

SmartPlant[®] *Instrumentation*

Enhanced Report Layouts

FLUOR

SmartPlant[®]

Implementation Team



FLUOR[®]

INTERGRAPH

Enhanced Report Layouts



Overview

An enhanced report layout is a group of settings for one or more enhanced report items of a particular report type such as Enhanced Smart Loop or SmartPlant Panel-Strip Reports.

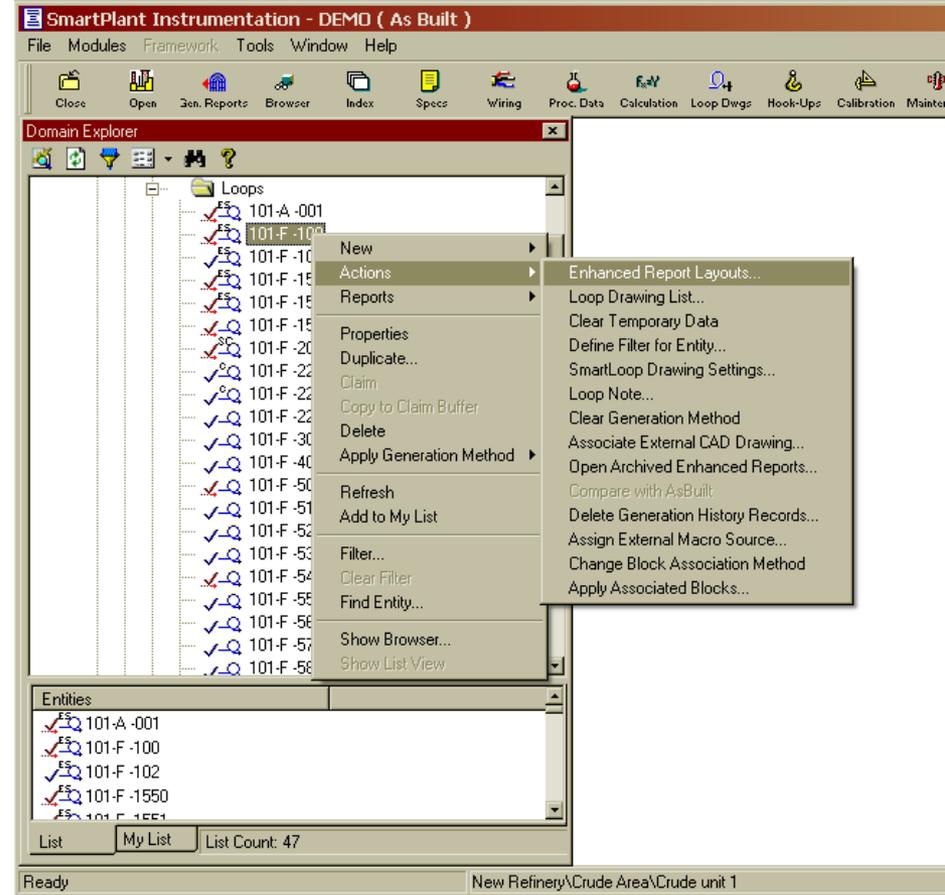
A layout includes a template for specifying the page size, a title block, various view options, macros, redlining, title block alignment, and the working area margins.

Default layouts are defined for each of the enhanced report types but the software gives you the flexibility to create your own.

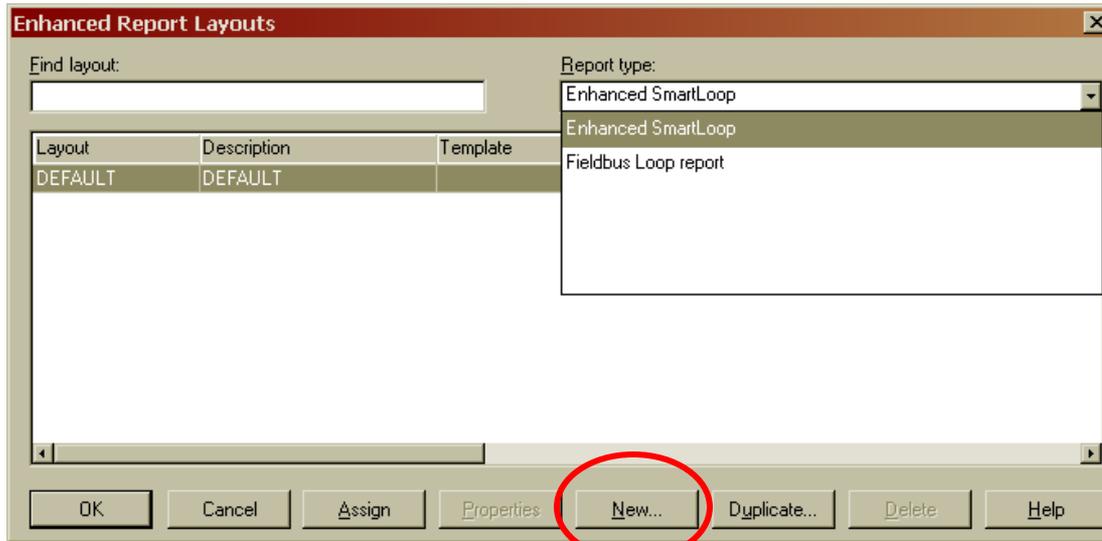
Enhanced Report Layouts

Create a New Layout

- ◆ Right-click an enhanced report item in the Domain Explorer.
- ◆ Select **Actions > Enhanced Report Layouts...** from the pop-up menu.



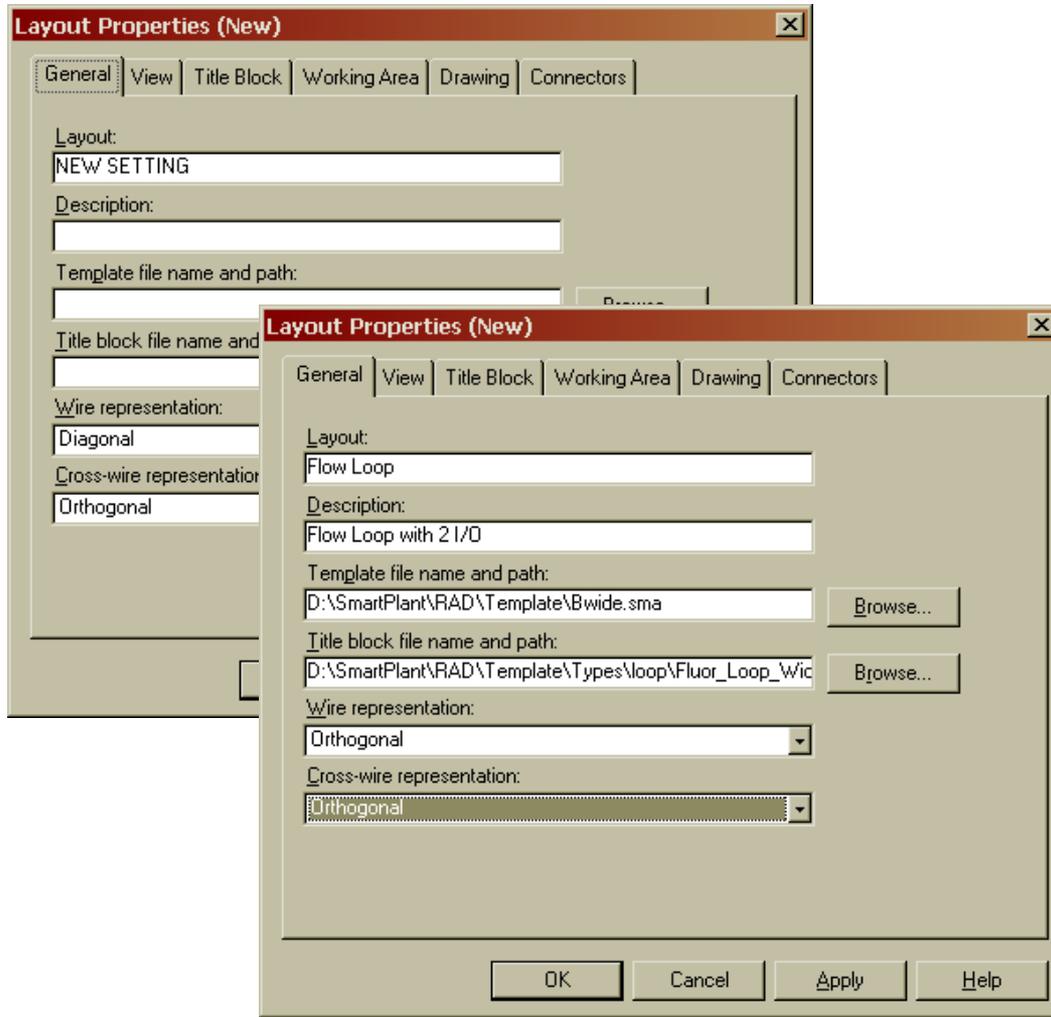
Enhanced Report Layouts



- ◆ In the Enhanced Report layout dialog box, select the down arrow from the Report type drop-down box and select the type of report for which you want to make the new layout.
- ◆ Select the New button to create a layout with new properties.

Note: Selecting to duplicate an existing layout will create a new layout with all the same properties as the source layout. It also will duplicate the template, title block, and all the symbols and graphics in the target layout that have been saved in the source layout at the layout level.

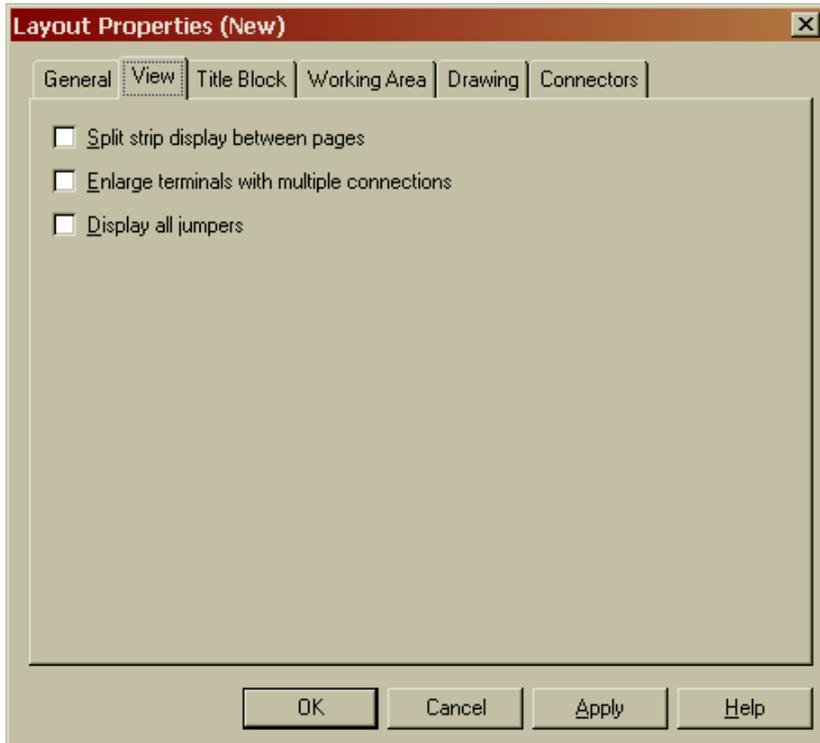
Enhanced Report Layouts



General Tab

- ◆ Assign a Layout name and Description.
- ◆ Assign a template file by selecting Browse to navigate to the .sma file or leave blank to use the default template.
- ◆ Assign a title block file by selecting Browse to navigate to the .sym file or leave blank to use the default title block.
- ◆ Select Diagonal or Orthogonal for the Wire and Cross-wire representation.

