

SAS: The last of the great mainframe stats packages

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It almost seemed like there was one
for every major university

- **DATATEXT**: Harvard
- **SPSS**: University of Chicago
- **BMDP**: University of California at Los Angeles
- **SAS**: University of North Carolina at Chapel Hill
- **OMNITAB**: Pennsylvania State University
- **S**: AT&T Bell labs

SAS vs. R

- R is like a motorcycle.
- SAS is like a military Humvee.
- Except it doesn't break down.

SAS File Types Include

- Raw data file
- Program file
- Log file
- Output file

- Data set (Now seems to be called data table)
- Library

Four files

- **Raw Data File:** A file consisting of rows and columns of numbers; or maybe some of the columns have letters (character data) instead of numbers. The rows represent observations and the columns represent variables.
- **Program File:** A file consisting of commands that the SAS software tries to follow. You create this file with a text editor. The program file contains a reference to the raw data file (in the infile statement), so SAS knows where to find the data. Program files have names like reading1.sas.
- **Log File:** This file is produced by every SAS run, whether it is successful or unsuccessful. It contains a listing of the program file, as well as any error messages or warnings.
- **Output File:** The list file contains the output of the statistical procedures requested by the program file. Output files have names like reading1.pdf, reading1.rtf, or reading1.htm.

SAS University Edition

- This is new.
- It seems to be the full version.
- It's free of charge to anybody with a university email address.

http://www.sas.com/en_us/software/university-edition.html

Features of SAS University Edition

- SAS lives in a virtual linux machine
- You interact with it through a browser interface called SAS Studio.
- With SAS running in the virtual machine, you point your browser to a localhost address.
- This way, it is really platform independent.
- You get your data into SAS via a shared folder.

More comments

- It's a **big** download – around 1.8 GB
- Actually it's two downloads.
- First, download the virtualization software, free from Oracle or VMWare.
- The SAS download site has good instructions.
- Once you connect to localhost, see the FAQ
- The FAQ is actually a well-organized manual.

Possible problems

- Slow or flaky internet connection. If it does not work the first time, try again.
 - Virtual machine requires 1GB of RAM.
 - Trouble with older operating systems?
 - Not available in the computer labs.
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- You can use SAS on tuzo or cquest if you wish.

Important Rule

- You may not use a classmate's SAS to do your work for this course.
- It's too easy to see each other's program code.
- You must have your own installation.
- If two people use the same installation of SAS University Edition, they will both get zero for the assignment even if there is no academic offence charge.

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