

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

The screenshot displays the SAS Enterprise Guide interface. The top menu bar includes File, Edit, View, Tools, Window, Help, and a User profile dropdown. The main workspace shows a project titled "Analyze Netflix Data" with a workflow diagram. The workflow consists of several steps: NetflixHistory.xlsx, ImportHFHistory, ImportedNFHistory.xlsx, CalcDaysRatings, TitlesDaysRatings, ChartRatings, SAS Report - ChartRatings, NetflixHistory Report, create_ratings_data, Ratings, RatingsFormat, scatter_days_vs_shipped, SAS Report - scatter_days_vs_shipped, MoviesWeLike, SAS Report - MoviesWeLike, PrepareTimeSeriesData, SAS Report - PrepareTimeSeriesData, ModifiedTimeSeriesDataTitles, create_series_plots, and SAS Report - create_series_plots. The left sidebar shows a "Server Files" pane with a tree view of local files, including Desktop, My Documents, MyProject.epg, Cow.sas, SingleFlow.cpf, and Zebra.sas. The bottom status bar indicates the active project is "NetflixHistory" and the file path is "C:\Netflix\Analyze Netflix Data".

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixHistory

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

Analyze Netflix Data

Run Cancel + Schedule

Filter

Analyze Netflix Data

- NetflixHistory.xlsx
- ImportHFHistory
- WORK.ImportedNFHistory.xlsx
- WORK.Ratings
- WORK.RatingsFormat
- WORK.TitlesDaysRatings

Server Files

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

Active project: NetflixHistory | File path: C:\Netflix\Analyze Netflix Data

Submissions

Lots of Pane Layout Flexibility – Dock, Float, Stack

The screenshot displays the SAS Enterprise Guide interface. At the top, the title bar reads "SAS Enterprise Guide" and "User profile". Below this is a menu bar with "File", "Edit", "View", "Tools", "Window", and "Help".

The main workspace is divided into several panes:

- Server Explorer (Left):** Shows a tree view of the server structure. Under "Local", it lists "Libraries", "Files", "Desktop", "My Documents", and "MyProject.egg". Under "MyProject.egg", there is a "NetFlix" folder containing files like "create_ratings_data", "scatter_days_vs_shipp", and "create_series_plots".
- Open Files (Bottom Left):** Shows a list of open files, including "*create_rating_data" with a "1 unsaved" indicator.
- Code Editor (Center):** A floating window titled "*create_rating_data" with a toolbar containing "Submit", "Save", "Print", "Undo", "Redo", and "Refresh". Below the toolbar are tabs for "Code", "Log", "Results", and "Output Data". The "Code" tab is active, showing a single line of code: "1 |".
- Project Explorer (Right):** A docked pane titled "Project" showing the project's execution history. It includes a search bar labeled "Filter" and a list of tasks: "Analyze Netflix Data", "NetflixHistory.xlsx", "ImportHFHistory", "WORK.ImportedNFHistory.xlsx", "ChartRatings", and "WORK.Ratings".

At the bottom of the interface, the status bar shows "Active project: None" on the left and "0 Submissions" on the right.

NetflixBHistory43 - SAS Enterprise Guide

File Edit View Tasks Favorites Program Tools Help Analyze Netflix Data Search Current Project

Project Tree

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

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	1
4 Bridge to Terab...	23JUL2011	29JUL2011	1
5 Oklahoma!	12JUL2011	23JUL2011	1
6 Bee Movie	06JUL2011	12JUL2011	1
7 Four Rooms	11JUN2011	06JUL2011	2
8 Mad Men: Sea...	24MAY2011	11JUN2011	1
9 Mad Men: Sea...	19APR2011	24MAY2011	1

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 Netflix Data
 - NetflixBHistory.xlsx
 - ImportHFHistory
 - WORK.ImportedNFHistory.xlsx
 - CalcDaysRatings
 - WORK.Ratings
 - WORK.RatingsFormat

Analyze Netflix Data

Run Cancel Schedule

```

    graph LR
      A[NetflixBHistory.xlsx] --> B[ImportHFHistory]
      B --> C[ImportedNFHistory.xlsx]
      C --> D[CalcDaysRatings]
      D --> E[TitlesDaysRatings]
      E --> F[ChartRatings]
      F --> G[SAS R Chart]
      H[create_ratings_data] --> I[Ratings]
      I --> J[RatingsFormat]
      J --> K[scatter_days_vs_shipped]
      K --> L[SAS R scatter_c hip]
      D -.-> J
      E -.-> K
  
```

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	Chalchicomula		

WORK.TitlesCostRatin*

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	Chalchicomula	\$2.00

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 SAS code for creating a periodic table. The code includes macro variables for cell dimensions and a DATA statement that outputs a table of elements. A secondary window titled "Log (Create_ratings_data)" is open, showing the execution log with various options and a performance note.

```
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 coordi
14 */
15
16 data table_data;
17 infile datalines pad truncover;
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
```