Enhanced Report Layouts

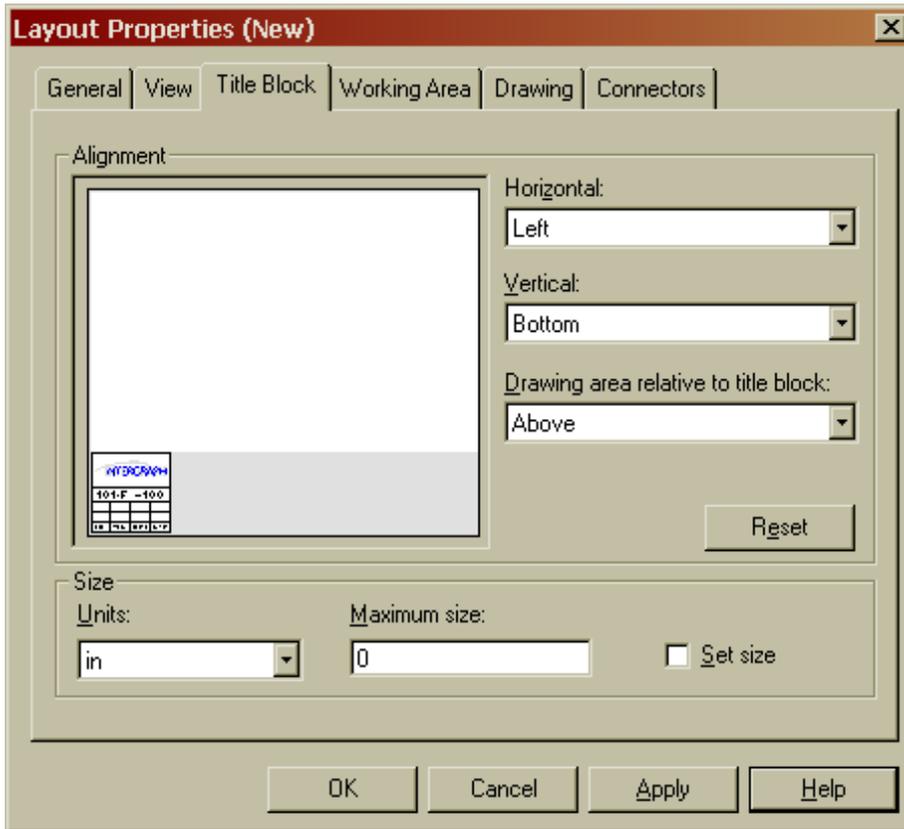


View Tab

Select the view options that you want to see on your layout.

- ◆ **Split strip display between pages**
- ◆ **Enlarge terminals with multiple connections**
- ◆ **Display all jumpers**

Enhanced Report Layouts



Title Block Tab

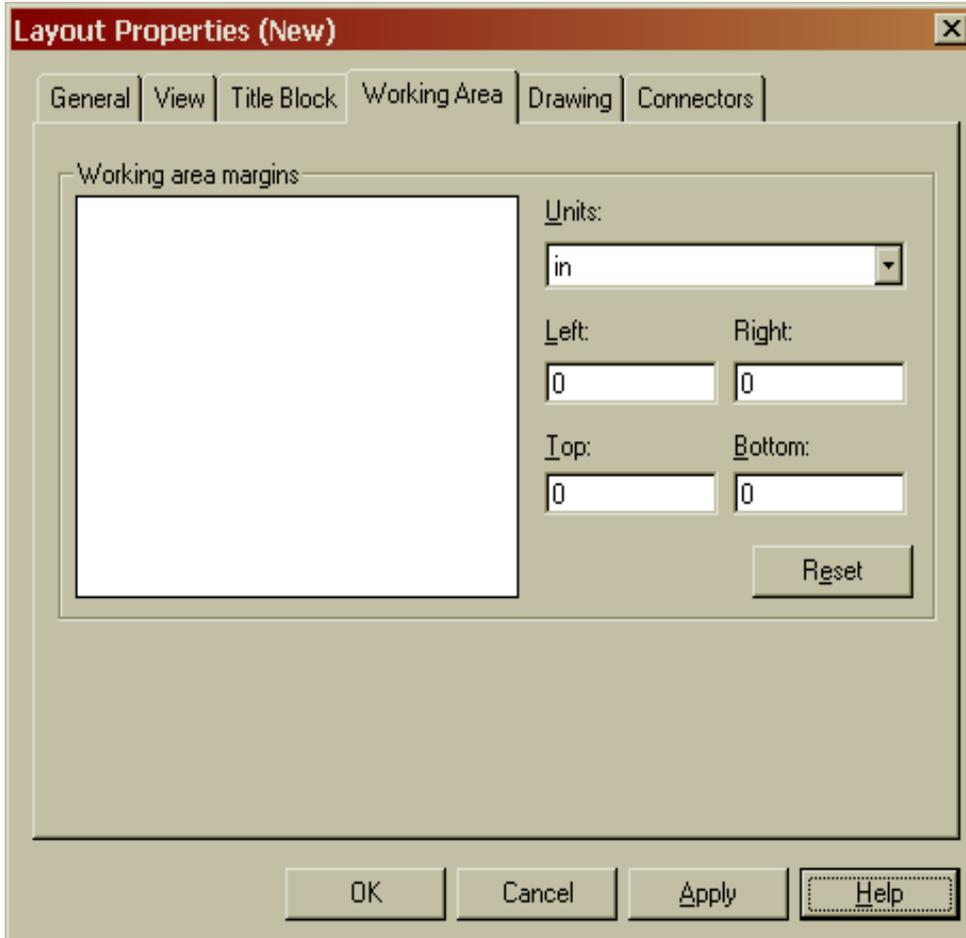
- ◆ Select the Alignment of your title block.

The alignment window displays the position of the title block origin and the edges of the drawing area of the page, when you use a symbol file (.sym) as the title block.

- ◆ Select Maximum size.

This is used if you want to specify a maximum size for your title block, you would clear the Set size check box if you want the title block to take up as much room as it needs.

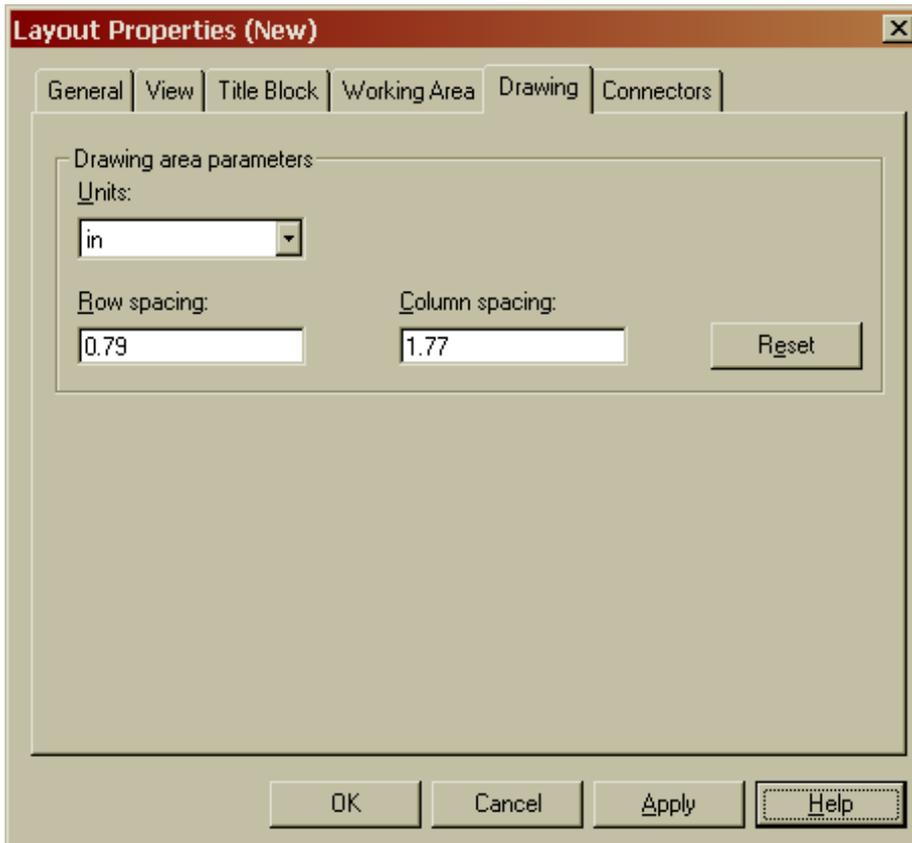
Enhanced Report Layouts



Working Area Tab

- ◆ These settings are used to set margins to the drawing area.
- ◆ They can be left at their default settings or modified as needed.
- ◆ To set new margins select a unit and then the number of units in each field.
- ◆ You can also drag the margin borders in manually on the “Working area margins” window.

