

Make SAS® Enterprise Guide® Your Own

John Ladds Statistics Canada Paper 1755-2014



Introduction

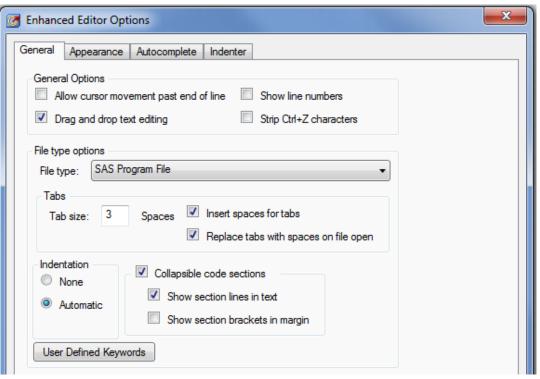
- Any tool that you use regularly you can customize it to suit your needs.
- With SAS® Enterprise Guide®, there are lots of places for additional enhancements.
- Some of the features of Base SAS and SAS Enterprise Guide mentioned are very involved and will only be discussed if there is time or offline.



- Lets start with what has not changed.
- Although the wrapper is very different, what is inside is very much the same.
- They have keep most of the good bits.

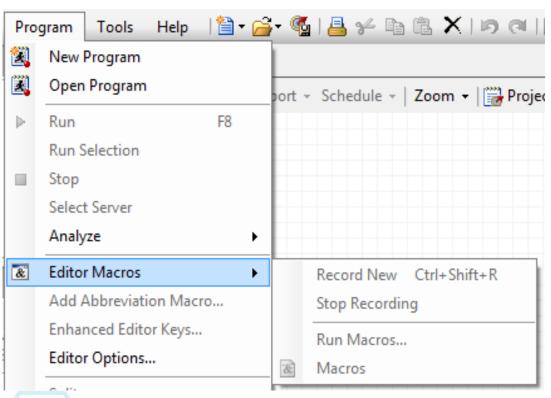


- Customizing the Enhanced Editor.
- Similar dialogue box.



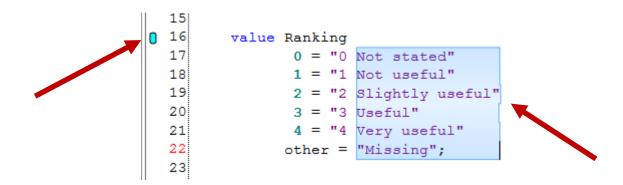


 Keyboard Macros and Abbreviations.





- Select a vertical block of code using the ALT key and use the mouse to select the desired columns.
- Bookmarks are a handy trick to mark a line you want to return to easily using CNTL-F2 and F2.





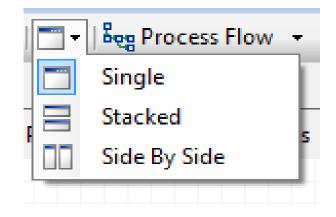
Not Quite the Same as Base SAS®

Of course there are differences.



Not Quite the Same as Base SAS®

- In Display Manager, you can arrange the layout of windows and save that layout.
- In SAS Enterprise Guide, you can view more than one aspect of the environment.
- Maximize workspace using CNTL-M.





