



What's New in SAS Enterprise Guide 8.1

Why Update SAS Enterprise Guide?

Things we can do better

The image shows a screenshot of the SAS Enterprise Guide interface with several callouts pointing to specific areas:

- Max 2 tabs**: Points to the top menu bar.
- Single monitor**: Points to the main workspace area.
- Dated look**: Points to the Project Tree and Program windows.
- Forced to work with a project**: Points to the Program window showing a project structure.
- Annoying modal dialogs**: Points to a dialog box asking to replace results.
- Data locking**: Points to an error message about data locking.

SAS Enterprise Guide Dialog:

Do you want to replace the results from the previous run?
Choosing "No" will save the changes to a new task, named "Program (2)".

Yes No

Error Message:

Enterprise Guide is not able to open this data set in update mode; it will remain, or will be opened, in read-only mode.
The open data operation failed. The following error occurred.
[Error] A lock is not available for SASUSER.MYFAFMMSG.DATA.

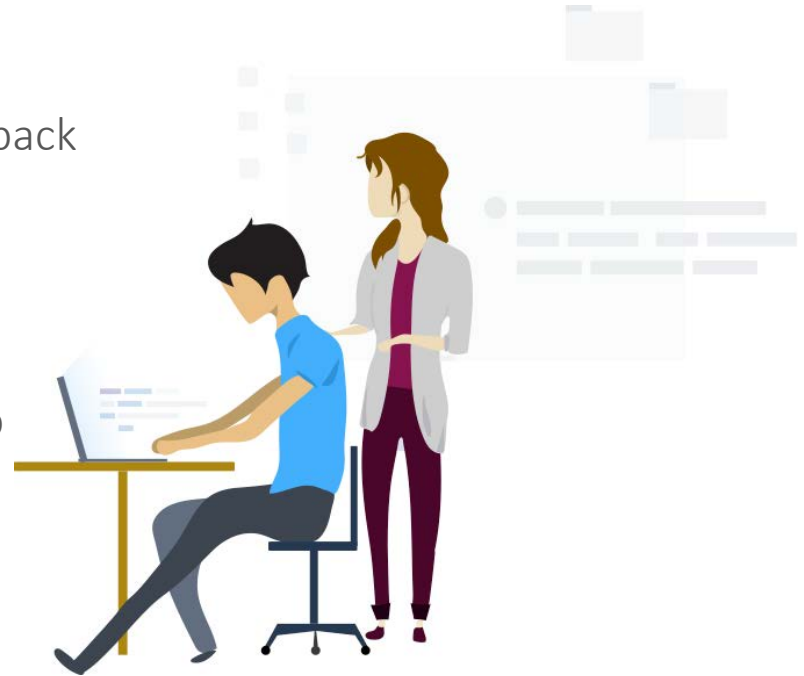
OK

Name	Team	nAtBat	nHits	nH...
Allan	Enterprise Guide			
Ashby,				
Davis,				
Dawson,				
Galarraga,				
Griffin,				
Newman,				
Salazar,				
Thomas, Andre	Atlanta	401	92	
Thornton, Andre	Cleveland	401	159	
Trammell, Alan	Detroit	401	53	
Trevino, Alex	Los Angeles	401	113	
Van Slyke, Andy	St Louis	401	60	
Winnipeg, Alan	Baltimore	401	60	

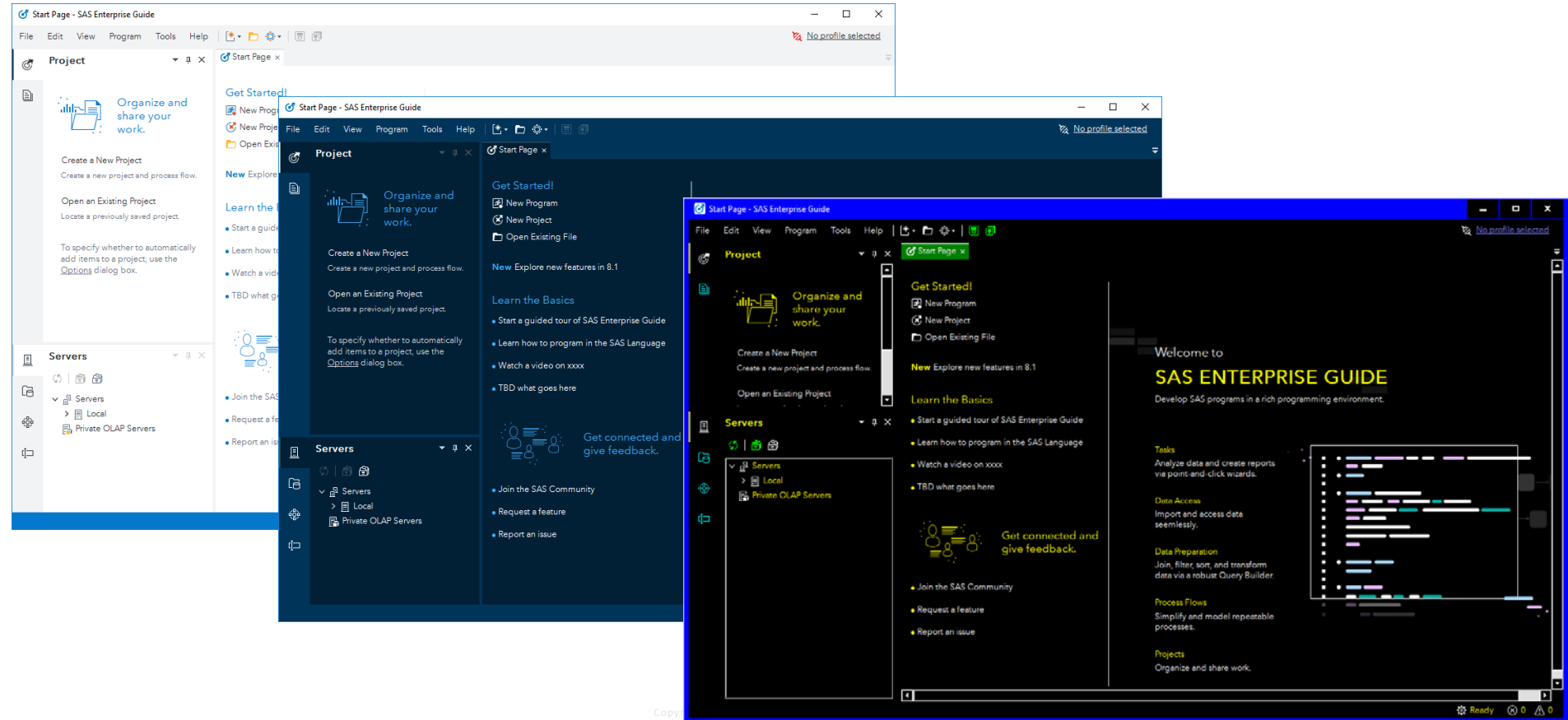
The Plan

Modernize, Yet Keep the Essence

- Why?
 - Supporting the work you do
 - Listening and responding to your feedback
 - Interchangeability with SAS Studio
- How?
 - Attractive, flexible, smart
 - Take advantage of being a desktop app
- When?
 - June 18, 2019