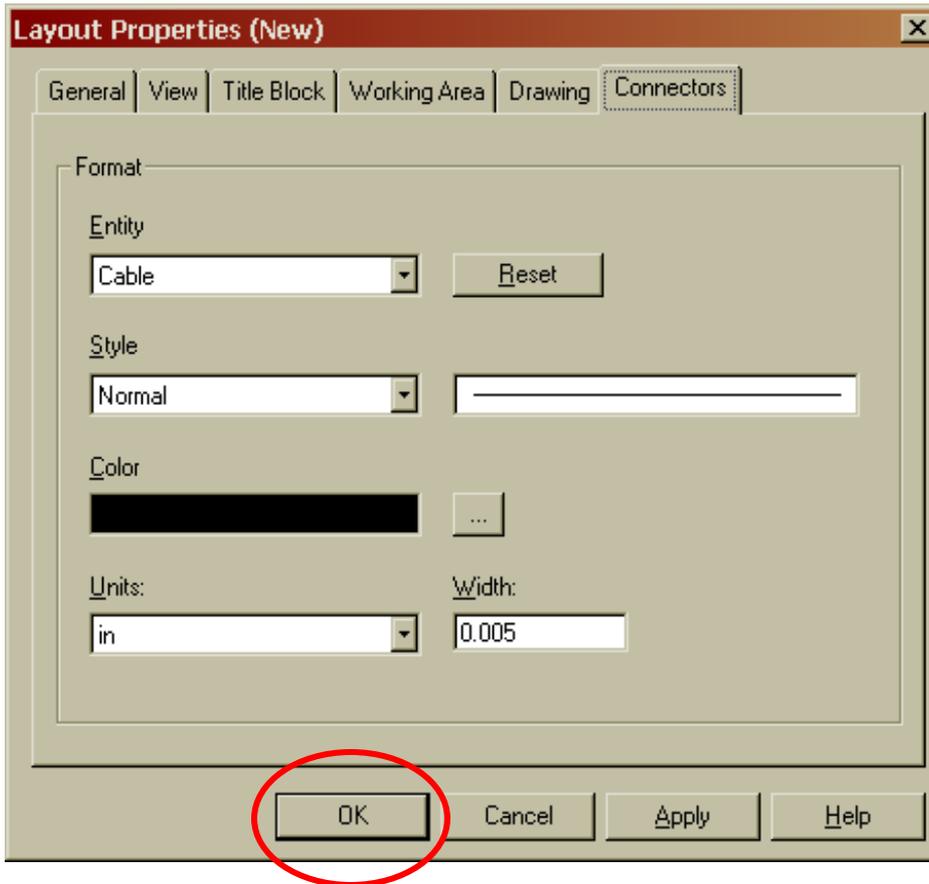
Enhanced Report Layouts



Drawing Tab

- ◆ These settings are used to set spacing for entities on the drawing sheet if drawings are being generated in custom symbol mode.
- ◆ The settings can be left at their default settings if you are not using custom symbols.

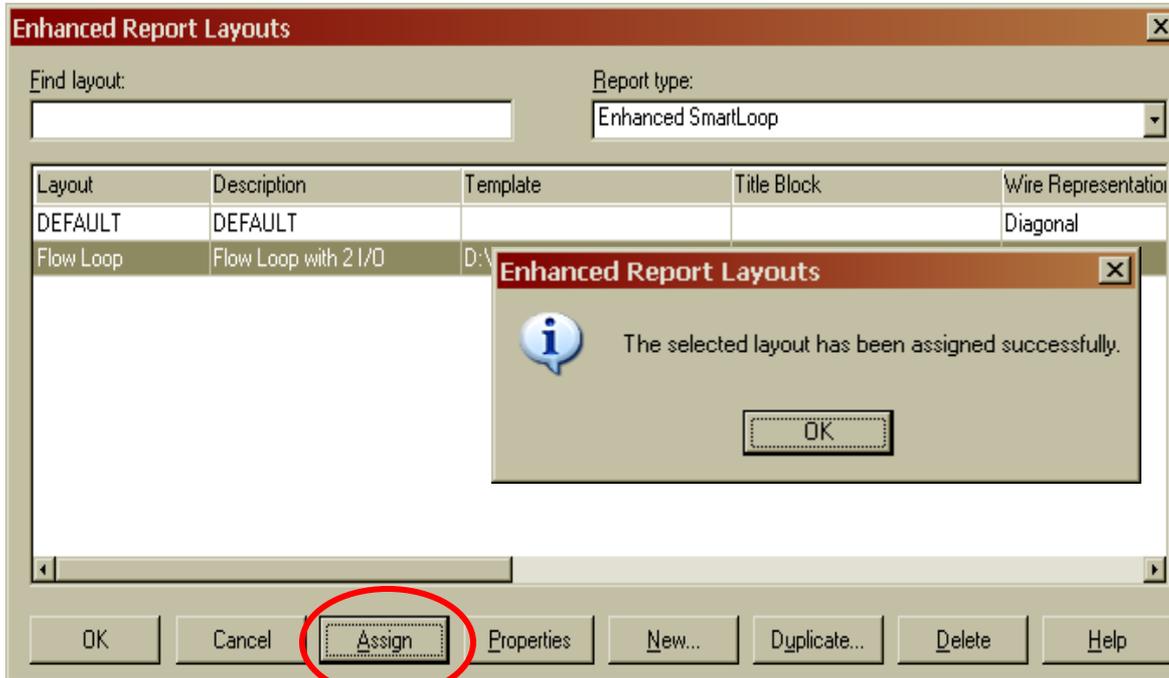
Enhanced Report Layouts



Connectors Tab

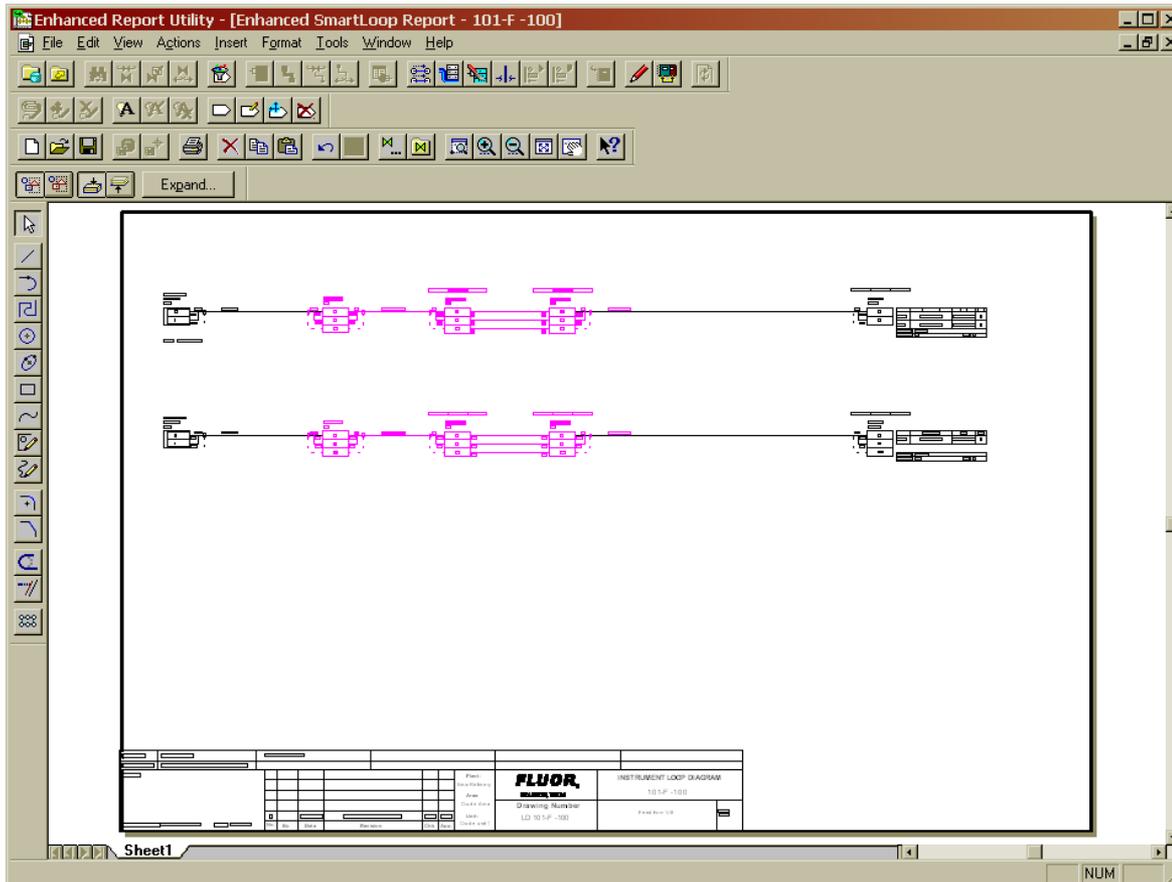
- ◆ These settings allow you to specify the style, color, and width of each line that represents a wire, cable, or cable set in your layout.
- ◆ Select the OK button and the new layout will be saved and the dialog box will close.

Enhanced Report Layouts



- ◆ You now can assign your new layout to your loop by selecting the Assign button in the Enhanced Report Layouts dialog box.
- ◆ You will receive a message that the selected layout has been assigned successfully.
- ◆ You can now close this dialog box by selecting the OK button and return to the Domain Explorer to generate the Loop Drawing Report with its new layout.

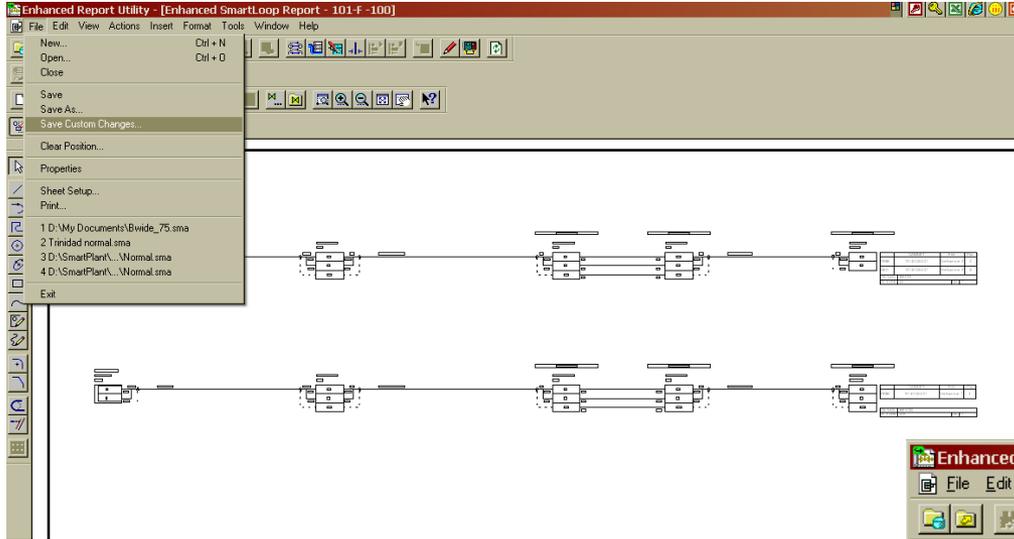
Enhanced Report Layouts



- ◆ You can move the entities in your drawing by selecting the items you want to move, and then dragging them to a new position...
- ◆ To select multiple items you can draw a window around them with your cursor or hold down the Ctrl button and select each item.