Split screen

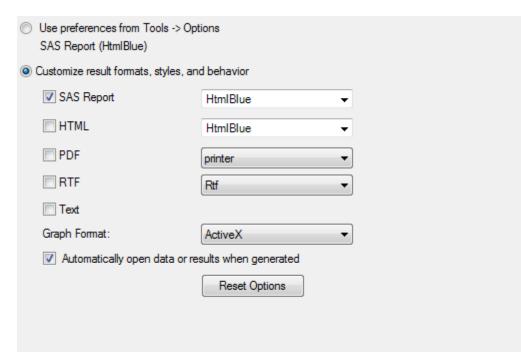
```
Add Labels •
                                                                              x Add Labels •
Program* Log R Output Data
                                                                                  Program* Log R Output Data
I Save ▼ ▶ Run ▼ ■ Stop | Selected Server: SASApp (Connected) ▼ 🦹 | Analyze Program ▼ | Export ▼ Seng
                                                                                  Export - Send To - Create - 1 Log Summary Project Log | Properties
                                                                                        ERROR 180-322: Statement is not valid or it is used out of proper of
      error:
  35
                                                                                     81
  36 -data work.evaluations:
                                                                                         58
  37
                                                                                     83
          set work.evalcapture;
                                                                                                    data work.evaluations:
  38
                                                                                                        set work.evalcapture;
  39
         if not missing (otherspecify) then other = 1;
                                                                                     85
  40
                                                                                     86
         if missing(BaseSAS) then BaseSAS = 2;
                                                                                                       if not missing (otherspecify) then other = 1;
  41
         if missing (EG)
                               then EG
                                            = 2;
                                                                                                       if missing(BaseSAS) then BaseSAS = 2;
   42
          if missing(SASBI) then SASBI = 2;
                                                                                     88
                                                                                                       if missing (EG)
                                                                                                                             then EG
                                                                                                                                          = 2:
  43
          if missing (Other) then Other = 2;
                                                                                     89
                                                                                                       if missing(SASBI) then SASBI = 2;
  44
                                                                                     90
                                                                                                       if missing(Other)
                                                                                                                            then Other = 2;
  45
                                                                                     91
          if BaseSAS = 1 and EG = 1
                                                                                                        if BaseSAS = 1 and EG = 1
          then EGSASBoth = 1:
  47
                                                                                     93
          else EGSASBoth = 2;
                                                                                                        then EGSASBoth = 1;
  48
                                                                                     94
                                                                                        70
                                                                                                        else EGSASBoth = 2;
  49
                                                                                     95
          if BaseSAS = 1 and EG = 2
  50
                                                                                     96
                                                                                                       if BaseSAS = 1 and EG = 2
          then SASOnly = 1;
  51
          else SASOnly = 2;
                                                                                                        then SASOnly = 1:
  52
                                                                                        74
                                                                                                        else SASOnly = 2;
  53
          if BaseSAS = 2 and EG = 1
                                                                                     99
  54
                                                                                                       if BaseSAS = 2 and EG = 1
          then EGOnly = 1;
                                                                                    100
  55
                                                                                    101
           else EGOnly = 2;
                                                                                                        then EGOnly = 1;
  56
                                                                                    102
                                                                                        78
                                                                                                        else EGOnly = 2;
  57
                                                                                   103
          labelx
  58
            AccessibleAnalytics = 'Accessible Analytics'
                                                                                    104
                                                                                                       labelx
  59
                                = 'O and A Session'
                                                                                    105
  60
            AccessibiltyTips = 'Accessiblity Tips'
                                                                                    106
  61
            LocalizedMessages = 'Localized Messages using External Strings
                                                                                        WARNING 1-322: Assuming the symbol LABEL was misspelled as labelx.
   62
             Overall
                                = 'Overall, how would you rate the meeting?'
                                                                                   108
```



- Now for what is new.
- New in Enterprise Guide does not mean you can't do it in Base SAS but it far different in Enterprise Guide.

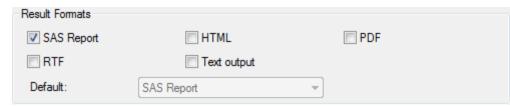


 Enterprise Guide provides multiple results outputs at the check of a box.



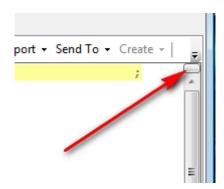


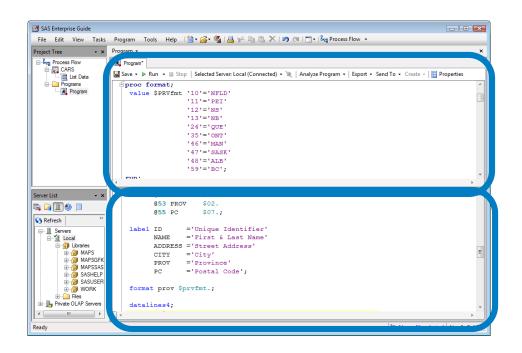
 For the whole project select Tools in the toolbar and select Options, Results.





Split Editor Window.