Meet SAS Enterprise Guide 8.1

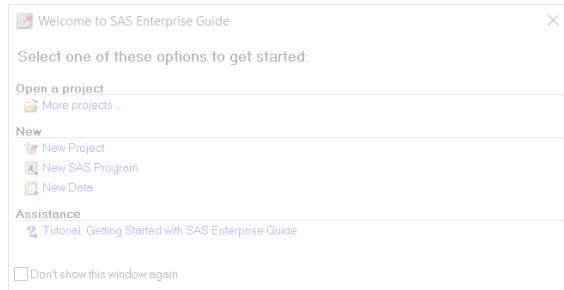




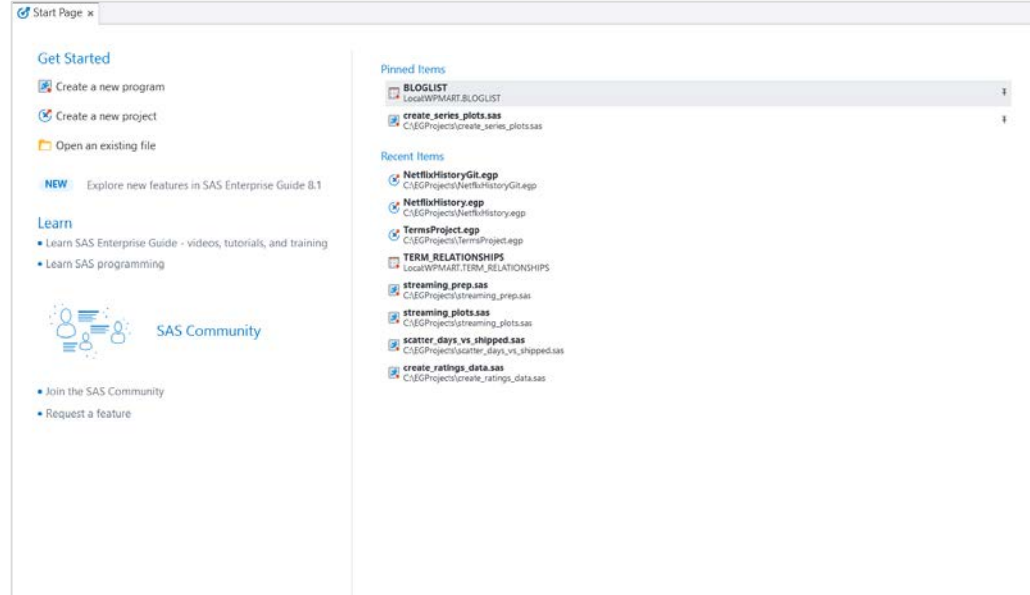
Onboarding

First Impressions Matter

Before



After



Refresh the Look

This screenshot shows the SAS Enterprise Guide interface for a project named "Analyze Netflix Streaming". The Project Tree on the left lists various data sources and programs, including "data\NetflixInstantWatch.xlsx", "Import Data (NetflixInstantWatch.xlsx)", "Clean Data", "WORK.INSTANT.TITLES (Local)", "Summarize Daily Minutes", "One-Way Frequencies1", "Title Frequency (Series)", "WORK.DAILY.SUMMARY (Local)", "One-Way Frequencies", "WORK.TITLES.PERMONTH (Local)", "WORK.MONTHLY.MINUTES (Local)", "WORK.MONTHS (Local)", "WORK.UTILIZATION (Local)", "Programs", and "programs\streaming_plots.sas". The main workspace displays a workflow diagram with steps: "NetflixInstantWatch.xlsx", "Import Data (NetflixInstantWatch.xlsx)", "Data Imported from NetflixInstantW...", "Clean Data", "InstantTitles", "One-Way Frequencies1", and "Cell Statistics WORKI...". A "Last Submitted Code" icon is also visible.

This screenshot shows the SAS Enterprise Guide interface for a project named "Analyze Netflix Data". The Project Tree on the left lists the project structure, including "NetflixFHistory.xlsx", "Import NF History", "Data Imported from NetflixFHistory...", "TITLES.DAYS.RATINGS", "Chart of ratings", "Summary Statistics", "Movies we like", "Didn't like", "Prepare Time Series I", "RATINGS", "Ratings Format", and "Modified Time Series data". The main workspace displays a workflow diagram with steps: "NetflixFHistory.xlsx", "Import NF History", "Data Imported from NetflixFHistory...", "Calc Days and Ratings", "TITLES.DAYS.RATINGS", "Chart of ratings", "SAS Report - Chart of ratings", "HTML - Chart of ratings", "scatter_days_vs_shipped", "SAS Report - scatter_days_vs_shipped", "HTML - scatter_days_vs_shipped", and "Summary Statistics". The interface includes a "Servers" panel at the bottom left and a status bar at the bottom showing "Project: NetflixFHistory51 Analyze Netflix Data", "Zoom: 100%", and "Ready".

Refresh the Look

The screenshot shows the SAS Enterprise Guide interface with the following components and callouts:

- Navigation side bar with panes:** Located on the left, it contains a Project pane, Servers pane, and Submission Status pane.
- Workspace area:** The central area containing the code editor with SAS code and the Log pane.
- Tools area:** Located at the bottom right, containing the Submission Status pane and the Process Flow pane.
- Status bar:** Located at the bottom of the window, displaying project and file information.

The code editor contains the following SAS code:

```
1 /* use a DATA step to subset data test */
2 data localCars;
3   set sashelp.cars(where=(origin="USA"));
4 run;
5
6 title "All USA cars, all variables";
7 /* produces a report of all numeric variables */
8 proc means data=localCars
9   mean stddev median mode n;
10 run;
11
12 title "All USA cars, just Mean and Std Dev";
13 /* narrows the processing to just the mean and standard deviation */
14 proc means data=localCars
15   mean stddev median mode n;
16 var mpg_highway mpg_city;
17 run;
18
19 title "All USA cars, just MPG numbers";
20 title2 "by type?";
21 proc means data=localCars
```

The Log pane shows the following output:

HTML - SampleProgram.sas

The MEANS Procedure

Variable	Label
MSRP	Engine Size (L)
Invoice	Engine Size (L)
EngineSize	Engine Size (L)
Cylinders	MPG (City)
Horsepower	MPG
MPG_City	(Highway)
MPG_Highway	Weight
Weight	(LBS)
Wheelbase	Wheelbase (IN)
Length	Length (IN)

The Submission Status pane shows the following information:

Name	Status	Run Time	Submitted	Completed	Process Flow	Server
SampleProgram.sas	Collecting...		10/13/2018 3:06:08 PM		Process Flow	Local
SampleProgram.sas	Preparing server...				Process Flow	Local

The Navigation Panes

Most of the panes are trees that contain folders and files. You can do many things from them:

- Create, delete, and rename files and folders.
- Move files and folders with drag and drop.
- Use the context menu to explore all options.



Tip: Drag and drop these panes and use the Layout Guide to help you position them where you like them.