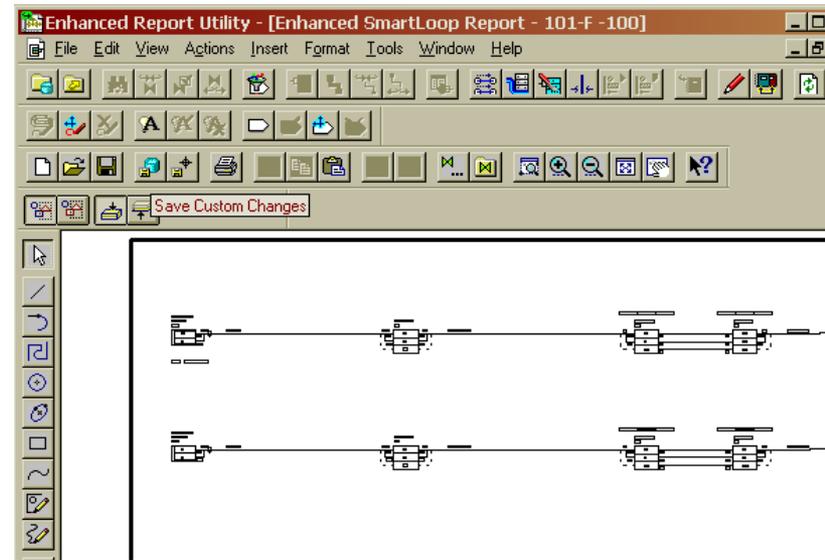


Enhanced Report Layouts

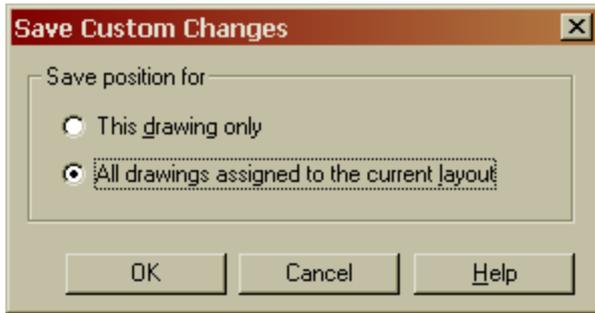


- ◆ You then save their positions by selecting **File > Save Custom Changes** from the Menu Bar.

- ◆ Or by selecting the **Save Custom Changes** button from the Actions Toolbar. 



Enhanced Report Layouts

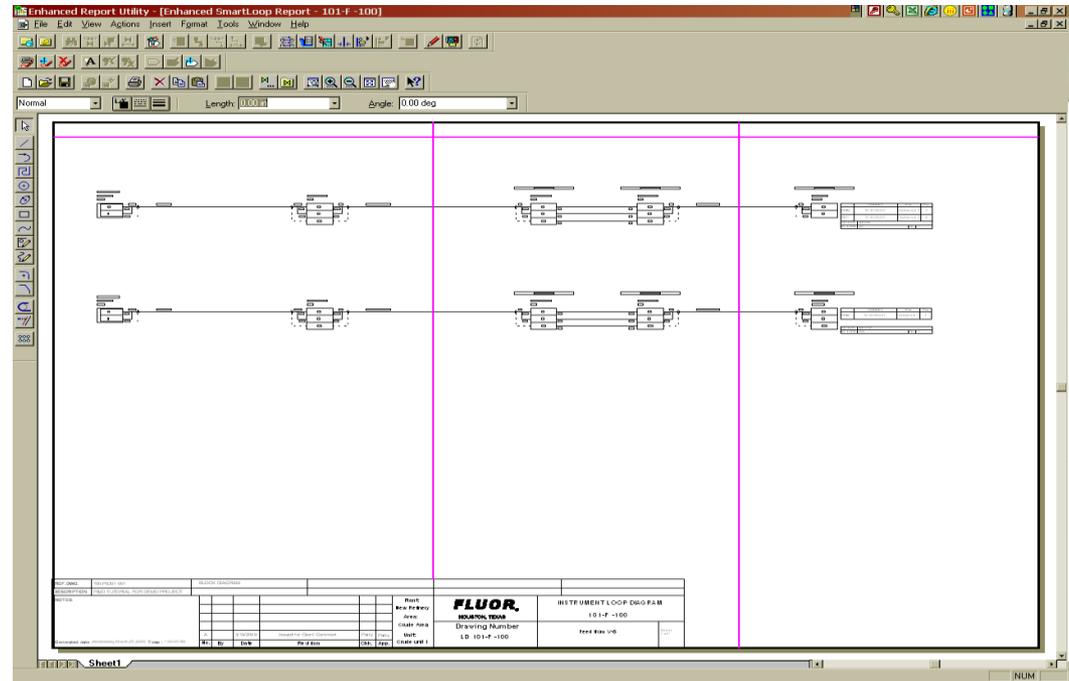


- ◆ In the **Save Custom Changes** dialog box, you will be asked if you want to save the position for:
 - **This drawing only, or**
 - **All drawings assigned to the current layout.**
- ◆ **Saving to “This drawing only” means the positions will be saved to this drawing, other drawings assigned to the layout will not be effected by these changes.**
- ◆ **Saving “All drawings assigned to the current layout” means all drawing assigned to this layout will inherit the same positions for the drawing entities of the same type.**



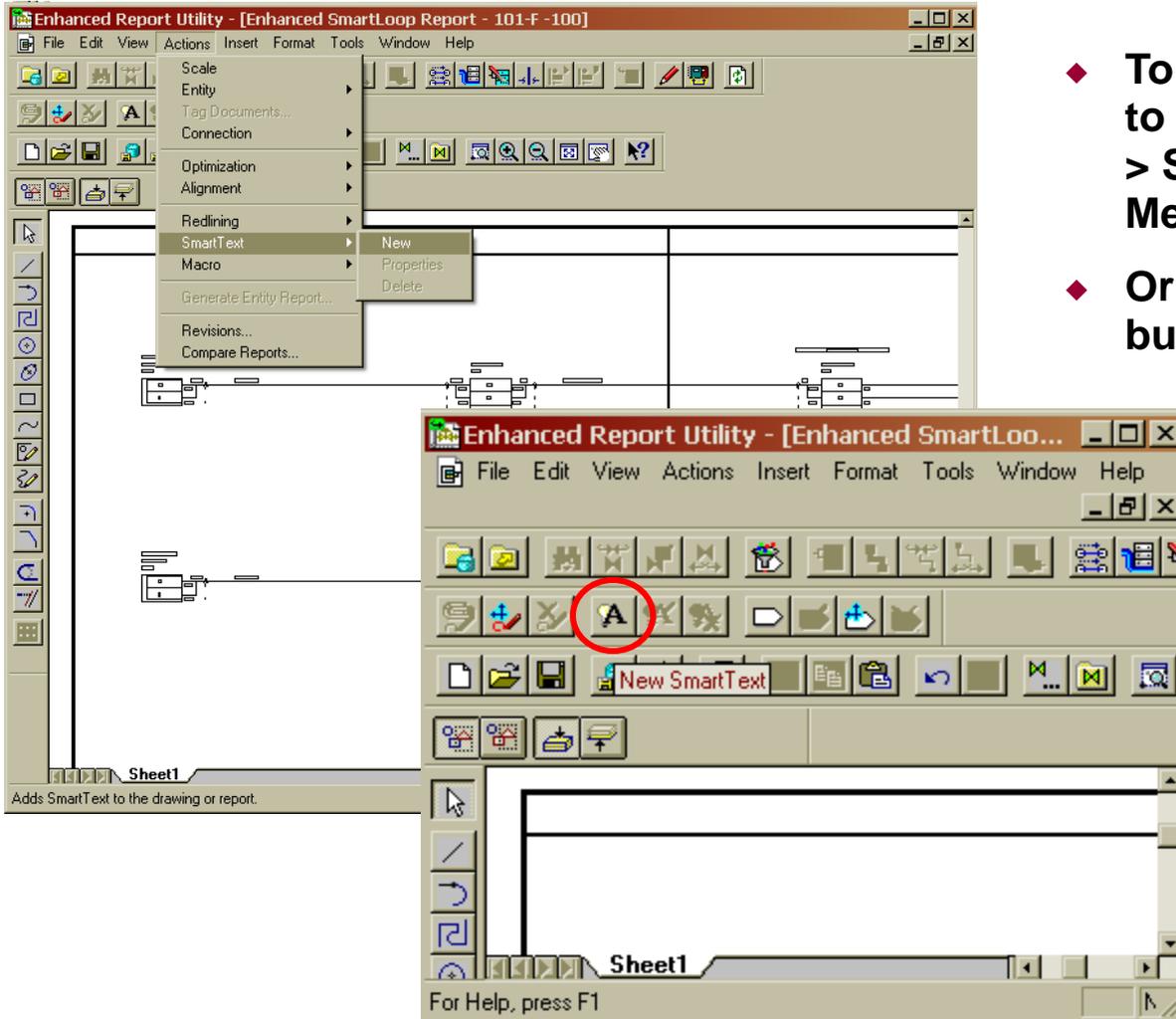
Graphics and Redlining

- ◆ Graphics such as lines and circles can be added to your layout but only saved to the drawing if attached as redlining.
- ◆ To draw and attach redlining graphics, select the line button from the drawing toolbar and draw lines on your drawing.
- ◆ Select the lines so they are highlighted and then select the attach redlining button from the Actions Toolbar  or select Actions > Redlining > Attach from the Menu Bar.
- ◆ You then need to save your custom changes to either the drawing level or layout level as before.



Note: Redlining items may need to be attached and saved individually.

