

SAS® GLOBAL FORUM 2017

April 2 - 5 | Orlando, FL

#SASGF

USERS PROGRAM



The Future of SAS® Enterprise Guide (EG) - An Informal Session

- New modern look
- Tabbed views with many layout options
- Program without projects or process flows
 - Integration points with SAS® Studio



Who Are We?



Samantha DuPont, Principal User Experience Designer for
Enterprise Guide and SAS Studio

Amy Peters, Product Manager for Enterprise Guide and
SAS Studio



Casey Smith, Sr. Development Manager for Enterprise
Guide

Interruptions are encouraged – we want to hear your questions & thoughts
Or drop by the Enterprise Guide and SAS Studio booths and chat with us



Modern Theme – SAS Family

Establish a familial resemblance across SAS's products

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixHistory

Last run: Oct 14, 2017 4:50:34 PM

Filter

Server Files

Servers

- Local
 - Libraries
 - Files
 - Desktop
 - My Documents
 - MyProject.epg
 - Cow.sas
 - SingleFlow.cpf
 - Zebra.sas

Active project: NetflixHistory | File path: C:\Netfix\Analyze Neflix Data

0 Submissions

Analyze Netflix Data

Run Cancel + Save Print Schedule

NetflixHistory.xlsx → ImportHFHistory → Imported NFHistory.xlsx → CalcDays Ratings → TitlesDays Ratings → ChartRatings → SAS Report - ChartRatings → NetflixHistory Report

create_ratings_data → Ratings → RatingsFormat → TitlesDays Ratings

TitlesDays Ratings → scatter_days_vs_shipped → SAS Report - scatter_days_vs_shipped

MoviesWeLike → SAS Report - MoviesWeLike

PrepareTimeSeriesData → SAS Report - PrepareTimeSeriesData

PrepareTimeSeriesData → ModifiedTimeSeriesDataTitles → create_series_plots → SAS Report - create_series_plots

Lots of Pane Layout Flexibility – Dock, Float, Stack

The screenshot displays the SAS Enterprise Guide software interface. At the top is a dark blue header bar with the text "SAS Enterprise Guide" on the left and "User profile" with a dropdown arrow on the right. Below the header is a menu bar with options: File, Edit, View, Tools, Window, Help, and several icons for saving, opening, and running. The main workspace is divided into three panes:

- Server Pane (Left):** Titled "Server", it shows a hierarchical tree of the local file system. Under "My Documents", there is a folder named "MyProject.epg", which contains a subfolder "NetFlix". Inside "NetFlix", there are three files: "create_ratings_data", "scatter_days_vs_shipp", and "create_series_plots".
- Open Files Pane (Bottom Left):** Titled "Open Files", it shows a list of open files. The file "*create_rating_data" is listed. Above the list, it says "1 unsaved".
- Project Pane (Right):** Titled "Project", it shows the current project's structure. It includes a "Last run:" timestamp of "Oct 14, 2017 4:50:34 PM". Below this is a "Filter" search bar and a list of project items: "Analyze Netflix Data" (which is expanded to show "NetflixHistory.xlsx", "ImportHFHistory", "WORK.ImportedNFHistory.xlsx", and "ChartRatings"), and "WORK.Ratings".

The central workspace area is currently empty, with tabs for "Code", "Log", "Results", and "Output Data". The "Code" tab is active, showing a single line of code: "1 |".

At the bottom of the interface, there is a status bar. On the left, it says "Active project: None". On the right, it shows "0 Submissions".