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

Project Pane Enhancements

Project - NetflixHistory

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

Filter

Name Status

- ▼ Analyze Netflix Data
 - ▼ NetflixHistory.xlsx
 - ▼ ImportHFHistory
 - ▼ WORK.ImportedNFHistory.xlsx
 - CalcDaysRatings
 - ▼ WORK.Ratings
 - ▼ RatingsFormat
 - ▼ WORK.TitlesDaysRatings
 - ▼ Programs
 - create_ratings_data
 - scatter_days_vs_shipped

Stuff to help you:

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

Annotations:

- Last run info
- Filter - as you type

Working with a Project (or not!)

The screenshot shows the SAS Enterprise Guide interface with a project named "Project - NetflixHistory". The top menu bar includes File, Edit, View, Tools, Window, and Help. The left sidebar contains a navigation pane with a search filter and a list of tasks under the "Analyze Netflix Data" folder. The main workspace displays a workflow diagram with the following steps: "NetflixHistory.xlsx" (input) → "ImportHFHistory" (process) → "create_ratings_data" (output) → "Rating" (output).

SAS Enterprise Guide

File Edit View Tools Window Help

Project - NetflixHistory

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

Filter

- Analyze Netflix Data
 - NetflixHistory.xlsx
 - ImportHFHistory
 - WORK.ImportedNFHistory.xlsx
 - CalcDaysRatings
 - WORK.Ratings
 - SW RatingsFormat
 - WORK.TitlesDaysRatings
 - ChartRatings
 - SummaryStatistics
 - MoviesWeLike
 - DontLike
 - PrepareTimeSeriesData
 - WORK.ModifiedTimeSeriesData

NetflixHistory.xlsx → ImportHFHistory → create_ratings_data → Rating

The screenshot shows the SAS Enterprise Guide interface with a file explorer view. The top menu bar includes File, Edit, View, Tools, Window, and Help. The left sidebar shows a tree view of the file system. The main workspace displays a file explorer view of the "NetFlix" folder, showing files "create_ratings_data", "scatter_days_vs_shipp", and "create_series_plots". The right pane shows the "Code" tab with a single line of code.

SAS Enterprise Guide

File Edit View Tools Window Help

Server

- Servers
 - Local
 - Libraries
 - Files
 - Desktop
 - My Documents
 - MyProject.epg
 - NetFlix
 - create_ratings_data
 - scatter_days_vs_shipp
 - create_series_plots

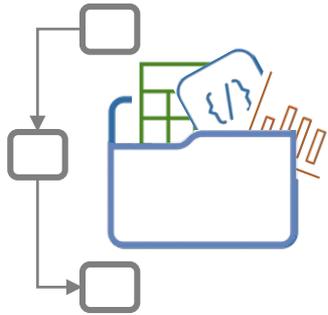
Open Files

1 unsaved

*create_rating_data

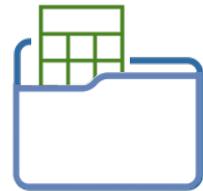
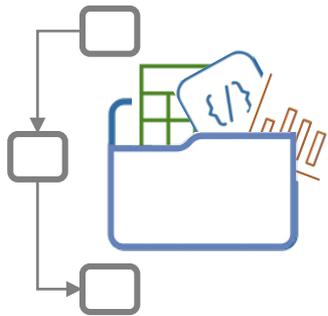
Code Log Results

```
1 |
```

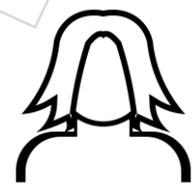


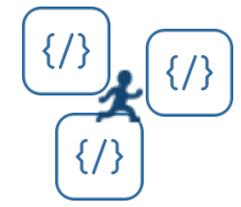
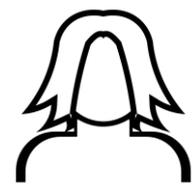
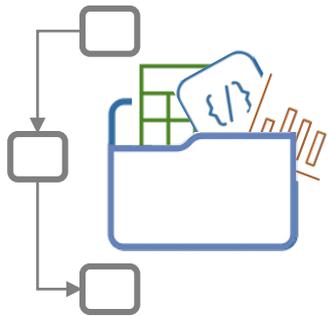
I love the way EG adds files to projects and process flows for me





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

Recent Files

Pinned	Today
<p>BA_Process</p> <p>Modified: 01/12/2017 9:34AM</p>	<p>QuerySalary</p> <p>Modified: 01/12/2017 9:34AM</p>
	<p>HistorySample</p> <p>Modified: 01/12/2017 9:34AM</p>
	<p>HistorySampleB</p> <p>Modified: 01/12/2017 9:34AM</p>