Open Items - At a glance you can see a list of your currently opened files.

Flexible Layout

Tab groups, floating, docking, oh my!

Before: Max 2 tabs and single monitor

The screenshot shows the SAS Enterprise Guide interface. On the left is a Project Tree with a hierarchical view of tasks. The main workspace displays a workflow diagram with steps: 'NetfixInstantWatch.xlsx', 'Import Data (NetfixInstantWatch.xlsx[Sheet1SA16:E605])', 'Data Imported from NetfixInstantWatch.xlsx', and 'Clean Data'. On the right, a data table is visible with columns for Title, Rating, Date, and Duration.

Title	Rating	Date	Duration
Psych: Sen 5	Rate 5 stars R...	14/JUN2012	42m 42m
Phineas & Ferb...	Rate 5 stars R...	14/JUN2012	22m 22m
Phineas & Ferb...	Rate 5 stars R...	14/JUN2012	22m 22m

After: Unlimited tabs & multiple monitors

The screenshot shows the SAS Enterprise Guide interface with a more complex layout. The Project Tree on the left includes tasks like 'Streaming Data', 'Analysis', and 'Programs'. The main workspace displays a workflow diagram with steps: 'import_netfix_activity.sas', 'VIEWING', 'Count times watched', 'Series frequency', 'HTML Series frequency', 'find_duplicates.sas', 'DUPTITLES', 'netfix_report.sas', and 'HTML - netfix_report.sas'. On the right, a bar chart titled 'HTML - netfix_report.sas' shows the number of shows (Y-axis, 0 to 250) for different categories (X-axis). Below the chart is a code editor with SAS code for generating graphics and a log window showing the execution results.

```
ods graphics / width=1200 height=600;
proc sgplot data=viewing;
  where year(date) in (2018, 2019);
  format date monyy.;
  vbar date / stat=freq group=profile groupdisplay=stack;
  yaxis grid label="Shows";
run;
```

Log window output:

```
50 39 title "Top 10 titles streamed in our house";
51 40 %let TopN = 10;
52 41 proc freq data=viewing ORDER=freq;
53 42 where year(date) in (2018, 2019);
54 43 Label maintitle="Program Title";
55 44 tables maintitle / maxlevels=4TopN Plots=FreqPlot
56 45 run;
57 46
58 NOTE: There were 2472 observations read from the data set WORK.
59 WHERE YEAR(date) in (2018, 2015);
```

Working with Code, Log, Results

At the Same Time!

Before: Choose which ONE to view

Program -

Program* | Log | Output Data (4) | Results

Refresh | Export | Send To | Create | Publish | Properties

Percent utilization

Obs	Make	Model	Type	Origin	DriveTrain	MSRP
1	Audi	A6 4.2 Quattro 4dr	Sedan	Europe	All	\$49,690
2	Audi	A8 L Quattro 4dr	Sedan	Europe	All	\$69,190
3	Audi	S4 Quattro	Sedan	Europe	All	\$48,040

After: View ALL

The screenshot shows the SAS Studio interface with three panes visible: Code, Results (1), and Log.

Code Pane: Contains SAS code for sorting data, calculating running averages, and printing results.

```
1 proc sort data=sashelp.cars out=cars;
2   by make;
3   run;
4 data testme;
5   set cars (where=(cylinders eq 8)) nobs=numObs;
6   format dollarsPerHorse dollar20.2 runningAverage;
7   retain runningHorses;
8   by make;
9   if _n_ eq 1 then runningHorses=0; else runningHorses=runningHorses+runningAverage;
10  runningAverageHorsepower=runningHorses/_n_;
11  dollarsPerHorse=invoice/Horsepower;
12  run;
13 proc print;
14   run;
15 data _null_;
16   y=(0.1 + 0.2) + 0.3;
17   z=0.1 + (0.2 + 0.3);
18   if y eq z then do;
19     put "equal";
20   end;
21 run;
22 data a;
23 set sashelp.class;
24 if sex eq "F";
25 output;
26 run;
27 data b;
28 set sashelp.class;
29 where sex eq "F";
30 run;
```

Results (1) Pane: Displays a table of car data.

Obs	Make	Model	Type	Origin	DriveTrain	MSRP
1	Audi	A6 4.2 Quattro 4dr	Sedan	Europe	All	\$49,690
2	Audi	A8 L Quattro 4dr	Sedan	Europe	All	\$69,190
3	Audi	S4 Quattro 4dr	Sedan	Europe	All	\$48,040
4	Audi	RS 6 4dr	Sports	Europe	Front	\$84,600
5	Audi	S4 Avant Quattro	Wagon	Europe	All	\$49,090
6	BMW	X5 4.4i	SUV	Europe	All	\$52,195
7	BMW	545iA 4dr	Sedan	Europe	Rear	\$54,995
8	BMW	745i 4dr	Sedan	Europe	Rear	\$69,195
9	BMW	745i 4dr	Sedan	Europe	Rear	\$73,105

Log Pane: Shows execution notes and timing information.

```
101
102 NOTE: There were 9 observations read from the data set WORK.CARS.
103 WHERE sex='F';
104 NOTE: The data set WORK.B has 9 observations.
105 NOTE: DATA statement used (Total process time):
106    real time           0.01 seconds
107    cpu time            0.01 seconds
108
109
110 57
111 58          %LET _CLIENTTASKLABEL=;
112 59          %LET _CLIENTPROCESSFLOWNAME=;
```

Working with Code, Log, Results

Drag a tab then use the Layout Guide to help you position the tab

The screenshot displays the SAS Enterprise Guide interface with three panels: Code, Log, and Results. The Code panel contains SAS code for generating a stacked bar chart and a horizontal bar chart. The Log panel shows the execution details for the first procedure. The Results panel displays a stacked bar chart titled 'Shows'.

```
Code
1 ods graphics / width=1200 height=600;
2 proc sgplot data=viewing;
3   where year(date) in (2018, 2019);
4   format date monyy.;
5   vbar date / stat=freq group=profile groupdisplay=stack;
6   yaxis grid label="Shows";
7 run;
8
9 /* Added Top 10 titles */
10 ods graphics / width=800 height=800;
11 title "Top 10 Titles streamed in our house";
12 slet TopN = 10;
13 proc freq data=viewing ORDER=freq;
14   where year(date) in (2018, 2019);
15   label maintitle="Program Title";
16   tables maintitle / maxlevels=&TopN Plots=FreqPlot (orient=horizontal scale=pe);
17 run;
```

Log

Errors (0) Warnings (0) Notes (5) ↓ ↑

Description	Line	Affected Code
yaxis grid label="Shows";	37	34
run;	38	25

Results (1)

Shows

Year	Profile	Shows
2018	Profile 1	100
	Profile 2	50
2019	Profile 1	150
	Profile 2	50
2018	Profile 1	180
	Profile 2	50
2019	Profile 1	150
	Profile 2	50
2018	Profile 1	100
	Profile 2	50
2019	Profile 1	100
	Profile 2	50

