Get started with Gauss

What is Gauss?

GAUSS™ is a complete analysis environment suitable for performing quick calculations, complex analysis of millions of data points, or anything in between. Whether you are new to computerized analysis or a seasoned programmer, the GAUSS family of products combine to offer you an easy to learn environment that is powerful and versatile enough for virtually any numerical task.

Since its introduction in 1984, GAUSS has been the standard for serious number crunching and complex modelling of large-scale data. Worldwide acceptance and use in government, industry, and the academic community is a firm testament to its power and versatility.

The GAUSS System can be described several ways: It is an exceptionally efficient number cruncher, a comprehensive programming language, and an interactive analysis environment. GAUSS may be the only numerical tool you will ever need.

Availability

Gauss version 9.0 is provided on all public room computers at LSE and can be run on any machine at LSE that is connected to the network.

Starting Gauss

On a public area computer:
1. Click on **Start | Programs | Econometrics | GAUSS 9.0** and click on **GAUSS 9.0**

On other computers:
1. Double-click on **My Computer** to display a list of your folders and servers.
2. Double-click on **Public on 'Lse.ac.uk\Software\Applications (W:)**
3. Scroll down and double-click on **gauss90**.
4. Right-click **gauss.exe**, choose **Send to** and then **Desktop** (create shortcut).
5. Once the gauss icon is on your desktop, double-click it to start the application.

Note: When Gauss is running and before you start any analysis you should change the working directory as follows:
1. Click on **File | Change Working Directory**.
2. Browse for an appropriate folder to use and click OK.
This must be a folder on which you have full permissions. Sometimes Gauss will produce an error related to the working directory. If this happens, follow this procedure to change it.

Using Gauss

Comprehensive help on using Gauss is available on-line via the Help menu.

GAUSS™ 9.0 features new threading functions that will allow you to take advantage of the power of multi-core, multi-processor, and hyper-threaded systems. By dividing your code into separate threads that run simultaneously to make use of multiple processors, you can dramatically reduce the time needed to run your code. A threading tutorial is available on the GAUSS site.

Example files

Demonstration programs and datasets are held in the subfolder *Examples* of gauss90.

Gauss.cfg

If you need to make certain changes to the way Gauss runs, copy the configuration file gauss.cfg from the gauss90 folder to your local drive or H space. You can edit the file with Notepad. See gauss.cfg itself for notes on how to use it.

Additional Applications

The following Gauss applications are available: Constrained Maximum Likelihood (cmlmt), Discrete Choice (dc), Loglinear Analysis (llmt), Linear Regression (lrmt), Maximum Likelihood Estimation (ml or maxlik), Nonlinear Equations (nlemt), Optimization (op or optimum) and Time Series (tsmt). Documentation in pdf format for these is available in the doc folder of gauss90.

Symbolic Tools for Gauss

The documentation for the Symbolic Tools is in the *Symbolic/doc* subfolder of gauss90.

Maple must be installed on your computer for the Symbolic Tools to work.

Note that when you run an application using symbolic tools there will be a pop-up box with the message Loading Maple Kernel on which you must click OK.

When you exit from Gauss after using symbolic tools there will again be a pop-up box this time saying Releasing Maple kernel and again you must click OK.

Queries

Those using Gauss on a taught course should seek help from the class teacher. Other students should go to the IT Help Desk; staff and research students should consult their IT Support team in the first instance.

Licence

LSE has a small number of floating network licences for Gauss.

Stand alone Gauss licences can be bought from Timberlake Consultants Limited. Timberlake's website is www.timberlake.co.uk