NetflixBHistory43 - SAS Enterprise Guide

File Edit View Tasks Favorites Program Tools Help

Project Tree

- Data Imported from NetflixBHistory.xlsx
- Calc Days and Ratings
- RATINGS
- TITLESDAYS RATINGS
- Chart of ratings
- Summary Statistics
- Movies we like
- Didn't like
- Prepare Time Series Data
- Modified Time Series data for WORK.TITLESDAYS

Servers

Calc Days and Ratings

	DVD Title	shipped	returned	DaysOut
1	Hairspray	13AUG2011	23AUG2011	1
2	Return to Neve...	02AUG2011	13AUG2011	1
3	The History Bo...	29JUL2011	02AUG2011	
4	Bridge to Terab...	23JUL2011	29JUL2011	
5	Oklahoma!	12JUL2011	23JUL2011	1
6	Bee Movie	06JUL2011	12JUL2011	
7	Four Rooms	11JUN2011	06JUL2011	2
8	Mad Men: Sea...	24MAY2011	11JUN2011	1
9	Mad Men: Sea...	19APR2011	24MAY2011	

Calc Days and Ratings

	dvd_title	rating	shipped
1	Hairspray	You rated this...	13AUG2011
2			
3		Rate 5 stars	
4		Rate 4 stars	
5		Rate 3 stars	
6		Rate 2 stars	
7		Rate 1 star	
8		Rate not intere...	
9	Return to Neve...	You rated this...	02AUG2011

Current: Max 2 tabs

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixBHistory

Last run: Oct 14, 2017 4:50:34 PM

Filter

- Analyze NetflixBHistory
 - NetflixBHistory.xlsx
 - ImportHFHistory
 - WORK.ImportedNFHistory.xlsx
 - CalcDaysRatings
 - WORK.Ratings
 - WORK.RatingsFormat

Run Cancel + Schedule

NetflixBHistory.xlsx → ImportHFHistory → ImportedNFHistory.xlsx → CalcDaysRatings → TitlesDaysRatings → ChartRatings → SAS R Chart

create_ratings_data → Ratings → RatingsFormat → scatter_days_vs_shipped → SAS R scatter_c hip

Future: Lots and lots of tabs



SAS Enterprise Guide

File Edit View Tools Window Help

Project - Project
Last run: Project has not been run

Filter

WORK.Ratings
Total columns: 500
Total rows: 5,000,000,000

	DVD Title	ActualRating	RatingPhrase
1	Best in Show	5	Loved it
2	Best of Abbott & Costello	5	Loved it
3	Bottle Rocket	5	Loved it
4	Best of Abbott & Costello		

WORK.TitlesCostRatings
Total columns: 300
Total rows: 2,000,000,000

	DVD Title	CostPerMovie
1	Best in Show	\$2.00
2	Best of Abbott & Costello	\$2.67
3	Bottle Rocket	\$1.33
4	Best of Abbott & Costello	\$2.33

Many side-by-side layout options

SAS Enterprise Guide

File Edit View Tools Window Help

Program

Submit

Code Results Output Data

```
1 %let name=periodic_table;  
2 filename odsout '.';  
3  
4 %let cellwidth=1.1;  
5 %let cellheight=1.2;  
6 %let gap=.05;  
7  
8 /*  
9 This example creates a periodic table using SAS/Graph gmap & annotate,  
10 and allows the coloring of the cells in the table to be controlled by  
11 the 'color' variable, and the text to be controlled via the 'text' variable
```

Log

Errors (0) Warnings (1) Notes (23)

```
1 OPTIONS NOSYNTAXCHECK;  
2 TITLE;  
3 FOOTNOTE;  
4 OPTIONS LOCALE=en_us DFLANG=LOCALE;  
5 DATA _NULL_;  
6 RUN;  
NOTE: DATA statement used (Total process time):  
real time 0.00 seconds
```

Tear 'n Float Panes and Tabs

The screenshot displays the SAS Enterprise Guide interface. The main window is titled 'Program' and contains a SAS program. The 'Log' window is open on the right, showing the execution log for the program 'Create_ratings_data'.