Working with Code, Log, Results

Or use preset layouts

The screenshot displays the SAS Enterprise Guide interface. The main window shows a SAS program with the following code:

```
/* width=1200 height=600;
data=viewing;
date) in (2018, 2019);
monyy.;
stat=freq group=profile groupdisplay=stack;
label="Shows";

10 titles */
/* width=800 height=800;
house";

14 where year
15 label main
16 tables main
17 run;

N Plots=FreqPlot (orient=horizontal scale=percent);

yaxis grid label="Shows";
run;

NOTE: PROCEDURE SGPLOT used (Total process time):
real time    0.31 seconds
cpu time     0.11 seconds

NOTE: There were 2472 observations read from the data set WORK.VIEWING.
WHERE YEAR(date) in (2018, 2019);

36
37
38
39
40
41
42
43
44
45
46
47
48 37 /* Added Top 10 titles */
```

The Log window shows the execution details, and the Results window displays a stacked bar chart titled "Results (1)". The chart shows the number of "Shows" for different categories across two years (2018 and 2019). The Y-axis is labeled "Shows" and ranges from 0 to 250. The X-axis represents different categories. The bars are stacked with red and teal colors.

Category	2018 Shows	2019 Shows
Category 1	~100	~50
Category 2	~150	~20
Category 3	~180	~10
Category 4	~170	~30
Category 5	~140	~20
Category 6	~100	~10
Category 7	~180	~10
Category 8	~100	~10
Category 9	~100	~10
Category 10	~10	~10

Float a Tab Within the App or To Another Monitor

Start Page Streaming Data BLOGLIST x

Where Query Builder Tasks Share

blog_id	name	path	last_updated	public
1	2 SAS Voices	/content/	2:59 07JUN2019:15:42:10	1
2	3 JMP Blog	/content/	4:06 22AUG2017:13:48:07	0
3	4 The Business Forecasting Deal	/content/	2:56 27MAR2019:13:58:47	1
4	5 The Text Frontier	/content/	3:41 11NOV2016:19:29:13	1
5	6 A Shot in the Arm	/content/	4:18 20SEP2016:14:12:48	1
6	7 SAS Analytics U Blog	/content/	10:11JUN2011:14:32:02 30MAY2018:19:11:52	1

BLOGLIST - * NetflixHistoryGit - SAS Enterprise Guide

File Edit View Program Tools Help

Project

- * NetflixHistoryGit
 - Streaming Data
 - NetflixViewingHistory_Dadasaurus
 - NetflixViewingHistory_Mom.csv
 - NetflixViewingHistory_PhineasFert
 - NetflixViewingHistory_SupremeRu
 - Note

BLOGLIST

Where Query Builder Tasks Share

blog_id	name	path	registered	last_updated	public
1	2 SAS Voices	/content/	10JUN2011:12:52:59	07JUN2019:15:42:10	1
2	3 JMP Blog	/content/jmp/	10JUN2011:12:54:06	22AUG2017:13:48:07	0
3	4 The Business Forecasting Deal	/content/forecasting/	10JUN2011:14:12:56	27MAR2019:13:58:47	1
4	5 The Text Frontier	/content/text-mining/	10JUN2011:14:19:41	11NOV2016:19:29:13	1
5	6 A Shot in the Arm	/content/hls/	10JUN2011:14:24:18	20SEP2016:14:12:48	1
6	7 SAS Analytics U Blog	/content/academic/	10JUN2011:14:32:02	30MAY2018:19:11:52	1
7	8 The Analytic Insurer	/content/insurance/	10JUN2011:14:45:58	21SEP2016:18:01:11	1

Working with a Project or NOT!

Program-centric Development

Before: Project required!

The screenshot shows the SAS Project Tree on the left, listing various data files and programs under the 'Analyze Netflix Streaming' project. The main window displays a program flow diagram with steps like 'Import Data (NetflixInstantWatch.xlsx)', 'Clean Data', 'INSTANTTITLES', 'Summarize Daily Minutes', 'One-Way Frequencies1', 'Title Frequency (Series)', 'DAILYSUMMARY', 'One-Way Frequencies', 'Cell statistics for Date analysis of WORK.IN', 'Cell statistics for Date analysis of WORK.D', 'MONTHS', 'UTILIZATION', 'DETAILS.csv', 'Import Data (DETAILS.csv)', and 'Programs'. The 'Programs' folder contains 'streaming_plots', 'streaming_prep', and 'Program'.

After: Project optional!

The screenshot shows the SAS Project dialog box on the left, titled 'Project', with options to 'Organize and share your work.', 'Create a New Project', 'Open an Existing Project', and 'To specify whether to automatically add items to a project, use the Options dialog box.' The main window displays a SAS program window titled 'DAILYSUMMARY' with the following code:

```
1 proc sort data=sashelp.cars out=cars;
2 by make;
3 run;
4 data testme;
5 set cars(where=(cylinders eq 8)) nobs;
6 format dollarsPerHorse dollar20.2 run;
7 retain runningHorses;
8 by make;
9 if _n_ eq 1 then runningHorses=0; el
10 runningAverageHorsepower=runningHorse
11 dollarsPerHorse=invoice/Horsepower;
12 run;
13 proc print;
14 run;
15 data _null_;
16 y=(0.1 + 0.2) + 0.3;
17 z=0.1 + (0.2 + 0.3);
18 if y < z then
```

Adding Files to a Project Automatically

Project and Process Flows

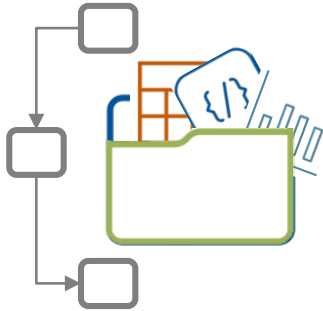
Reset

When an item is opened automatically add to the project

General

Enable automatic file new projects

Option to automatically add items to a project



I love the way EG adds files to projects and process flows for me



A screenshot of the SAS Project and Code editor interface. The left pane shows a project tree with a folder named 'Analyze Netflix Data' containing various files and sub-folders. The right pane shows the code editor with a SAS program named 'DataStep.sas' containing the following code:

```
1 proc sort data=sashelp.c
2 by make;
3 run;
4 data testme;
5 set cars(where=(cylinder
6 format dollarsPerHorse d
7 retain runningHorses;
8 by make;
9 if _n_ eq 1 then running
10 runningAverageHorsepower
11 dollarsPerHorse=invoice/
12 run;
13 proc print;
14 run;
15 data _null_;
16 y=(0.1 + 0.2) + 0.3;
17 z=0.1 + (0.2 + 0.3);
18 if y eq z then do;
19 put "equal";
20 end;
21 run;
22 data a;
23 set sashelp.class;
24 if sex eq "F";
```

Add Files to a Project Manually



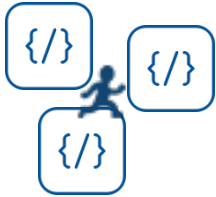
I love the idea of a projects and process flows, but I want to add files myself



The screenshot shows the SAS Studio interface. On the left, a project tree displays a folder named 'Programs' containing several files, including 'DataStep.sas'. A context menu is open over 'DataStep.sas', with the 'Add to project' option highlighted in blue. The main editor window shows the SAS code for 'DataStep.sas', which includes a PROC SORT statement and a PRINT statement. The code is as follows:

```
1 proc sort data=sashelp.  
2   by make;  
3   run;  
  
testme;  
cars (where=(cylinder  
at dollarsPerHorse  
in runningHorses;  
ake;  
n_eq 1 then runni  
ingAverageHorsepor  
arsPerHorse=invoi  
  
print;  
  
_null_;  
.1 + 0.2) + 0.3;  
1 + (0.2 + 0.3);  
eq z then do;  
put "equal";  
  
end;  
run;
```


No Project!