SmartText and Watermarks



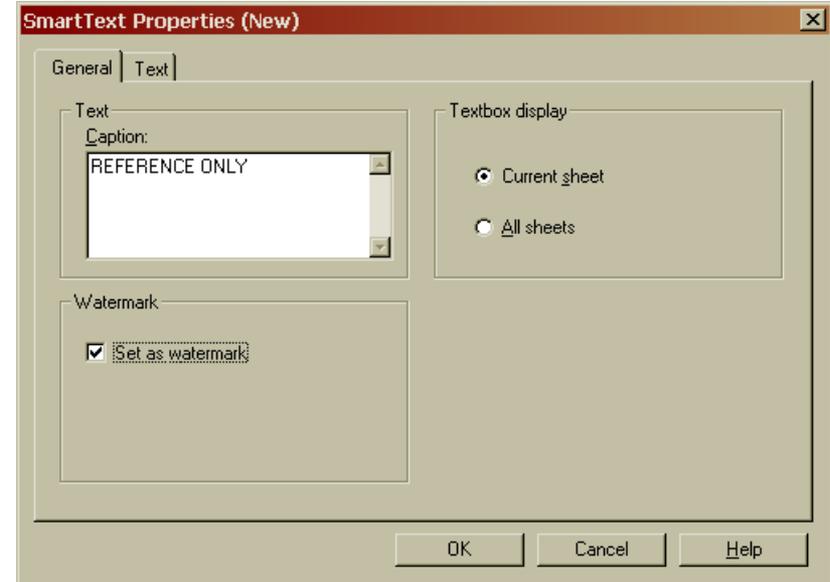
- ◆ To add SmartText or a watermark to your drawing select **Actions > SmartText > New** from the Menu Bar.
- ◆ Or select the **New SmartText** button from the Main Toolbar.

Note: A watermark is SmartText that appears behind other drawing items. The “Save as watermark” option is only available when you add SmartText for the first time.

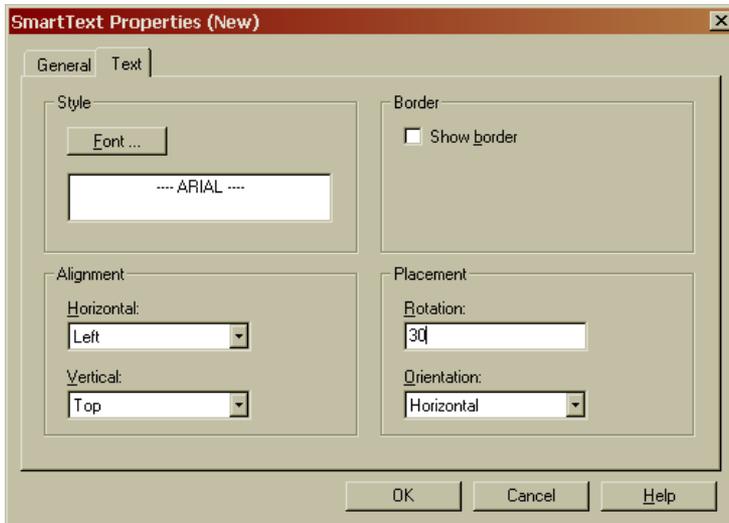


SmartText and Watermarks

- ◆ On the General Tab of the SmartText Properties (New) dialog box in the Caption window type your text, if this is to be a watermark check the box Set as watermark.

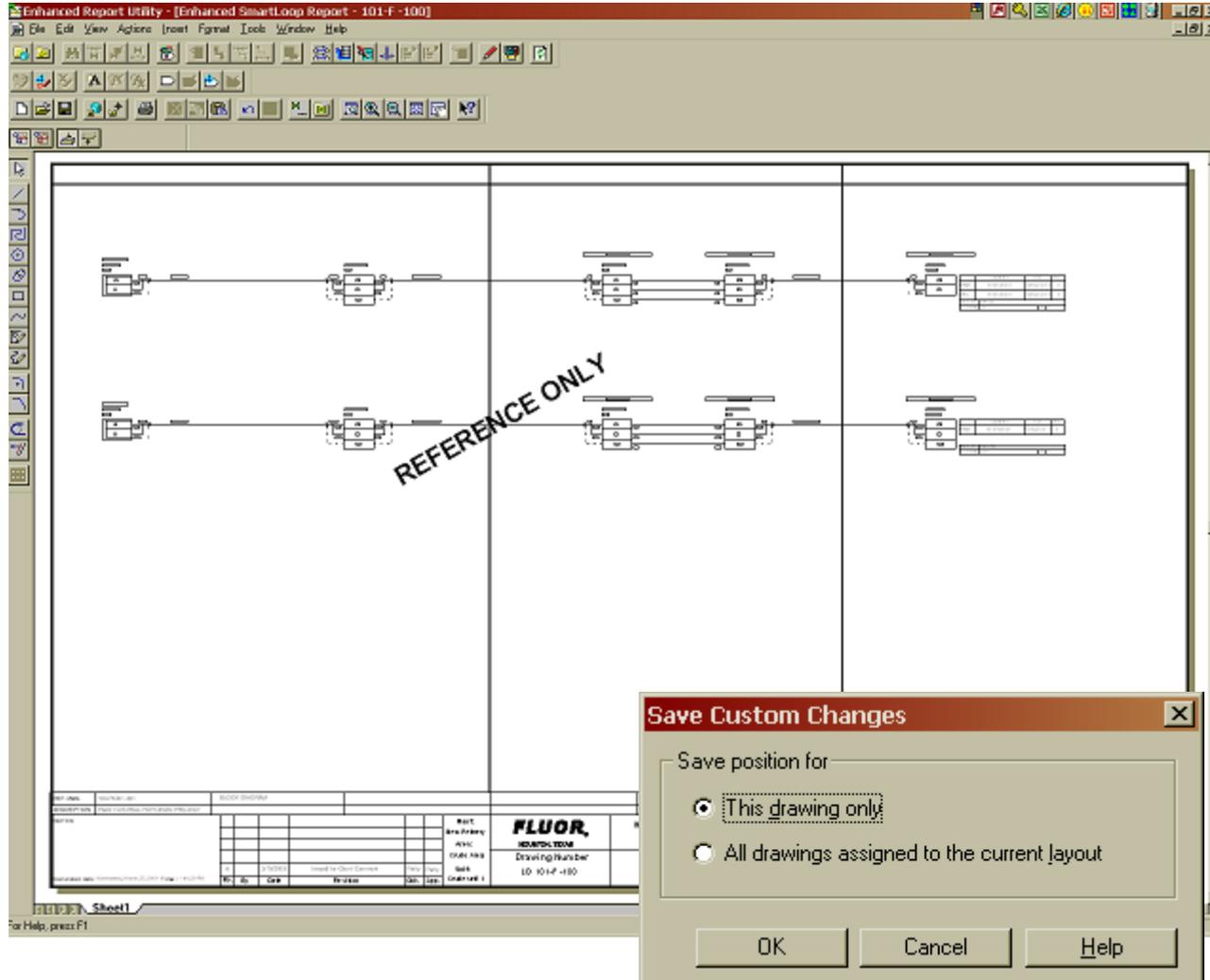


- ◆ On the Text tab select the font properties, alignment and placement, then select OK.





SmartText and Watermarks

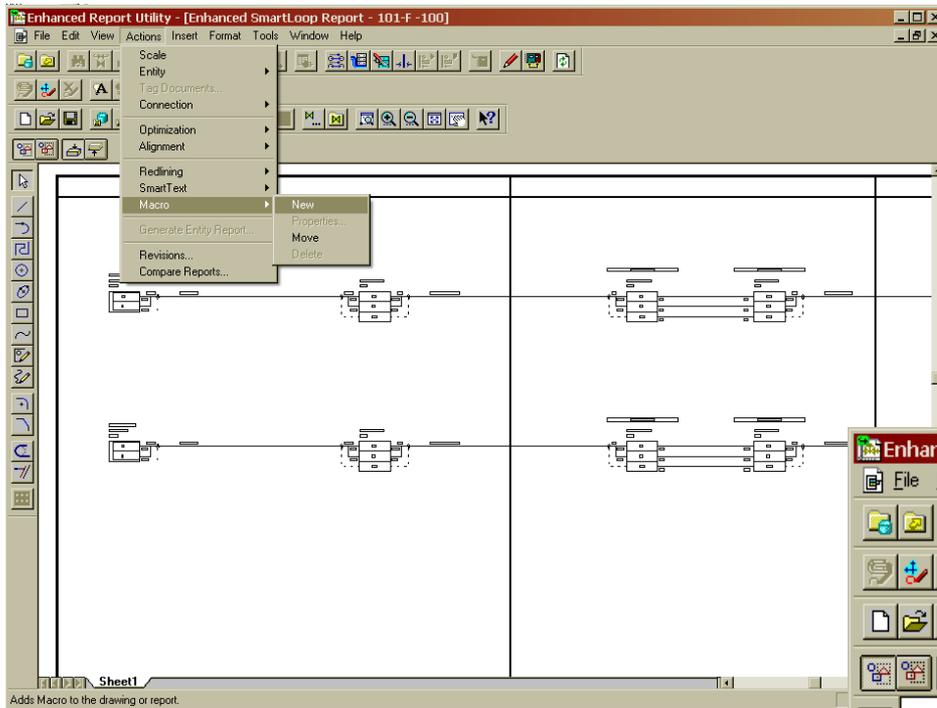


- ◆ You will be returned to the drawing and your mouse pointer will become a cross-hair icon so you can place your SmartText.
- ◆ Select the Save Custom Changes button. 

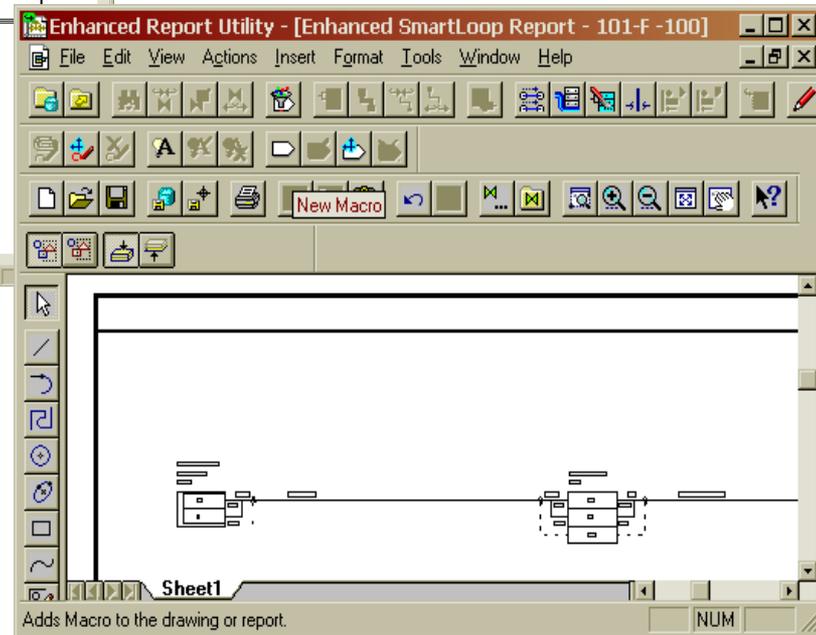
Note: SmartText and watermarks can ONLY be saved at the drawing level not to the layout level. To save text to the layout level you can use a macro caption.



