ARRIS updates, 3rd party applications, web site creation, colored renderings or freelance drafting services, please don't hesitate to contact the number or email address listed below...*operators are standing by!*