I just want to program – not interested in projects or process flows

A screenshot of the SAS Enterprise Guide interface. The window title is "streaming_prep.sas - SAS Enterprise Guide". The menu bar includes File, Edit, View, Program, Tools, and Help. The "Project" pane on the left shows options to "Create a new project" and "Open an existing project". The "Servers" pane shows a tree view with "Local", "Libraries", "Files", and "Private OLAP Servers". The main editor displays SAS code for calculating monthly minutes and utilization. The status bar at the bottom indicates "Ready" and "1" errors.

```
1 @data months (keep=date daysInMonth minutesInMonth);
2   length date 8;
3   format date monyy?.;
4   do yr = 2007 to 2012;
5     do mon = 1 to 12;
6       date = mdy(mon, 1, yr);
7       eom=intnx('month',date,0,'end');
8       daysInMonth=day(eom);
9       minutesInMonth = 24*60*daysInMonth;
10      output;
11    end;
12  end;
13 run;
14
15 @data monthlyminutes;
16   set monthlyminutes;
17   date = mdy(month(date),1,year(date));
18 run;
19
20 @data utilization;
21   length utilization 8;
22   format utilization percent10.6;
23   merge months monthlyminutes(rename=(count=minutesStreamed) drop=percent);
24   by date;
25   if minutesStreamed = . then
26     minutesStreamed=0;
27   utilization = minutesStreamed / minutesInMonth;
28 run;
```

Items That Don't Require a Project

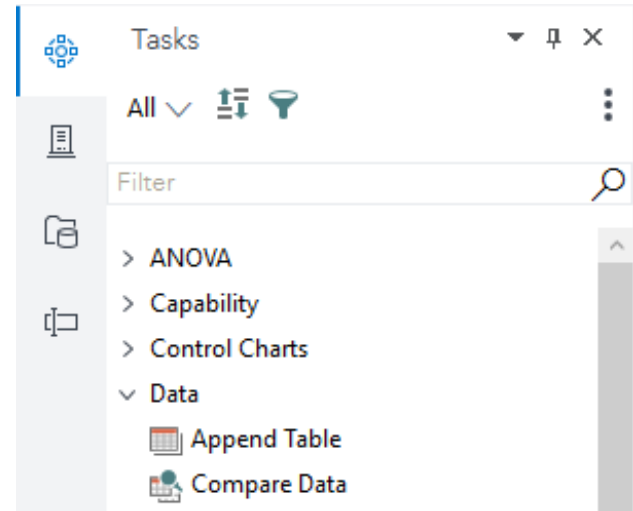
These items do not require a project. They can be opened and edited in a 'project-less' environment. We plan on adding more items, such as tasks, to the list in subsequent releases.

- Programs
- Data
- OLAP Cubes
- SAS Report Results
- SAS Visual Analytics Reports
- Logs

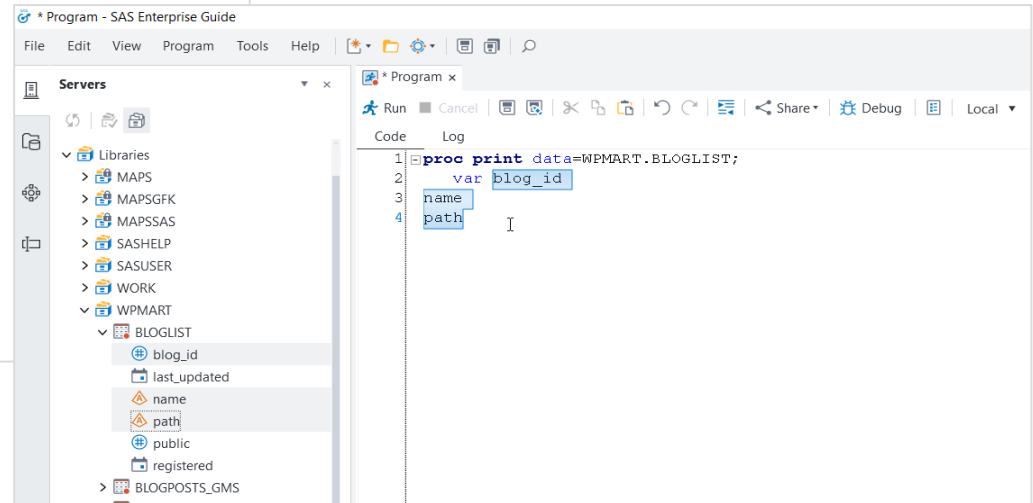
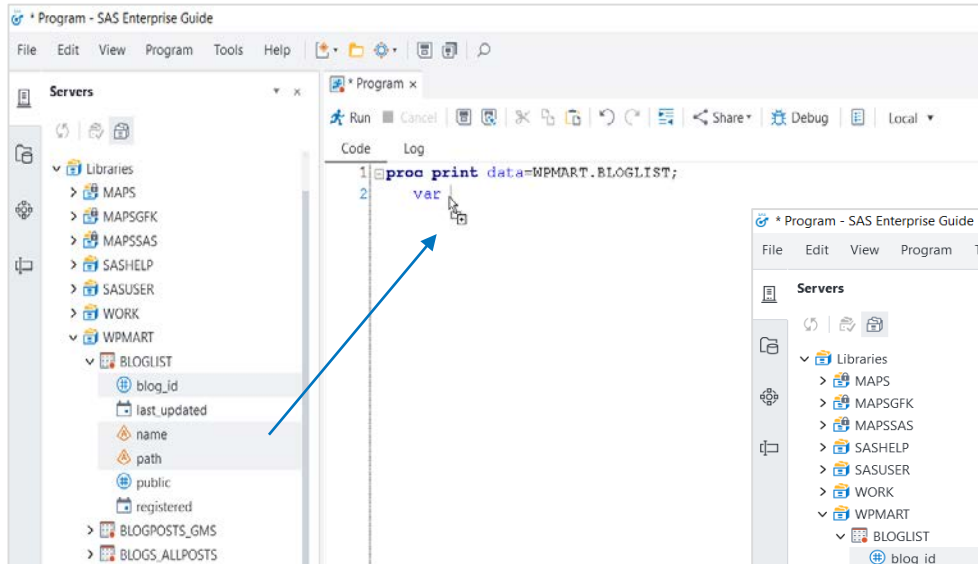


Working with Tasks

- Tasks now available from the Tasks pane
- Query Builder and Import automatic favorites
- Still need a project to use tasks
- SAS Studio tasks are available



Drag and Drop Data Set Names and Variables into a Program



What's Happening?