Macro Caption



- ◆ To add text as a macro caption, first click on your drawing sheet and then select **Actions > Macro > New** from the Menu Bar.
- ◆ Or Select the **New Macro** from the Actions Toolbar. 



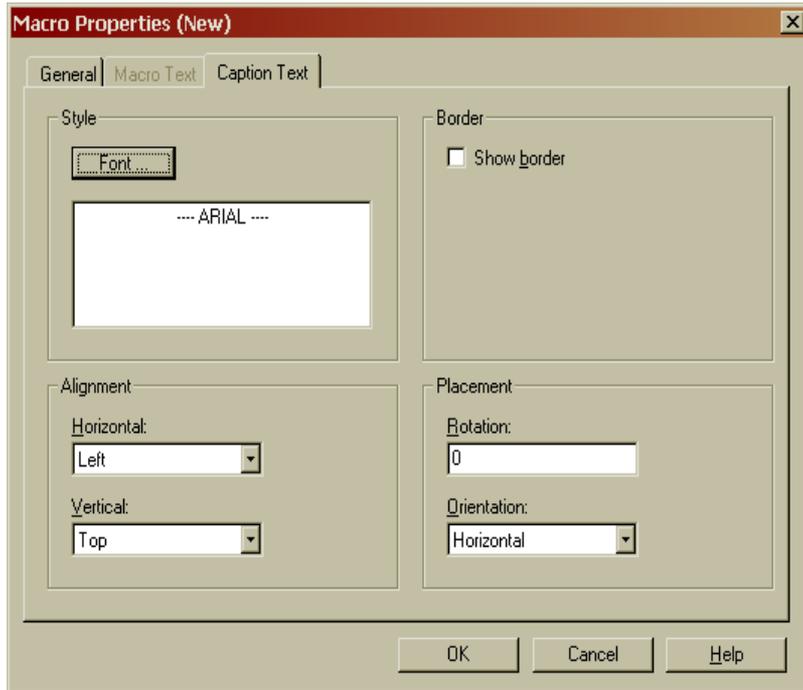
Macro Caption

- ◆ The Macro Properties (New) dialog box will open.
- ◆ On the General tab, in the Label section type your text in the Caption field.
- ◆ Select the Display caption only check box.

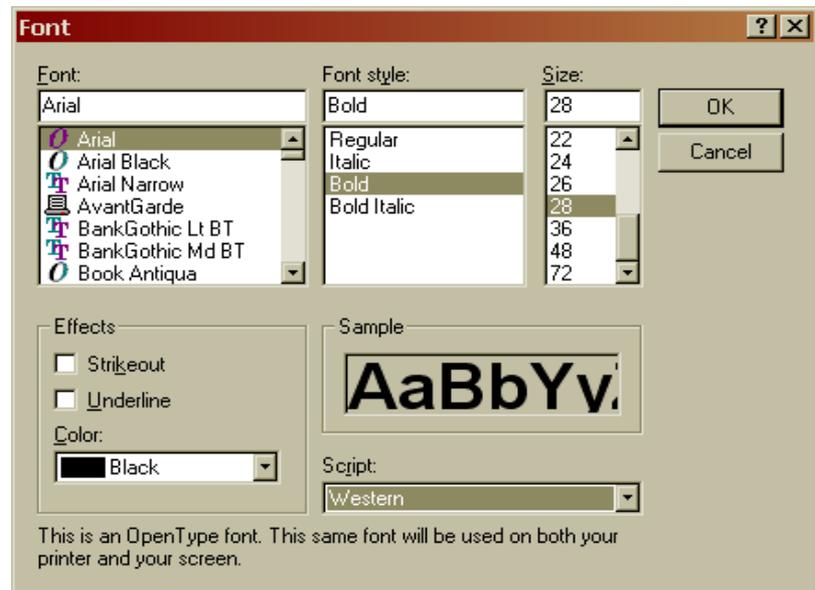
The screenshot shows the 'Macro Properties (New)' dialog box with the 'General' tab selected. The 'Macro definition' section has 'Macro type' set to 'GENERAL' and 'Macro' set to 'SHEETNO'. The 'Filter' section has 'Filter' set to a dropdown menu and 'Description' set to an empty text box. The 'Label' section has 'Caption' set to 'FIELD'. The 'Display caption only' checkbox is checked and circled in red. A red arrow points to the 'Caption' field. The 'Display 'Null' when no data is available' checkbox is unchecked. The 'OK', 'Cancel', and 'Help' buttons are at the bottom.



Macro Caption



- ◆ Select the Caption Text tab to set your font properties, text alignment and placement.
- ◆ Select the OK button to close the Font... window and the OK button again to close the Macro Properties (New) dialog box.



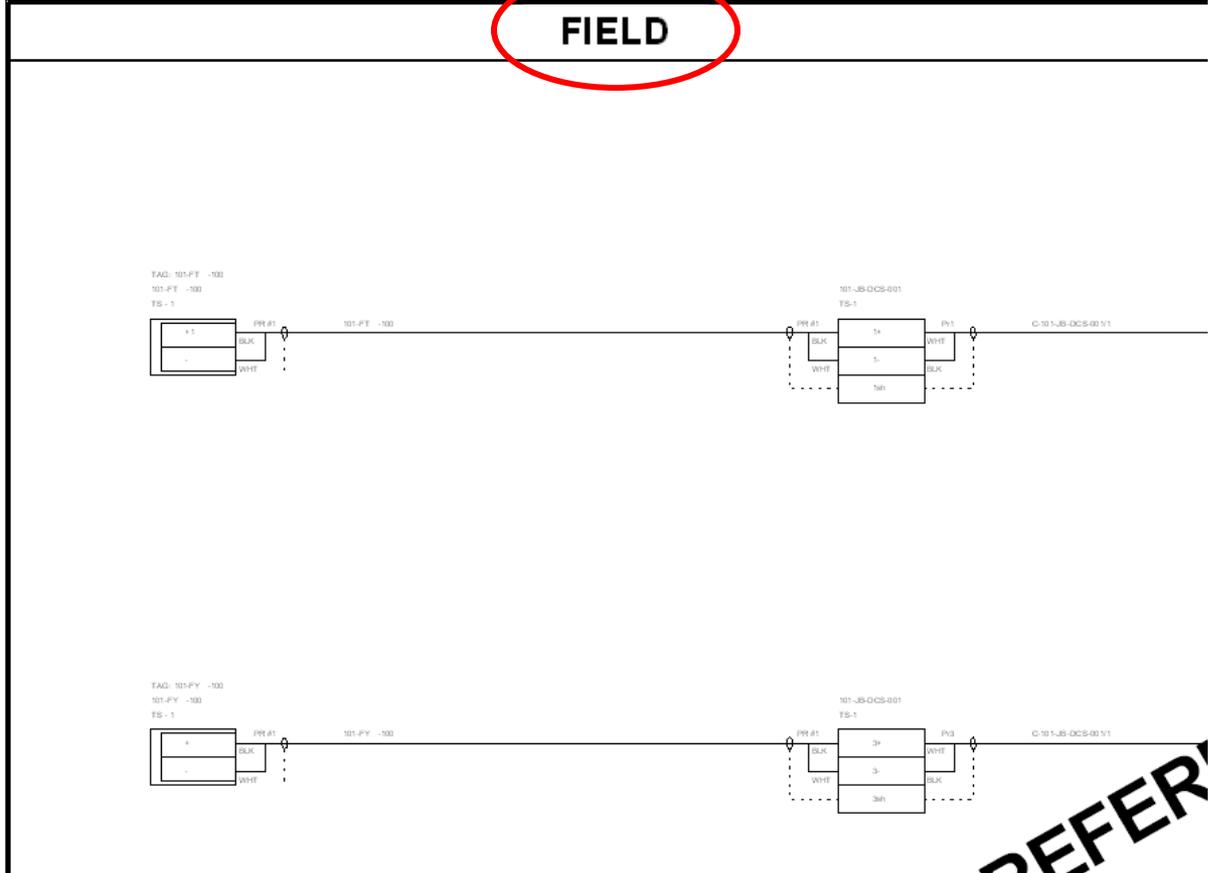


Macro Caption

FIELD

- ◆ You will then be returned to your drawing with cross-hairs to place your macro caption.
- ◆ To save this text, select the **Save Custom Changes** button from the **Actions Toolbar**. 

Note: This text is saved at the layout level. Each Enhanced Report saved to this layout will display this text.