SAS Program Code:

```
1 %let name=periodic_table;
2 filename odsout '.';
3
4 %let cellwidth=1.1;
5 %let cellheight=1.2;
6 %let gap=.05;
7
8 /*
9 This example creates a periodic table using SAS/
10 and allows the coloring of the cells in the table
11 the 'color' variable, and the text to be control
12 The numbering for the rows & columns of the table
13 corner (since that's the origin of gmap's coordin
14 */
15
16 data table_data;
17 infile datalines pad trunc;
18 input column row number $ 10-12 abbreviation $ 1
19 datalines;
20 1 10 1 H Hydrogen Nonmetals, Pri
21 1 9 3 Li Lithium Alkali metals,
22 1 8 11 Na Sodium Alkali metals,
23 1 7 19 K Potassium Alkali metals,
24 1 6 37 Rb Rubidium Alkali metals,
25 1 5 55 Cs Caesium Alkali metals,
26 1 4 87 Fr Francium Alkali metals,
27 2 9 4 Be Beryllium Alkaline earth
```

Log Window Output:

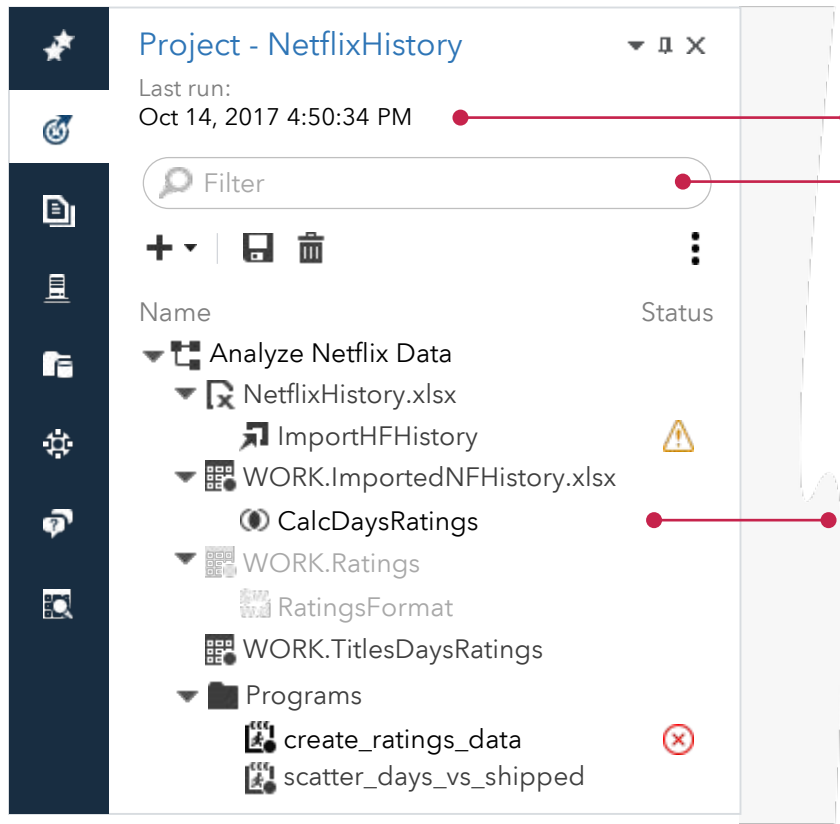
```
Log
Errors (0) Warnings (1) Notes (23)

1 OPTIONS NOSYNTAXCHECK;
2 TITLE;
3 FOOTNOTE;
4 OPTIONS LOCALE=en_us DFLANG=LOCALE;
5 DATA _NULL_;
6 RUN;
NOTE: DATA statement used (Total process time):
      real time          0.00 seconds
      cpu time           0.00 seconds

7
8 OPTIONS VALIDVARNAME=V7;
9 OPTIONS VALIDMEMNAME=COMPAT;
10 ODS _ALL_ CLOSE;
11 FILENAME _HTMLOUT TEMP;
12 FILENAME _RTFOUT TEMP ENCODING='UTF-8';
13 FILENAME _PDFOUT TEMP;
14 FILENAME _LISTOUT TEMP;
15 FILENAME _GSFNAME TEMP;
16 FILENAME _DATAOUT TEMP;
17 %LET SYSCC=0;
18 %LET _CLIENTAPP=SAS Studio;
19 %LET _CLIENTAPPVERSION=5.1;
20 %LET _SASSERVERNAME=%BQUOTE(localhost);
21 %LET _CLIENTUSERID=%BQUOTE(sawals);
22 %LET _CLIENTUSERNAME=%BQUOTE();
23 %LET _CLIENTMACHINE=%BQUOTE();
```




