

SAS Studio and SODA

Tom Kari, Tom Kari Consulting
TASS, December 2017

SAS Studio and SODA

SAS Studio

- Browser based, user interface to SAS environment
- Zero footprint on the user's machine

SODA (SAS On Demand for Academics)

- Hosted environment to allow learners to use SAS
- Runs on SAS servers
- User interface is SAS Studio



SAS Studio and SODA

Key operations

- Two perspectives: SAS Programmer / Visual Programmer
- Upload / Download
- Import / Export
- SAS program editor
- Tasks
- Snippets
- Server directory navigation



SAS Studio and SODA

“Top Ten” Best

- 10 Running man is back!
- 9 Editing the autoexec file
- 8 Versioning (not tested)
- 7 Drag and drop dataset and field names
- 6 Subflows within process flows
- 5 Easier to build custom tasks
- 4 Code formatting
- 3 Use code that is created for a task
- 2 Graphics tasks use SG procs
- 1 Incredible software stack available in SODA: Base SAS, SAS/GRAPH, SAS/STAT, SAS/ETS, SAS/OR, SAS/IML, SAS/QC, SAS/IML Studio



SAS Studio and SODA

“Top Ten” Worst

- 7 The usual difficulties with a browser-based interface
- 6 Problems when library space consumed on SODA
- 5 Difficulty stopping programs on SODA
- 4 Custom tasks less sophisticated than EG
- 3 Can't open tasks from dataset window, like in EG
- 2 No "Summary Tables" task
- 1 Query builder is less sophisticated than EG (no advanced expressions)



SAS Studio and SODA

SODA Performance Tests (informal)

- Thanks to Yves Deguire, a test using the *Gregory-Leibniz series to estimate Pi*
- He's coded it to run in a data step, and 8-way multithreaded in DS2!

	My PC		SODA	
	Single Threaded	Multi Threaded (8)	Single Threaded	Multi Threaded (8)
User CPU Time (Seconds)	45.81	44.39	16.39	15.67
Real Time (Seconds)	45.85	9.32	16.39	3.35
Memory (KB)	496.46	4,518	1,465	5,864
OS Memory (KB)	17,748	23,380	23,076	29,096



SAS Studio and SODA

Random observations

- The Visual Programmer perspective is a bit version 0.9
- UTF-8 by default
- No prompt manager, but can easily build a custom task to gather prompts. SAS provides examples.
- Can't do as much without writing SAS code as in EG
- Documentation is excellent
- Not all the tasks that are documented are available in SODA
- Programs tend to run quickly, then there's a delay for the results to be gathered and presented
- Can select vertical blocks of text
- Process flows are awkward because you have to use the breadcrumbs
- Interactive mode and background mode not available in SODA
- Home / End / Ctrl+Home / Ctrl+End functionality is different



SAS Studio and SODA

“Bottom Line”

I can comfortably say that if I were forced to use SODA from here on in, I would cheerfully be able to make it work for me.