Get Started

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



Project

Create a New Project

-----OR-----

Open an Existing Project

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

What's new in Enterprise Guide 8

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

Server Files



- Servers
- Local

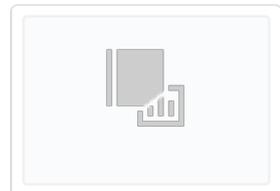
Recent Files

Pinned

Today



BA_Process
Modified: 01/12/2017 9:34AM



QuerySalary
Modified: 01/12/2017 9:34AM



HistorySample
Modified: 01/12/2017 9:34AM



HistorySampleB
Modified: 01/12/2017 9:34AM

Project

Create a New Project

-----OR-----

Open an Existing Project

Server Files



Servers

Local

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

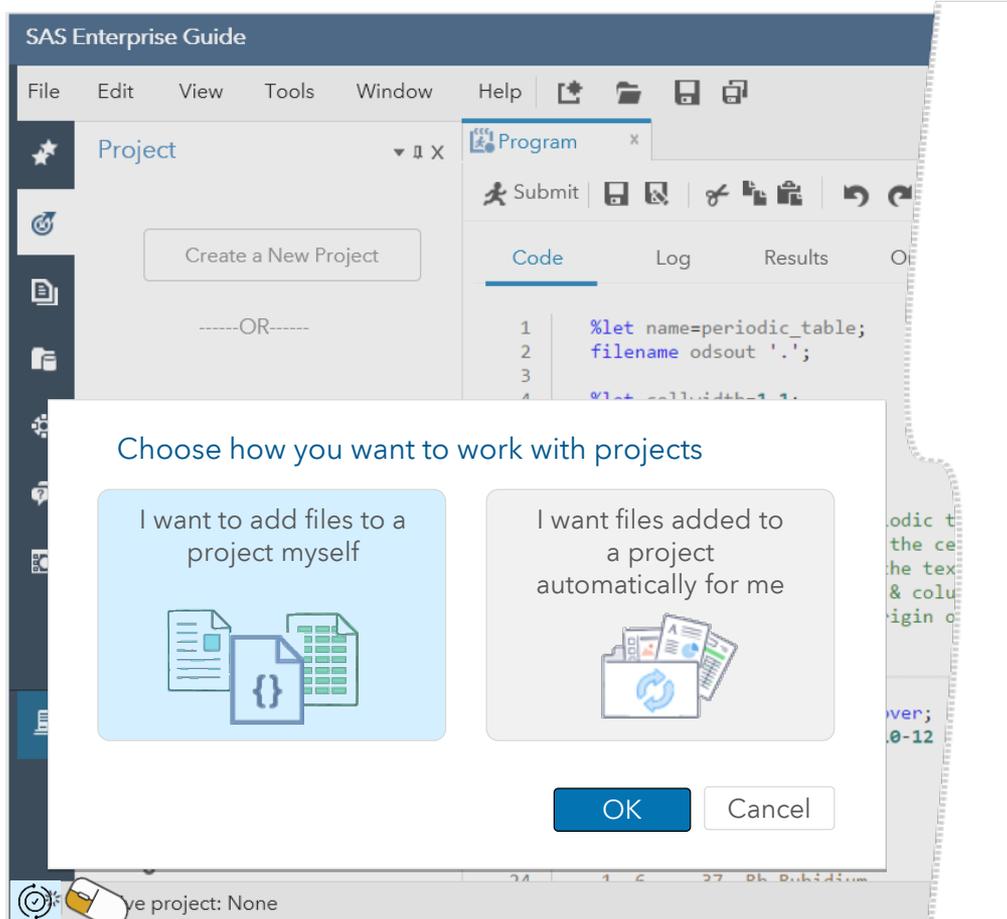
The screenshot shows the SAS Enterprise Guide interface. The main window displays a project named 'Project - NetflixHistory'. The 'Server Files' pane on the left shows a tree view of the file system, with the 'NetFlux' folder selected. A context menu is open over the 'NetFlux' folder, with the 'Add to project' option highlighted. The main window also shows a table of DVD titles with columns for 'DVD Title' and 'Total rows'.

DVD Title	Total rows
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	

The screenshot shows the same SAS Enterprise Guide interface. The 'Server Files' pane on the left shows the 'NetFlux' folder selected, with the files 'create_ratings_data' and 'create_series_plots' highlighted. The main window also shows the same table of DVD titles as in the previous screenshot.

DVD Title	Total rows
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: Ratatouille	
20 Sideways	
21 The Curious Case of Benjamin Franklin	
22 The Darjeeling Limited	
23 The Jungle Book	
24 The Madness of King George	
25 The Men Who Stare at Goats	

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.



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.