Project Pane Enhancements



Last run info

Filter - as you type

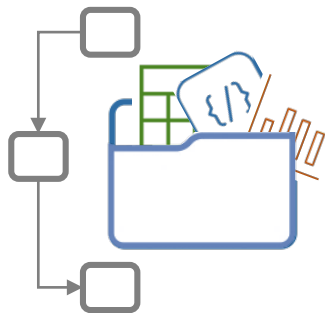
Stuff to help you:

- More run options
- Status indicators
- Ability to exclude/include items on the fly

Working with a Project (or not!)

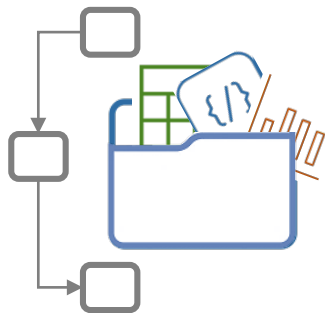
The screenshot shows the SAS Enterprise Guide interface with a project named "Project - NetflixHistory" open. The project's last run was on Oct 14, 2017 at 4:50:34 PM. The left sidebar displays a tree view of the project's contents, including a folder "Analyze Netflix Data" which contains several files and tasks. The main workspace shows a workflow diagram with two tasks: "NetflixHistory.xlsx" and "ImportHFHistory", connected by an arrow. Below this, there is a task named "create_ratings_data" and a task named "Rating".

The screenshot shows the SAS Enterprise Guide interface with the "Server" pane open. The "Server" pane displays a tree view of the server's structure, including a folder "Local" which contains a folder "Files". The "Files" folder contains a folder "My Documents" which contains a file "MyProject.epg". The "MyProject.epg" file is expanded, showing a folder "NetFlix" which contains three files: "create_ratings_data", "scatter_days_vs_shipp", and "create_series_plots". The "Open Files" pane is also open, showing a list of files, including "1 unsaved" and "*create_rating_data".



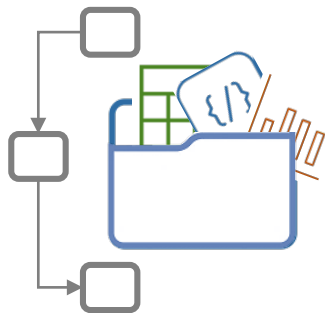
I love the way EG adds
files to projects and
process flows for me





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





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



Project

Create a New Project

-----OR-----

Open an Existing Project

Server Files

Servers

Local

Start page

Discover what's new in Enterprise Guide 8

Learn about new features

Learn about working without a project or process flow

Get Started

New project
Project Explorer

New program
Starting coding S

Open a project
Have an existing

Recent Files

Pinned

BA_Process

Modified:
01/12/2017 9:34AM

QuerySalary

Modified:
01/12/2017 9:34AM

Today

HistorySample

Modified:
01/12/2017 9:34AM

HistorySampleB

Modified:
01/12/2017 9:34AM

Active project: None



- Project
- Data
- Program
- Stored process
- Process Flow
- Task

Project

Create a New Project

-----OR-----



Open an Existing Project

What's new in Enterprise Guide 8

What new features


Learn about working without a project or process flow

Get Started

 New project
Project Explorer New program
Starting coding S Open a project
Have an existing


