

12_31 Excessively Large Cross Section Sheet (XPL) IPS File

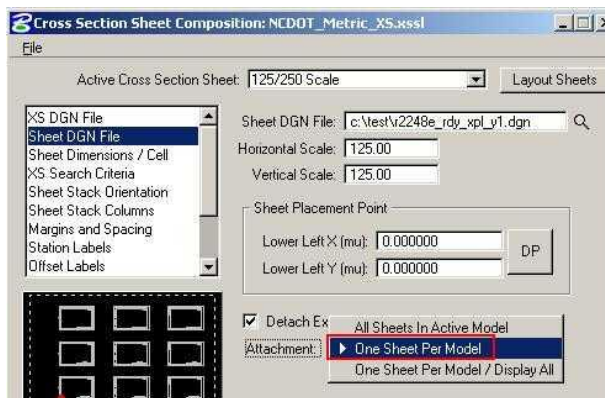
Question:

I think my Ips files are corrupt. The file size for the [mainline]_xsc and YLine_xsc are too large. I recreated the YLine_xsc from Interplot Organizer but there was no change in the file size. The total number to Yline cross section in YLine_xsc is 113.[Why is my IPS files so large?]

Answer:

First, I would like to thank you for using correct standard file naming convention in this TIP. I has made our job easier.

The -Y- Line cross section sheets IPS file is excessively large because in each XPL file, you have referenced the cross section sheets again in the default model. This situation is commonly first encountered during the laying out of cross section sheets. When setting the Geopak Cross Section Composition (XSSL) tool, choose "One Sheet Per Model" as the attachment method. Do not choose the "All Sheets in Active Model" nor "One Sheet Per Model/Display All" option.



The original IPS file size was over **224 MB!**



I detached all reference files/models from the default model of each -Y- Line cross section XPL sheet file and recreated the IPS file. I was able to drastically reduce the size of the file, with identical amount of plots/sheets, to 14 MB! All from not re-referencing or re-creating each cross section sheet again in the default model. Remember that each cross section is already in its own model.

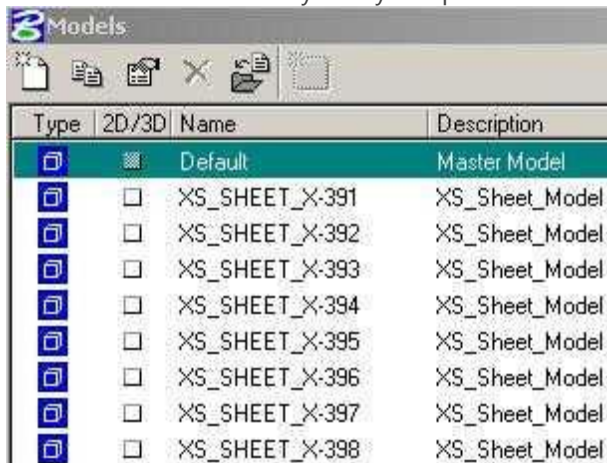


[Want to know why? Read on](#)

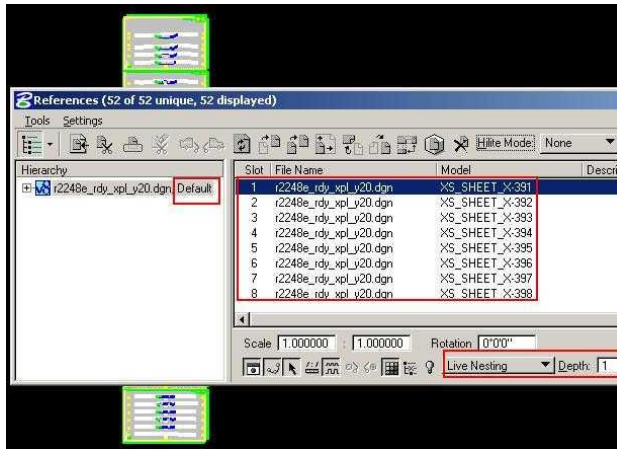
What is Live Nesting Reference?

Live nesting of reference models to a depth of some number can be confusing and can lead to some potential problems such as this if you are not aware of its function. When the "One Sheet Per Model/Display All" option has been selected, the cross section sheets are layout out and referenced in their own model **plus** the default model. Live nesting depth is set to "1".

What does that mean? Say that you open a XPL file and go to the default model.

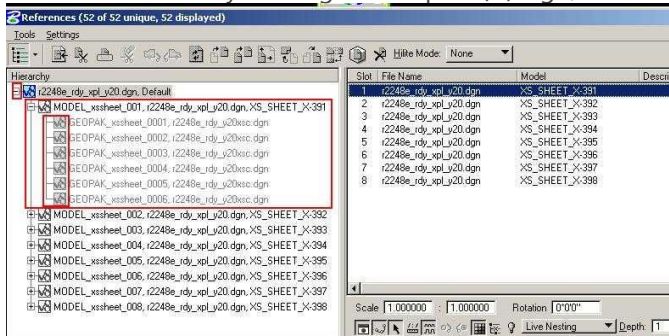


In this case, the default model also referenced the other XPL sheet models with a live nesting depth set to "1".



How many referenced models are being attached to the default model?

Initially one would say 8 models are referenced to the default model. However, if you expand the default model of this file by clicking on the plus (+) sign, it will reveal first "depth" of the original 8 models.



As one of the original 8 model referenced (depth of "0"), and as how many reference models are referenced/attached to it, they are automatically nested or referenced inside. With live nesting depth set at 1, the total number of referenced models is 52 for just this one default model! This same practice is

being carried on to the other 8 models in this one file. Potentially the number of referenced models can be exponentially, depending on the depth set.

How come the DGN file does not change in size while the IPS file is excessively large?

Because in the default model, not the other XPL sheet models in the same file, there are no graphical element created nor placed. All are referenced. On the contrary, iPlot Organizer IPS file will have to store and remember all those reference files as a resource to capture your plotting properties. The unnecessary amount resource in the IPS file makes the file size excessively large.

It is necessary to reference anything in the default model of the XPL file?

NO. As a matter of fact, potential problems such the time it takes to open and close an IPS file can take a lot longer. Actual submitting of plots make take 15 to 20 times longer or not plot at all if the IPS is too large. In addition, the Roadway Model Navigator has been develop to aid cases like this.

Lastly, will there be a need in Roadway to use live nesting of reference models?

Yes. Currently, live nesting is being used by other NCDOT Units. Roadway will see this feature starting with Roadway Design Hearing Maps.