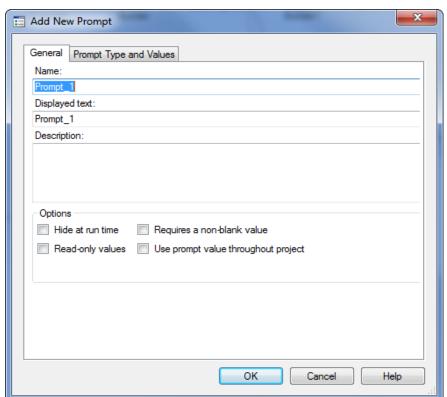


 High lighting other instances of select text

```
Program Log Cutput Data
Save → ▶ Run → ■ Stop | Selected Server: SASApp → 🦹 | Analyze I
   1 proc format;
         value YESNOfmt
            1 = 'Yes'
            2 = 'No'
          other = 'Missing';
           value rankten
           1-3 = 'Not likely (1-3)'
           4-6 = 'Maybe (4-6)'
             7 = "Very likely (7)"
             8 = "Very likely (8)"
             9 = "Very likely (9)"
            10 = "Very likely (10)"
  14
           other = 'Missing';
  16
         value Ranking
  17
                 0 = "0 Not stated"
  18
                 1 = "1 Not useful"
  19
                 2 = "2 Slightly useful"
                 3 = "3 Useful"
  21
                 4 = "4 Very useful"
  22
                other = "Missing";
  23
  24
         value experfmt
  25
                 1 = 'Not a user'
                 2 = 'New to SAS'
  27
                 3 = 'Casual user'
                 4 = 'Advanced user'
  29
                 5 = 'Expert'
  30
             other = 'Missing';
  31
  32
      run;
```



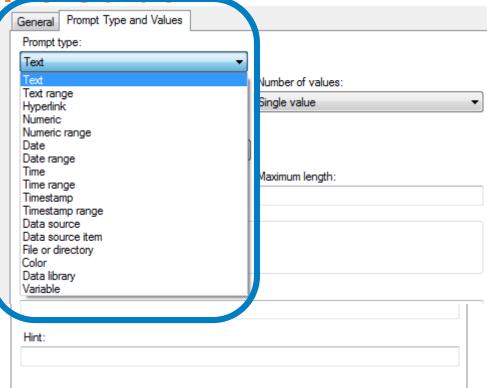
- Prompts.
- Remove the need for directly editing code before submission.
- Or to create tedious display windows to gather user inputs.





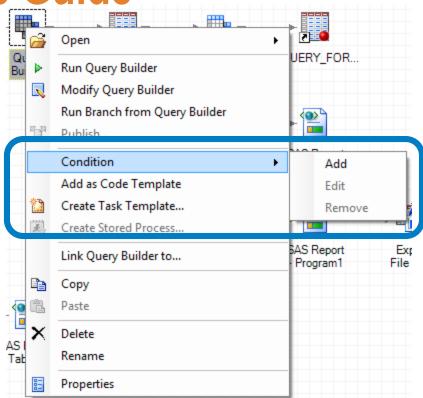
 Prompts provide a rich assortment of options.

Major reduction in programming.



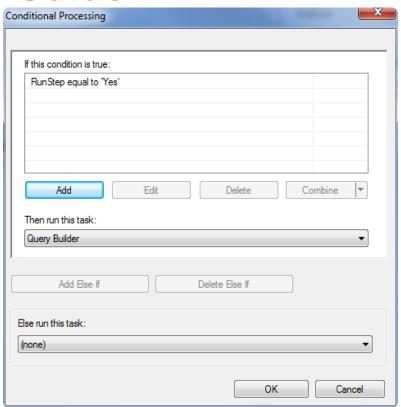


- Conditional Processing.
- Specific task can be controlled.
- Based conditions from a variety of sources including prompts.



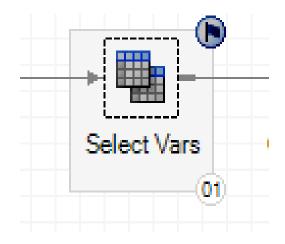


- Complete a simple dialog box.
- Far less complex than doing the same with macro code.



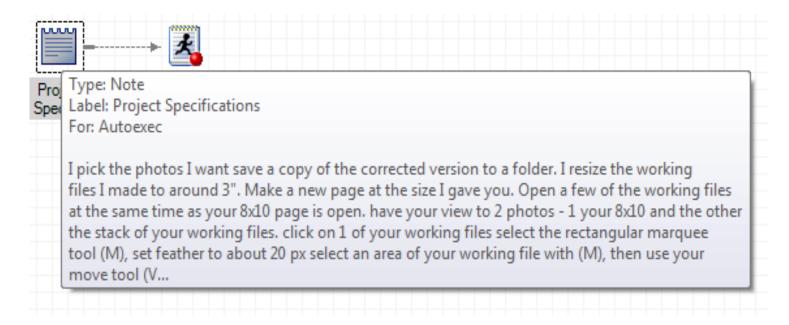


- The flag in the right hand corner of the task icon indicates that this is a conditional task.
- It should be noted that if you are using SAS Enterprise Guide to write stored procedures, Conditional Processing is not supported.