Recent Files

Pinned



BA_Process


Modified:
01/12/2017 9:34AM



QuerySalary


Modified:
01/12/2017 9:34AM

Today



HistorySample

Modified:
01/12/2017 9:34AM



HistorySampleB

Modified:
01/12/2017 9:34AM

Server Files



Servers

Local

Active project: None



Project



Create a New Project

-----OR-----

Open an Existing Project



Server Files



Servers

Local



Active project: None

Program



Submit



Code

Log

Results

Output Data

```
1 %let name=periodic_table;
2 filename odsout '.';
3
4 %let cellwidth=1.1;
5 %let cellheight=1.2;
6 %let gap=.05;
7
8 /*
9 This example creates a periodic table using SAS/Graph gmap & annotate,
10 and allows the coloring of the cells in the table to be controlled by
11 the 'color' variable, and the text to be controlled via the 'text' variable.
12 The numbering for the rows & columns of the table starts at the bottom/left
13 corner (since that's the origin of gmap's coordinate system).
14 */
15
16 data table_data;
17 infile datalines pad truncover;
18 input column row number $ 10-12 abbreviation $ 14-16 element $ 18-33 description $ 35-100;
19 datalines;
20 1 10 1 H Hydrogen Nonmetals, Primordial, Gas
21 1 9 3 Li Lithium Alkali metals, Primordial, Solid
22 1 8 11 Na Sodium Alkali metals, Primordial, Solid
23 1 7 19 K Potassium Alkali metals, Primordial, Solid
24 1 6 37 Rb Rubidium Alkali metals, Primordial, Solid
```


Project – Add Files Yourself

The screenshot shows the SAS Enterprise Guide interface. The 'Project - NetflixHistory' window is active, displaying a table of DVD titles. The 'Server Files' pane on the left shows a tree structure with 'Servers' > 'Local' > 'Libraries' > 'Files' > 'NetFlix'. A right-click context menu is open over the 'NetFlix' folder, with the 'Add to project' option highlighted. The status bar at the bottom indicates 'Active project: NetflixHistory' and 'File path: Libraries\WORK.TitlesDaysRatings'.

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixHistory

Last run:
Project has not been run

Filter

Enter expression

DVD Title

	DVD Title
1	Best in Show
2	Best of Abbott & Costello
3	Bottle Rocket
4	Charlotte's Web
5	Defying Gravity: Season 1
6	Dreamgirls
7	Evan Almighty
8	Everything Is Illuminated
9	Flushed Away
10	Garden State
11	Hairspray
12	High Fidelity
13	Iron Man
14	John Adams: Disc 3
15	Little Miss Sunshine
16	Mad Men: Season 2: Disc 1

Server Files

Servers

- Local
 - Libraries
 - Files
 - Desktop
 - My Documents
 - MyProject.epg
 - NetFlix
 - create_ratings_data
 - scatter_days_vs_ratings
 - create_series_plots
 - NetflixHistory.xls
 - NetflixInstantWatch.xls

Open

Add to project

Cut

Copy

Paste

Delete

Rename

Properties

Active project: NetflixHistory | File path: Libraries\WORK.TitlesDaysRatings

The screenshot shows the same SAS Enterprise Guide interface. The 'Server Files' pane is still open, but the 'NetFlix' folder is no longer selected. Instead, the 'create_ratings_data' and 'create_series_plots' files are highlighted. The status bar at the bottom indicates 'Active project: NetflixHistory' and 'File path: Libraries\WORK.TitlesDaysRatings'.

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixHistory

Last run:
Project has not been run

Filter

Enter expression

DVD Title

	DVD Title
1	Best in Show
2	Best of Abbott & Costello
3	Bottle Rocket
4	Charlotte's Web
5	Defying Gravity: Season 1
6	Dreamgirls
7	Evan Almighty
8	Everything Is Illuminated
9	Flushed Away
10	Garden State
11	Hairspray
12	High Fidelity
13	Iron Man
14	John Adams: Disc 3
15	Little Miss Sunshine
16	Mad Men: Season 2: Disc 1
17	Meet the Robinsons
18	Modern Family: Season 1
19	Night at the Museum