Submission Feedback

Before: Some status information

After: Knowing status at a glance

The screenshot shows a 'Project Tree' window in SAS. The tree structure is as follows:

- Analyze Netflix Streaming
 - NetflixInstantWatch.xlsx
 - Import Data (NetflixInstantWatch.xlsx)
 - Data Imported from NetflixInstantWatch.xlsx
 - Clean Data
 - INSTANTTITLES
 - Summarize Daily Minutes
 - One-Way Frequencies1
 - Title Frequency (Series)
 - DAILYSUMMARY
 - One-Way Frequencies
 - Cell statistics for Date analysis of WORK.IN
 - Cell statistics for Date analysis of WORK.D
 - MONTHS
 - UTILIZATION
 - DETAILS.csv
 - Import Data (DETAILS.csv)
 - Programs
 - streaming_plots
 - streaming_prep
- Analyze Netflix Data
 - Custom Reports
 - Netflix History Report
 - Like and Dislikes
 - Ordered Lists

At the bottom, a 'Task Status' window shows the following information:

Task	Status
Program	Running PROC SORT...
One-Way Frequencies	Queued...
Import Data (NetflixInstantWatch.xlsx)	Waiting on [One-Way Frequencies]
streaming_prep	Waiting on [One-Way Frequencies]
	Waiting on streaming_prep...

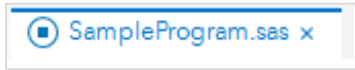
The screenshot shows the 'Project' window with a workflow diagram and a 'Submission Status' table. The workflow diagram includes tasks like 'Import NF History', 'Data Imported from NetflixHistory.xlsx', 'Calc Days and Ratings', 'RATINGS', 'Ratings Format', 'TITLES/DAYS/RATINGS', 'Chart of ratings', 'SAS Report - Chart of ratings', 'Netflix History Report', 'scatter_days_vs_shipped', 'SAS Report - scatter_days_vs_shipped', and 'Summary'. The 'Submission Status' table is as follows:

Name	Completed	Status	Info	Run Time	Submitted	Process
Chart of ratings	12/4/2018 3:15:05 PM	✗	Error	2.642s	12/4/2018 3:15:03 PM	Analyze
scatter_days_vs_shipped	12/4/2018 3:15:07 PM	✓	Successful	1.883s	12/4/2018 3:15:05 PM	Analyze
Summary Statistics	12/4/2018 3:15:20 PM	✓	Successful	12.692s	12/4/2018 3:15:17 PM	Analyze
Movies we like		⊙	R...		12/4/2018 3:15:20 PM	Analyze
Prepare Time S...						

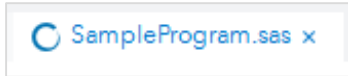


Running Multiple Items without Locking the UI

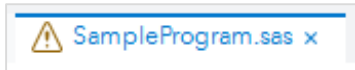
Status icons



Program is queued in the order of submission.



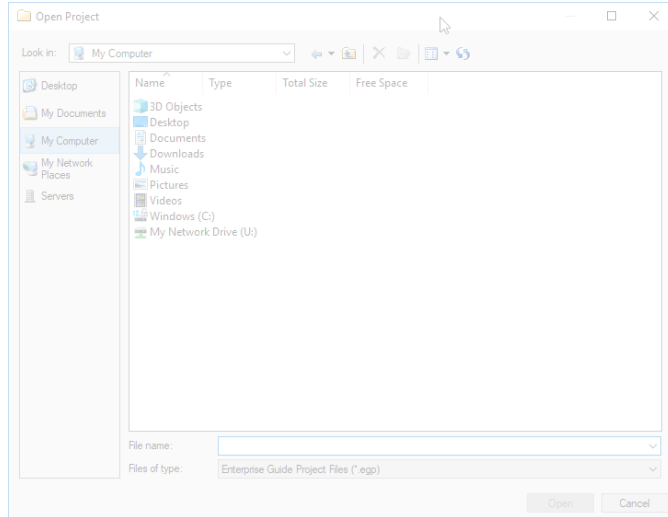
Program is in the process of being submitted.



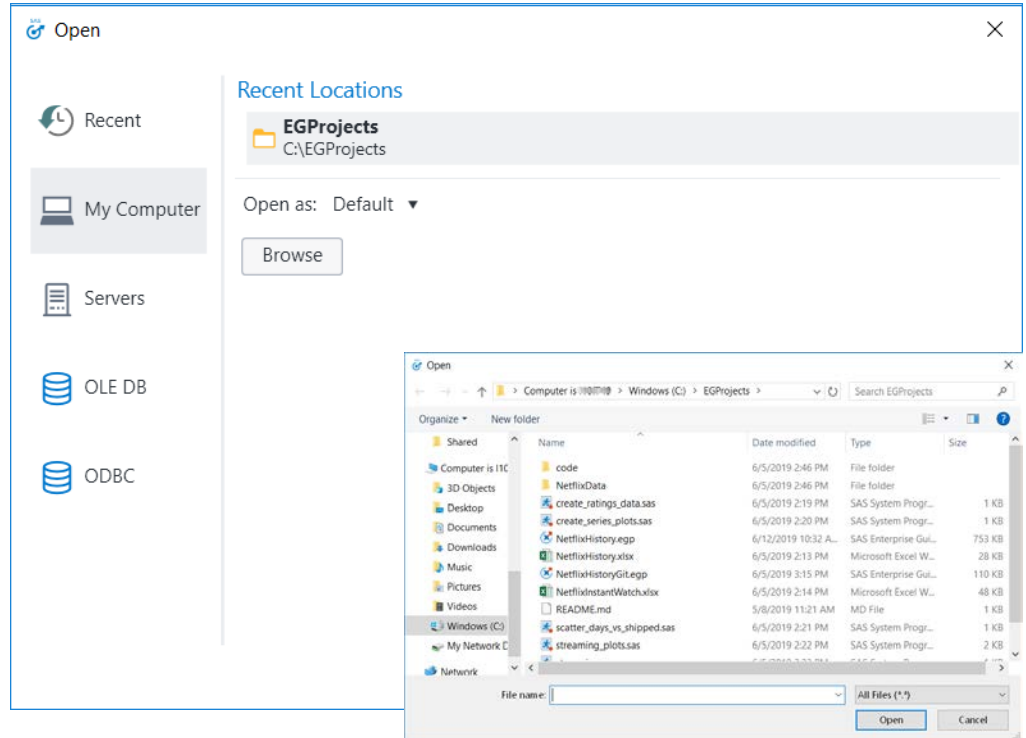
Status icons will show you, at a quick glance, if your program ran with errors or warnings.