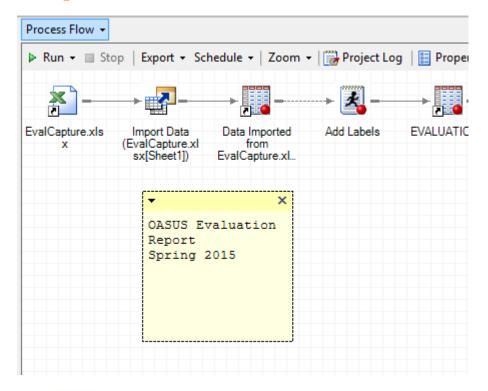




Comments icons can be attached to tasks.



And they are like post it notes

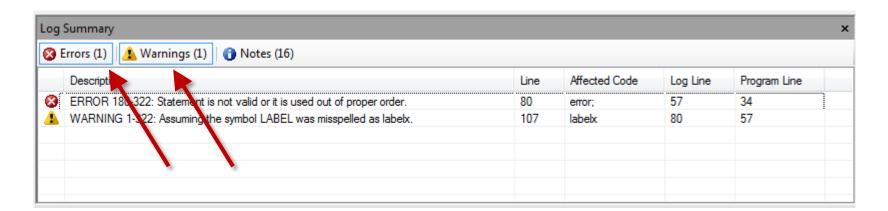




Comment in macro calls to explain input variables.

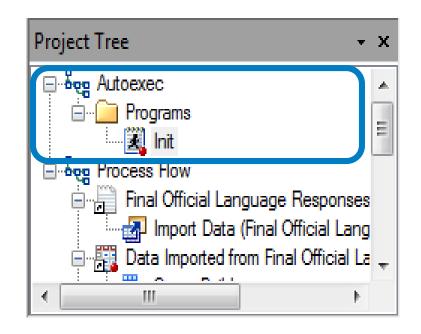


- Log Summary
 - Allows you the focus on Errors and Warning.
 - Very handy for long logs





- The "Autoexec" process flow.
- Runs when the project is first opened.
- Can be controlled via a prompt.
- Any Process flow can be renamed to "Autoexec".



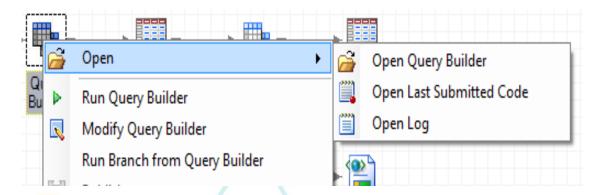


- Insert code before and after every task in a project.
- This a handy tool for debugging, adding step timers, or setting options.

Additional SAS code	
☐ Insert custom SAS code before task and query code	Edit
Insert custom SAS code after task and query code	Edit

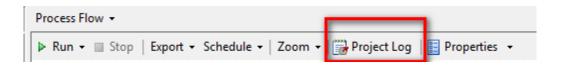


- Logs in SAS Enterprise Guide.
- Task logs and last submitted code.
- Retains can be examined days later.
- Report results are also retained.



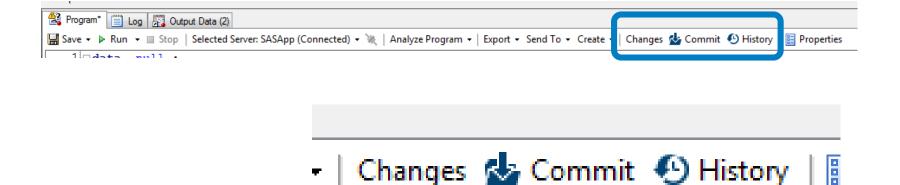


 The entire project's log can optionally be retained and exported.



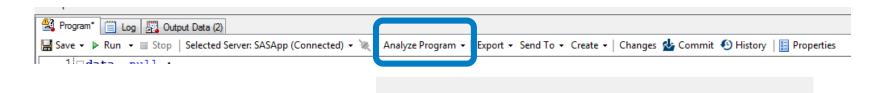


Version control for program code.