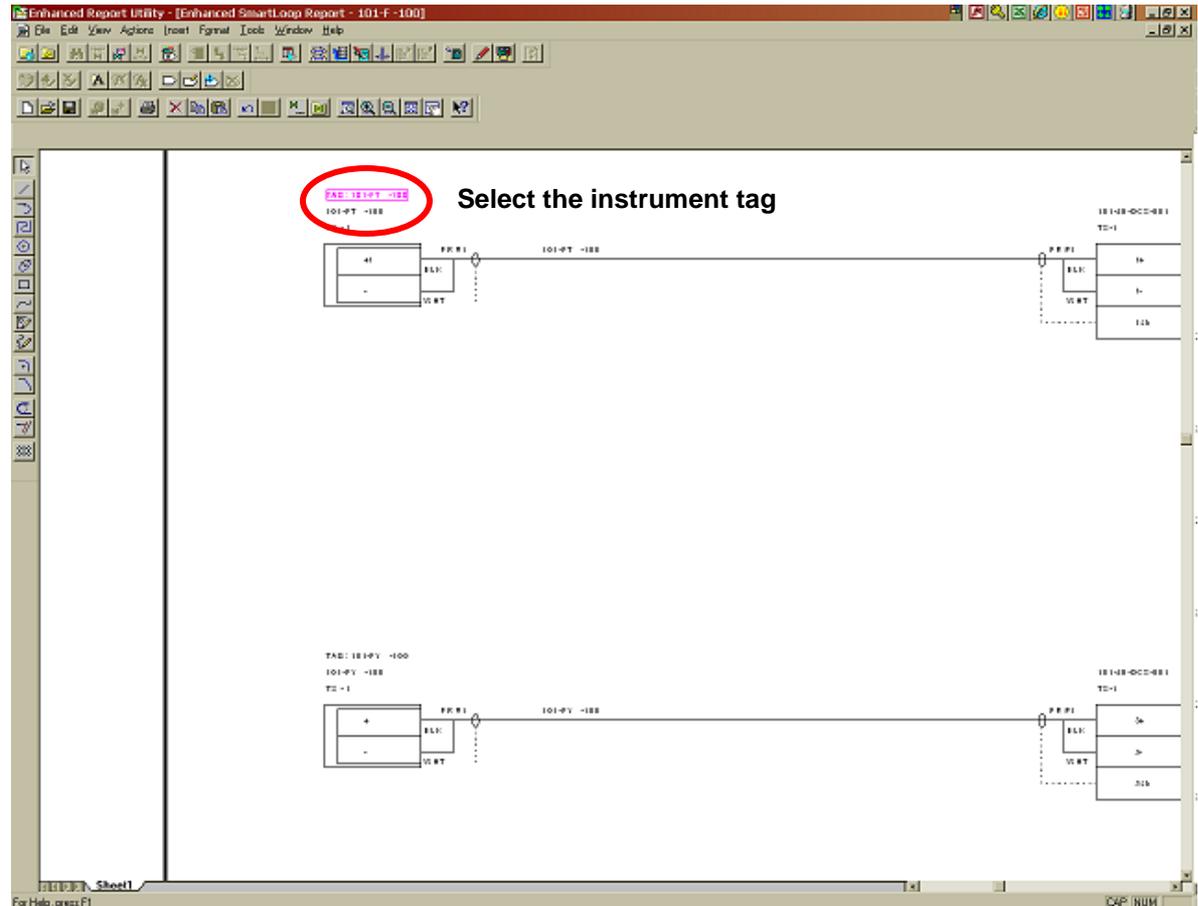
REFER



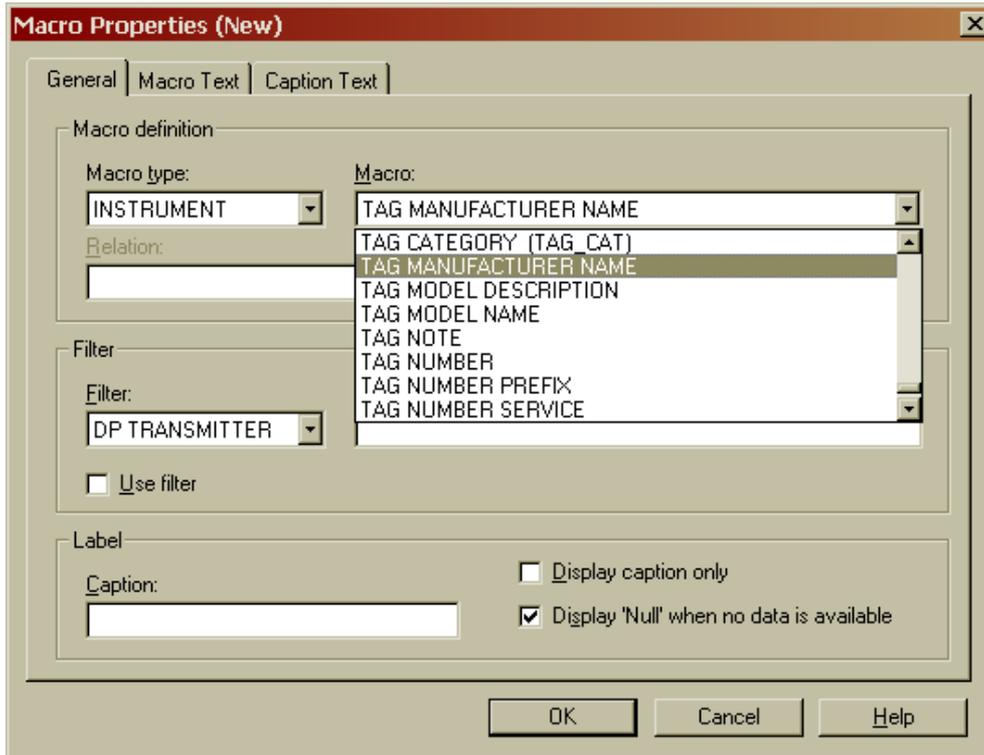
Macros and Macro Filters

- ◆ **Macros are properties of entities stored in the database that you can place on your drawings.**
- ◆ **To place a macro, first select an entity on your drawing.**
- ◆ **Select the New Macro button from the Main Toolbar.** 
- ◆ **or Select Actions > Macro > New**

Note: Macros and macro labels are saved at the layout level.



Macros and Macro Filters



- ◆ The Macro Properties (New) dialog box will open.
- ◆ On the General tab, INSTRUMENT will be displayed as the Macro type because you selected the instrument tag in your drawing.
- ◆ Select the Macro you wish to place in your drawing by selecting the down arrow to display the macros that are available for that macro type.
- ◆ Select a Filter for your macro if appropriate. We will discuss filters in more detail later.



Macros and Macro Filters

- ◆ Type a caption in the Label box which will be displayed on the left side of the macro when placed in the drawing.

Macro Properties (New)

General | Macro Text | Caption Text

Macro definition

Macro type: INSTRUMENT Macro: TAG MANUFACTURER NAME

Relation:

Filter

Filter: DP TRANSMITTER Description:

Use filter

Label

Caption: MFG:

Display caption only

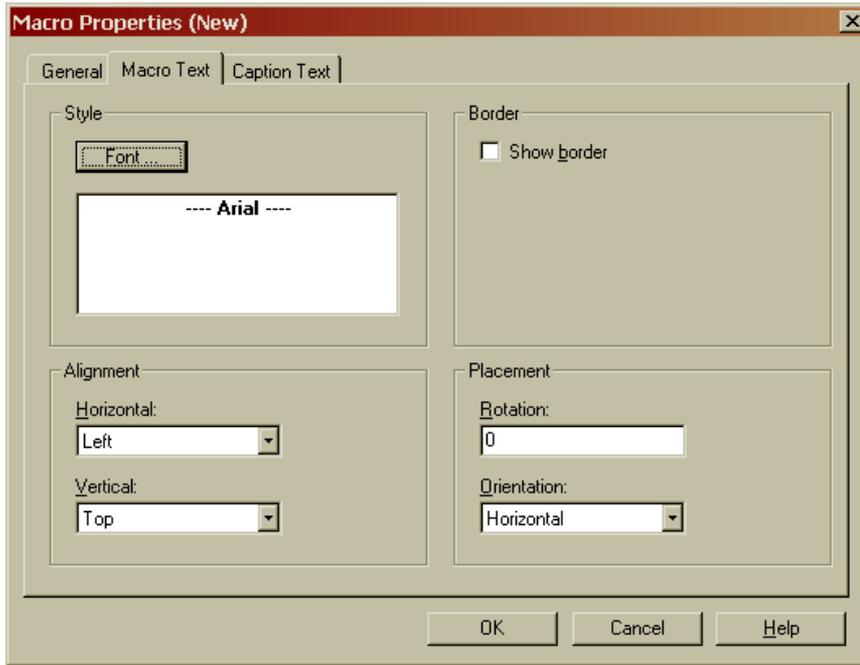
Display 'Null' when no data is available

OK Cancel Help

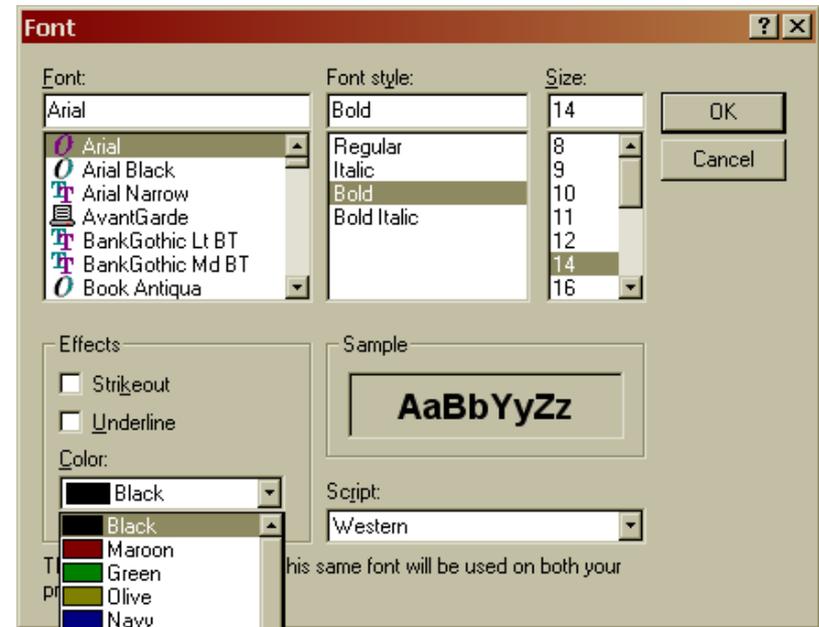
- ◆ Select the Display “Null” when no data is available check box if you want Null to appear on your drawing when the macro field is blank in the database.



Macros and Macro Filters



- ◆ On the Macro and Caption Text tabs you can select your font style, alignment, placement, and border options.
- ◆ Select OK in the Font Dialog box and OK in the Macro Properties (New) box.