Opening Files

Before



After



Search

- Search panel that can toggle on and off
- Search for items in a project and in the Open Files pane

The screenshot displays the SAS Enterprise Guide interface for a project named "Analyze Netflix Data - NetflixHistory". The main workspace shows a workflow diagram with tasks such as "Import NF History", "Data Imported from Netflix...", "Calc Days and Ratings", "TITLES DAY SRATINGS", "Chart of ratings", "HTML - Chart of ratings", "scatter_days_vs_shipped.sas", "HTML - scatter_days_vs_shippe...", "Movies we like", "SAS Report - Movies we like", "Like and Dislikes", "Summary Statistics", and "HTML - Summary Statistie".

The "Search" panel is open at the bottom, showing a search for "Netflix" with 26 results. The search results are displayed in a table with columns for "Refine Results", "Name", "Type", and "Process Flow".

Refine Results	Name	Type	Process Flow
<input checked="" type="checkbox"/> All	Data Imported from NetflixHistory.xlsx	Data	Analyze Netflix Data
<input type="checkbox"/> Program	Data Imported from NetflixInstantWatch.xlsx	Data	Analyze Netflix Streaming
<input type="checkbox"/> Task	Calc Days and Ratings	Query	Analyze Netflix Data
<input type="checkbox"/> Report	Clean Data	Query	Analyze Netflix Streaming
<input type="checkbox"/> Data	Import NF History	Task	Analyze Netflix Data
<input type="checkbox"/> Query	Import Data (NetflixInstantWatch.xlsx\$Sheet1\$A16:E605)	Task	Analyze Netflix Streaming
<input type="checkbox"/> Stored process	Log	Log	Analyze Netflix Data
<input type="checkbox"/> Cron	Log	Log	Analyze Netflix Data

Output Data Performance Options

- New options for controlling what output data to open automatically

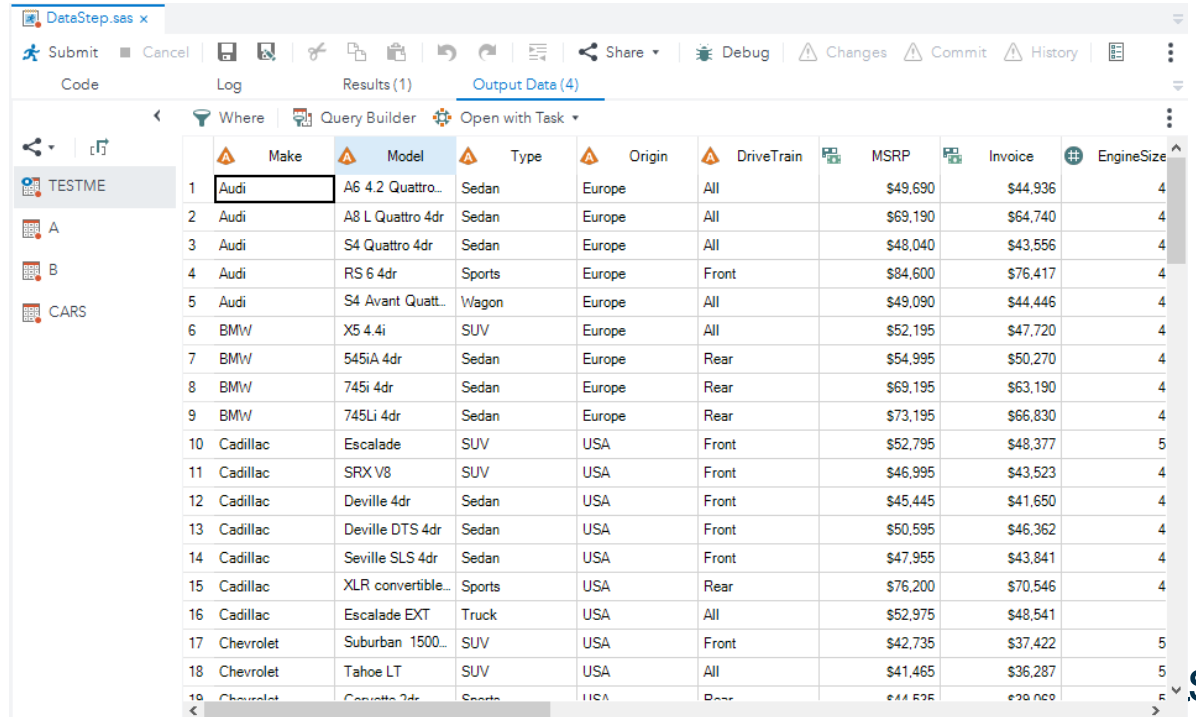
When generating tables in a program, automatically open:

Last table ▾

Unlock open data after inactivity (minutes):

Unlock all open data before running code

Automatically refresh open data tabs after running code



The screenshot shows the SAS DataStep interface with a table of car data. The table has columns for Make, Model, Type, Origin, DriveTrain, MSRP, Invoice, and EngineSize. The first row is highlighted, and the 'Make' column is selected.

	Make	Model	Type	Origin	DriveTrain	MSRP	Invoice	EngineSize
1	Audi	A6 4.2 Quattro...	Sedan	Europe	All	\$49,690	\$44,936	4
2	Audi	A8 L Quattro 4dr	Sedan	Europe	All	\$69,190	\$64,740	4
3	Audi	S4 Quattro 4dr	Sedan	Europe	All	\$48,040	\$43,556	4
4	Audi	RS 6 4dr	Sports	Europe	Front	\$84,600	\$76,417	4
5	Audi	S4 Avant Quatt...	Wagon	Europe	All	\$49,090	\$44,446	4
6	BMW	X5 4.4i	SUV	Europe	All	\$52,195	\$47,720	4
7	BMW	545iA 4dr	Sedan	Europe	Rear	\$54,995	\$50,270	4
8	BMW	745i 4dr	Sedan	Europe	Rear	\$69,195	\$63,190	4
9	BMW	745Li 4dr	Sedan	Europe	Rear	\$73,195	\$66,830	4
10	Cadillac	Escalade	SUV	USA	Front	\$52,795	\$48,377	5
11	Cadillac	SRX V8	SUV	USA	Front	\$46,995	\$43,523	4
12	Cadillac	Deville 4dr	Sedan	USA	Front	\$45,445	\$41,650	4
13	Cadillac	Deville DTS 4dr	Sedan	USA	Front	\$50,595	\$46,362	4
14	Cadillac	Seville SLS 4dr	Sedan	USA	Front	\$47,955	\$43,841	4
15	Cadillac	XLR convertible...	Sports	USA	Rear	\$76,200	\$70,546	4
16	Cadillac	Escalade EXT	Truck	USA	All	\$52,975	\$48,541	4
17	Chevrolet	Suburban 1500...	SUV	USA	Front	\$42,735	\$37,422	5
18	Chevrolet	Tahoe LT	SUV	USA	All	\$41,465	\$36,287	5
19	Chevrolet	Camaro 2dr	Sports	USA	Rear	\$44,535	\$39,000	5