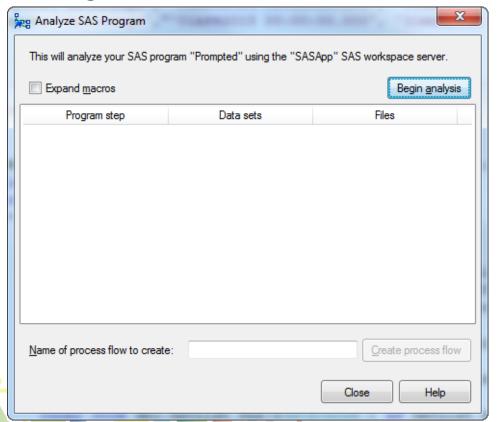
- Analyze for ...
 - Program Flow
 - Grid Computing
 - Internationalization



Analyze Program +

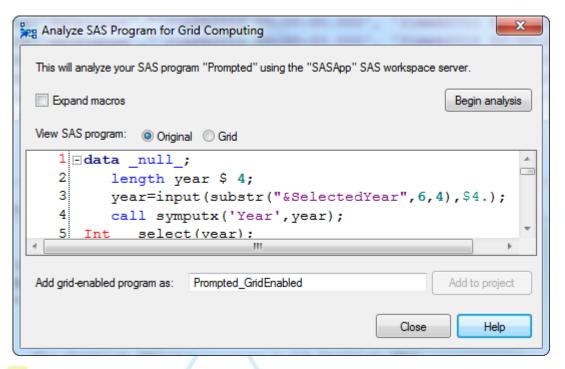


Analyze for Program Flow



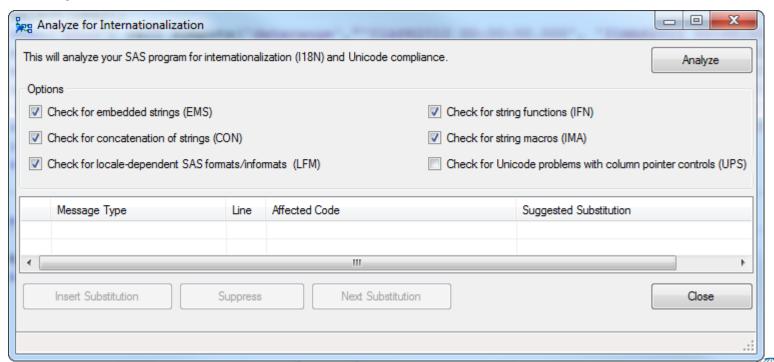


Analyze for Grid Computing



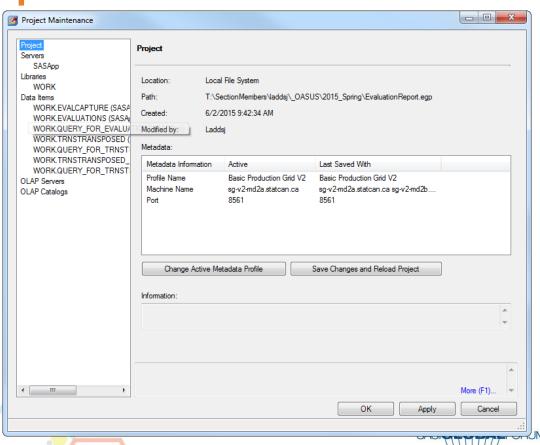


Analyze for Internationalization

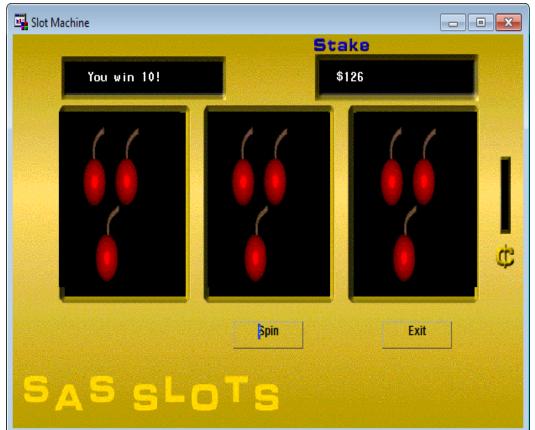




- Project Maintenance...
 - Under Tools
- Allows for global changes.
- Also available is a batch process to multiple projects in a folder. MigrationWizard.exe



Conclusion





Thank You

- While writing this paper, I have discovered the best resources are other users, local user groups and the software itself.
- I would like to thank my colleagues at the SAS
 Technology Centre in Statistics Canada for their support and encouragement.
- I would also like to thank the members of the Ottawa SAS Users Society (OASUS) for helping to keep me on top of all this technology.



Questions?

John Ladds

Statistics Canada

SAS Technology Centre

John.Ladds@statcan.gc.ca