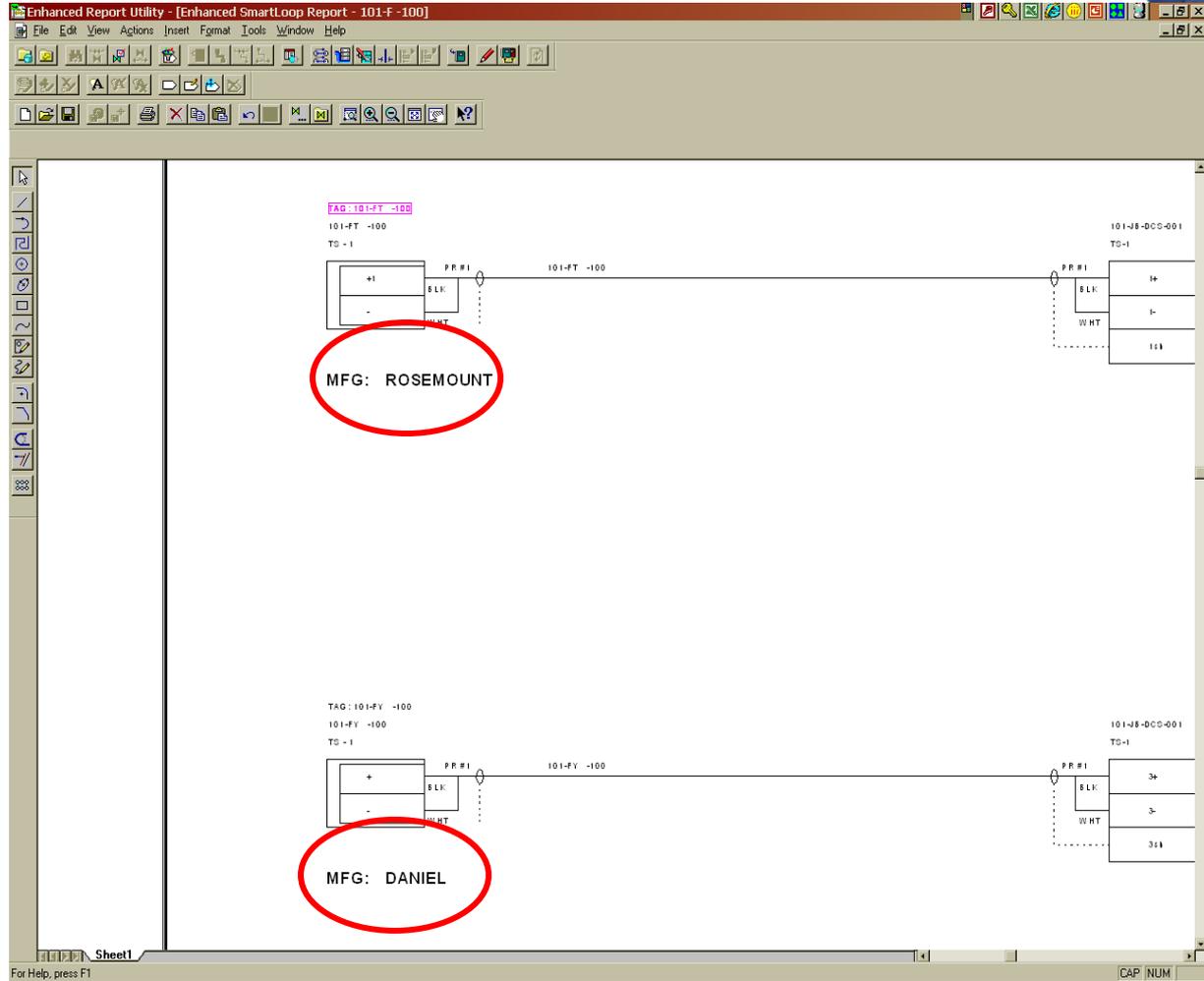




Macros and Macro Filters

- ◆ You will be returned to the drawing with cross-hairs so you can place your new macro and label.
- ◆ Save your macros to the layout by selecting the Save Custom Changes button on the Actions Toolbar.

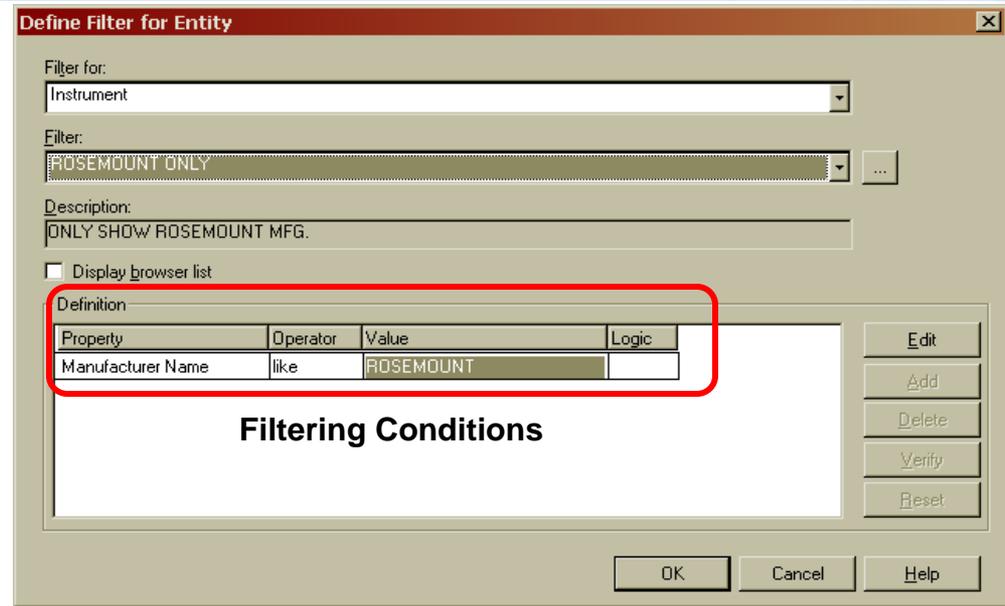
Note: Notice each instrument now has a macro displayed for it even though we only selected one instrument tag. If you do not use a filter, the software adds the macro to all entities of the same type.





Macros and Macro Filters

You can create filters and attach these to your macro to selectively display information. For example you can filter out all macros and labels for instruments other than those with a Rosemount manufacturer.



- ◆ To apply a filter to a macro you must first create the filter.
- ◆ To create a filter select **Actions > Entity > Define Filter** from the Menu Bar.
- ◆ Select the down arrow in the “Filter for:” drop-down box and choose Instrument since it is the type of entity we want to filter.
- ◆ Create a name for the filter by clicking the ellipses button to the right of the drop-down box.
- ◆ Select the filtering conditions by clicking the Edit then Add buttons, select filtering conditions as shown in the Definition group box.
- ◆ Select the Verify button to see if the filter conditions are valid and then OK to close and save the new filter.



Macros and Macro Filters

Enhanced Report Utility - [Enhanced SmartLoop Report - 101-F -100]

File Edit View Actions Insert Format Tools Window Help

Macro Properties

TAG: 101-FY -100
101-FY -100
TG - 1

PR R1

101-FY -100

PR R1

101-JE-0CS-001
TG-1

MFG: DANIEL

- ◆ To apply the filter select the macro that you wish to filter out. In this case we will filter out the manufacturer Daniel.
- ◆ Select the Macro Properties button from the Main toolbar or right-click on the macro and select properties from the pop-up menu. 

Sheet1

Allows you to edit the properties of a macro or macro label.

CAP NUM



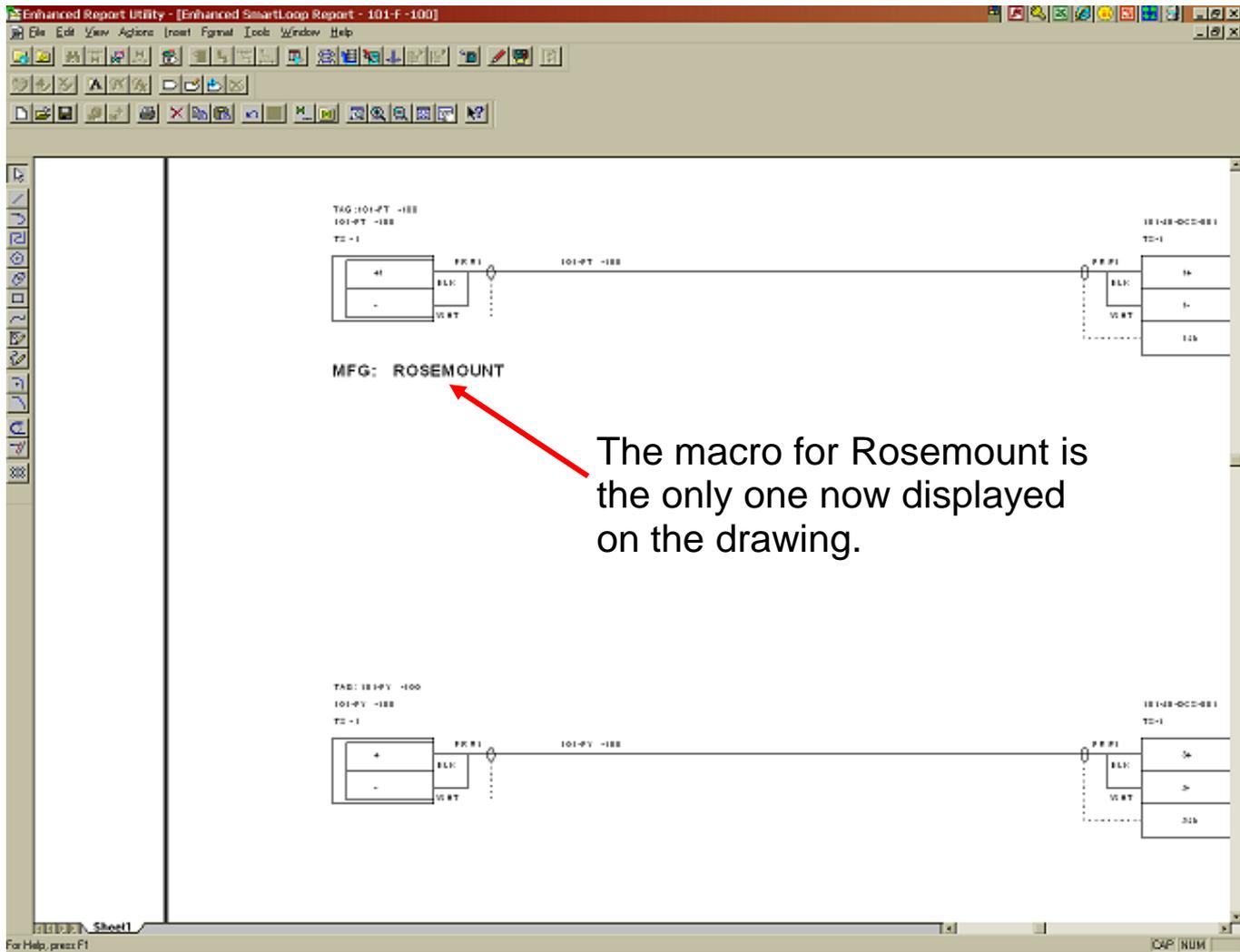
Macros and Macro Filters

- ◆ In the Macro Properties dialog box select the Filter you wish to apply from the drop-down list.
- ◆ Select the check box Use filter.
- ◆ Apply the filter to both the macro and the macro label.

The screenshot shows the 'Macro Properties' dialog box with the 'Caption Text' tab selected. The 'Macro definition' section includes a 'Macro type' dropdown set to 'INSTRUMENT' and a 'Macro' dropdown set to 'TAG MANUFACTURER NAME'. The 'Relation' dropdown is empty. The 'Filter' section has a 'Filter' dropdown set to 'ROSEMOUNT ONLY' and a 'Description' text box containing 'ONLY SHOW ROSEMOUNT MFG.'. The 'Use filter' checkbox is checked. The 'Label' section has a 'Caption' text box containing 'MFG:' and a checkbox for 'Display 'Null' when no data is available' which is unchecked. The dialog has 'OK', 'Cancel', and 'Help' buttons at the bottom.



Macros and Macro Filters





QUESTIONS ?