

GAUSS™ 8.0

Quick-Start Guide



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Introduction **1**

Product Overview

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 a standard for serious number crunching and complex modeling of large-scale data. Worldwide acceptance and use in government, industry, and the academic community is a firm testament to its power and versatility.

Getting Started **2**

Installation Under UNIX/Linux/Mac OS X

1. Make a directory to install GAUSS in.
2. `cd` to that directory.
3. Unzip the `.gz` or `.zip` file if there is one.
4. Untar the `.tar` file.
5. Put the installation directory in the executable path.
6. Put the installation directory in the shared library search path.
7. Install the license; please refer to Chapter 5: Licensing for instructions.

For last minute information, see `README.term`.

Installation Under Windows

Machine Requirements

- A Pentium computer or higher.
- Operating System and Memory (RAM) requirements
 - Windows NT 4.0, SP6 IE4.0, 32 MB minimum, 256 MB or more recommended.
 - Windows 2000, 64 MB minimum, 256 MB or more recommended.
 - Windows XP, 128 MB minimum, 256 MB or more recommended.

- Free hard disk space requirements:
Minimum of 100 MB free hard disk space, more may be needed depending on the size of matrices and the complexity of the program.
- Monthly defragmenting is recommended.

Installation from Download

Downloading

If you have current Premier Support, you can download the latest shipping release of the version of GAUSS you own from your Premier Support site. If you do not have current Premier Support, contact Aptech Systems, Inc., for the ftp download instructions.

Installation

After downloading, unzip the software in a temp directory and run `setup.exe`.

Installation from CD

Insert the GAUSS 8.0 compact disc into the CD-ROM drive, and setup should start automatically. If setup does not start automatically, click on `Start`, then click `Run`, and type `D:\setup.exe` in the dialog box (where `D:` is the drive letter of the CD-ROM drive).

You can use this procedure for the initial installation of GAUSS and for additions or modifications to GAUSS components.

To install the license, please refer to Chapter 5: Licensing for instructions.

Documentation **3**

GAUSS Quick-Start Guide

- Introduction
- Getting Started
- Documentation
- Support Services
- Licensing

GAUSS User Guide

- Introduction
- Getting Started
- Using the Command Line Interface
- Introduction to the Windows Interface
- Using the Windows Interface
- Matrix Editor
- Library Tool
- GAUSS Source Browser
- GAUSS Help
- Language Fundamentals
- Operators
- Procedures and Keywords
- Sparse Matrices
- N-Dimensional Arrays

Working With Arrays
Structures
Run-Time Library Structures
Libraries
Compiler
File I/O
Foreign Language Interface
Data Transformations
The GAUSS Profiler
Publication Quality Graphics
Time and Date
ATOG
Error Messages
Maximizing Performance
Fonts Appendix
Reserved Words Appendix
Singularity Tolerance Appendix

GAUSS Language Reference

Introduction
Commands by Category
Command Reference
Obsolete Commands Appendix
Colors Appendix

Ordering Documentation

- GAUSS User Guide and Language Reference set (Part No. 005499)

For pricing information, please visit our Web site at: www.Aptech.com, or contact us at:

Aptech Systems, Inc.
P.O. Box 250
Black Diamond, WA 98010 USA
Phone: (360) 886-7100
FAX: (360) 886-8922
E-mail for Corporate Sales: corpsw@Aptech.com OR info@Aptech.com
E-mail for Academic Sales: acsw@Aptech.com OR info@Aptech.com
E-mail for Government Sales: govsw@Aptech.com OR info@Aptech.com

Support Services

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Contacting Our Support Services

- To contact our support technicians under your Premier Support contract, please e-mail us at: support@Aptech.com and include the following information:
 - Brief description of problem
 - Operating system version (Windows XP, Linux, Mac OS X, etc.)
 - GAUSS version and revision number
 - License ID of GAUSS
 - Your phone number and/or email address
 - Your name
- Our contact information:

Aptech Systems, Inc.
P.O. Box 250
Black Diamond, WA 98010 USA
Phone: (360) 886-7100
FAX: (360) 886-8922
E-mail: info@Aptech.com
- Our Web address is: www.Aptech.com.

Licensing 5

Licensing Under UNIX/Linux 32-bit

After you install GAUSS or the GAUSS Engine, go to the FLEXlm subdirectory and run the following command:

```
% ./lmutil lmhostid
```

Send the output to license@aptech.com, and you will be sent a license code. Create a file called `gauss.lic` in the FLEXlm subdirectory, and copy the license code into it.

If you have purchased a Single User or Server Locked license, the program is now ready for use. If you have purchased a floating network license, you have to start the `lmgrd` license server daemon first. Go to the FLEXlm subdirectory and run the following command:

```
% ./lmgrd -c gauss.lic -l lmgrd.dl
```

For Network licensing see your system administrator to have the license daemon started automatically in the operating system start-up scripts.

For last minute information, see `README.term`.

3. Aptech will send you one or more licenses, depending on the number of increments you purchased. Save all of them in a file called 'gauss.lic'. Copy the gauss.lic file to the license server installation directory on each server.

Configure License Server(s)

1. Launch LMTOOLS from the GAUSS 8.0 program group
2. Select the "Configuration using Services" radio button
3. Select "Configure Services" tab
 - a. Specify Service Name, we suggest "GAUSS License Server"
 - b. Complete the next 3 fields
 - c. "Path to the lmgrd.exe file"
 - d. "Path to the license file"
 - e. "Path to the debug log file" (specify a filename of your choice)
 - f. On NT, select "Use Services"
 - g. Select "Start Server at Power Up" box
 - h. Click "Save Service" button
4. Select "Start/Stop/Reread" tab
 - a. From the "Flexlm license Services installed on the computer" field, choose the name of the server to start.
 - b. Click on the "Start Server" button
5. Close LMTOOLS
6. Test by starting GAUSS on Server.

Configure Clients

Copy the gauss.lic license file to the gauss8.0/flexlm directory on each client workstation where GAUSS is installed.

GAUSS is now ready to run.

Server Locked License

1. Email or FAX your completed registration form containing your contact information, serial number and the hostid that was displayed during installation to Aptech Systems. Be sure to include your e-mail address and/or FAX number. E-mail is the preferred method for returning licenses.