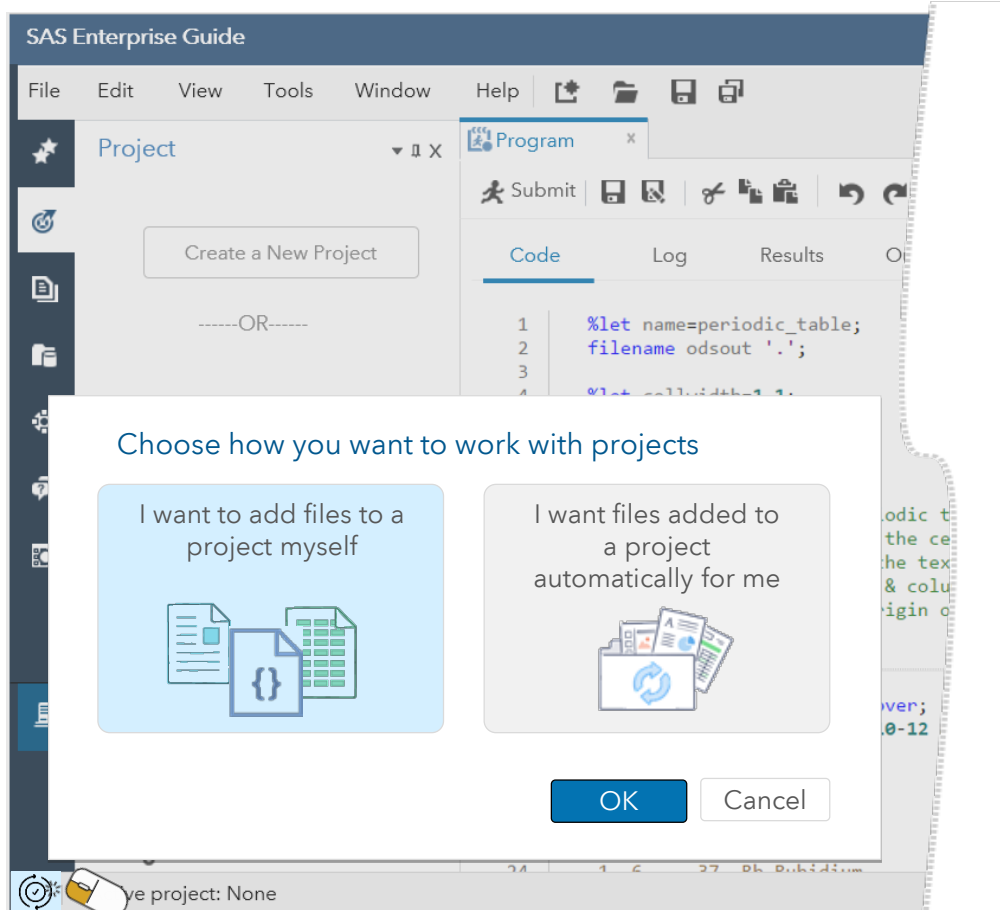
Server Files

Servers

- Local
 - Libraries
 - Files
 - Desktop
 - My Documents
 - MyProject.epg
 - NetFlix
 - create_ratings_data
 - scatter_days_vs_ratings
 - create_series_plots
 - NetflixHistory.xls
 - NetflixInstantWatch.xls

Active project: NetflixHistory | File path: Libraries\WORK.TitlesDaysRatings

Project Mode – ON or OFF




Where would you expect to turn “using a project or not” on or off?

- Preferences?
- Accessible option in the UI?
- Other?

Would you want to see this setting in the UI?
For example, in the status bar an icon indicates ON or OFF.

 | Active project: Project | File path: Libraries\WORK

 | Active project: None | File path: Libraries\WORK

How often do you think you will switch between the two options?



Integration Between SAS Studio and Enterprise Guide

Goal: Provide the best application for SAS programmers on the desktop and on the web

- Long term vision is to provide users with a familiar experience as they move between the two applications.
 - Theme – part of the SAS family
 - Harmonizing the Server navigation experience
 - Query builder in SAS Studio is more EG-like
 - Studio Tasks available in EG task browser
- Leverage the strengths of each – browser and rich-client
- Content independence; not specific to one app or the other
 - Started - EG projects conversion in Studio (experimental)

Feedback & Questions

Come by the Enterprise Guide or SAS Studio booths
and chat with us on your thoughts about our future
vision

Don't Forget to Provide Feedback!

1. Go to the Agenda icon in the conference app.
2. Find this session title and select it.
3. On the sessions page, scroll down to Surveys and select the name of the survey.
4. Complete the survey and click Finish.