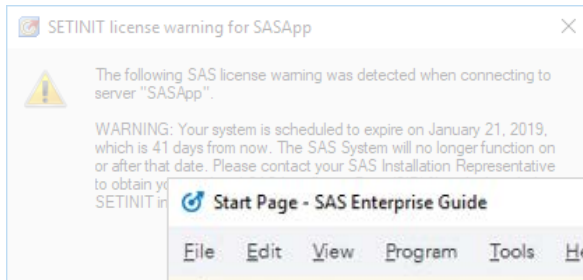


Notifications

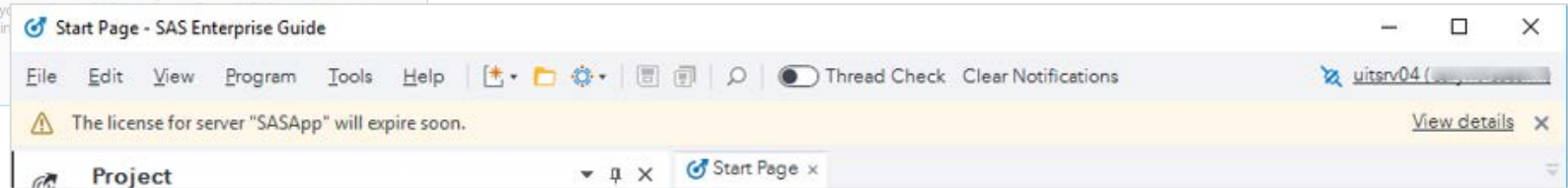
What do you really need to know?

- Get out of your way so you can continue working
- Better messaging

Before



After





Behind the Scenes

- Always responsive
 - Gracefully handle server unresponsiveness
- More responsible with open data
 - Not locking as long
 - Not opening when unnecessary
- Improved handling of large project logs
- Product help is now online!



SAS Enterprise Guide and SAS Studio

Future Forward

The screenshot shows the SAS Studio interface. The code editor contains the following SAS code:

```
1 proc sort data=sashelp.cars out=cars;  
2 by make;  
3 run;  
4 data testme;  
5 set cars;  
6 format dollarsPerHorse dollar20.2;  
7 retain runningHorse;  
8 if _type_="Sedan" and cylinders=4 then runningHorse=1;  
9 if _type_="SUV" and cylinders=4 then runningHorse=2;  
10 run;
```

The output window displays a table with the following data:

Obs	Make	Model
1	Audi	A6 4.2 Quattro 4dr
2	Audi	A8 L Quattro 4dr
3	Audi	S4 Quattro 4dr
4	Audi	RS 6 4dr
5	Audi	S4 Avant Quattro

The Submission Status window shows the following details:

Status	Name	Type	Run Time	Submitted	Completed
✓	Program.sas	Program	2.697s	12/4/2018, 3:25...	12/4/2018, 3:26...
✓	Program.sas	Program	3.977s	12/4/2018, 3:29...	12/4/2018, 3:29...

The text "SAS Studio" is overlaid in green on the code editor.

The screenshot shows the SAS Enterprise Guide interface. The code editor contains the following SAS code:

```
1 proc sort data=sashelp.cars out=cars;  
2 by make;  
3 run;  
4 data testme;  
5 set cars(where=(cylinders eq 8)) noobs;  
6 format dollarsPerHorse dollar20.2;  
7 retain runningHorse;  
8 by make;  
9 if _type_="Sedan" and cylinders=4 then runningHorse=1;  
10 if _type_="SUV" and cylinders=4 then runningHorse=2;  
11 run;
```

The output window displays a table with the following data:

Obs	Make	Model	Type	Origin
1	Audi	A6 4.2 Quattro 4dr	Sedan	Euro
2	Audi	A8 L Quattro 4dr	Sedan	Euro
3	Audi	S4 Quattro 4dr	Sedan	Euro

The Submission Status window shows the following details:

Name	Run Time	Submitted	Completed
Program	2.111s	12/4/2018 3:27:13 PM	12/4/2018 3:27:15 PM
Program	2.070s	12/4/2018 3:30:05 PM	12/4/2018 3:30:07 PM

The text "SAS Enterprise Guide" is overlaid in green on the code editor.

SAS Enterprise Guide and SAS Studio

Work Anywhere

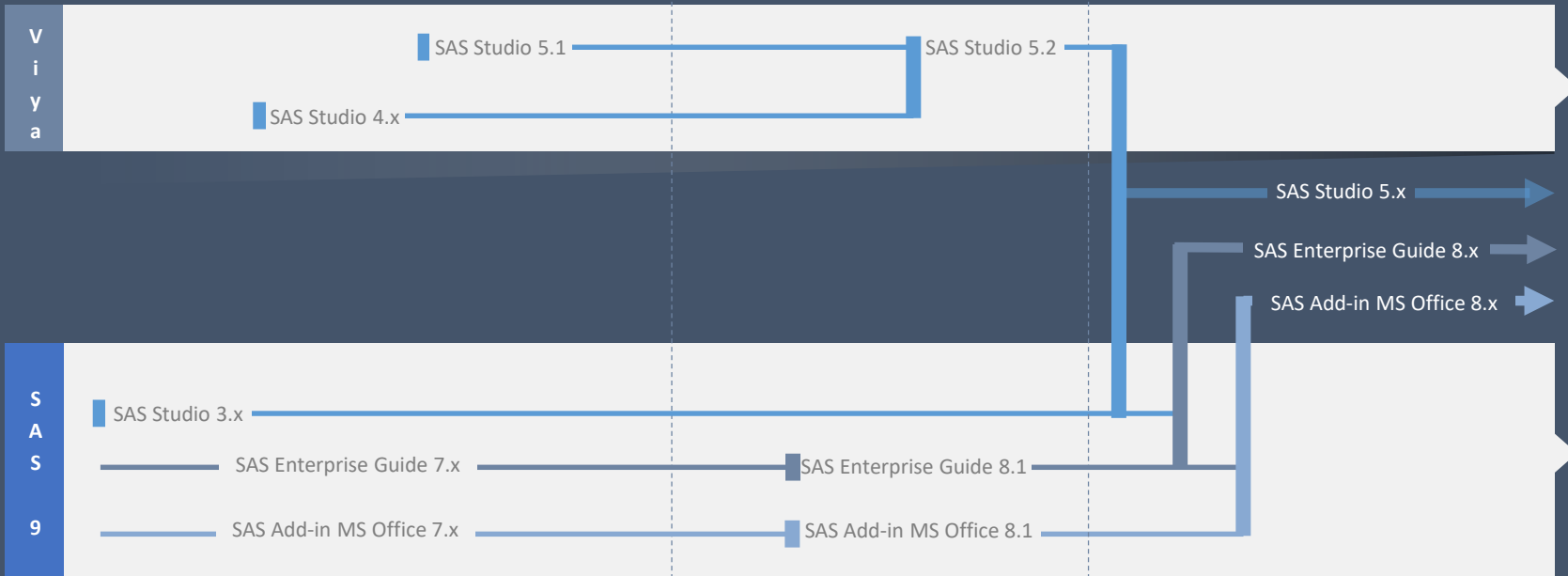




2014 - 2018

2019

2020





Join the Discussion

Tell us what you like, don't like, what more you need

On SAS Communities:

- [SAS Enterprise Guide community](#) – find it under Business Intelligence
- [SASware ballot ideas](#)





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