

GAUSS™ 14

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.

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Installation Under Linux

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. In a terminal window at your GAUSS directory, run `./ginstall`.
6. Put the installation directory in the executable path.
7. Put the installation directory in the shared library search path.
8. Install the license; please refer to Chapter 5: Licensing for instructions.

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

Installation Under Mac OS X

From Download

1. Download the file from your Premier Support site or from the download instructions provided by Aptech Systems.
2. Unzip the software in a temp directory.
3. Run `GAUSS1H_MacOSX_Installer.pkg` by browsing to the folder where you saved the file and double-clicking on it to launch the installation process.
4. Install the license; please refer to Chapter 5: Licensing for instructions.

From CD

1. Insert the GAUSS 14 CD into the CD-ROM drive. Browse to the CD and double-click on the `GAUSS14_MacOSX_Installer.pkg` file.
2. Install the license; please refer to Chapter 5: Licensing for instructions.

Installation Under Windows

From Download

1. Download the file from your Premier Support site or from the download instructions provided by Aptech Systems.
2. Unzip the software in a temp directory.

Getting Started

3. Run GAUSS_14_Win*.msi by browsing to the folder where you saved the file and double-clicking on it to launch the installation process or by clicking on Start, then Run, browse to the folder where you saved the file, and click on GAUSS_14_Win*.msi.
4. Install the license; please refer to Chapter 5: Licensing for instructions.

From CD

1. Insert the GAUSS 14 CD into the CD-ROM drive. If the installation does not start automatically, browse to the drive where you have inserted the disc and double-click the GAUSS_14_Win*.msi file.
2. 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
- Introduction to the Graphical User Interface
- Navigating the Graphical User Interface
- Using the GAUSS Debugger
- GAUSS Graphics
- Graphics Editing
- Using the Command Line Interface
- Language Fundamentals
- Operators

Documentation

Procedures and Keywords
Random Number Generation in GAUSS
Sparse Matrices
N-Dimensional Arrays
Working With Arrays
Structures
Run-Time Library Structures
Multi-Threaded Programming in GAUSS
Libraries
The Library Tool
Compiler
File I/O
Foreign Language Interface
Data Transformations
The GAUSS Profiler
Time and Date
ATOG
Error Messages
Maximizing Performance
GAUSS Graphics Colors
Reserved Words
Singularity Tolerance
Publication Quality Graphics
PQG Fonts
PQG Graphics Colors

GAUSS Language Reference

Introduction
Commands by Category
Command Reference
Obsolete Commands

Ordering Documentation

Documentation in PDF format is available from our website at <http://www.Aptech.com>.

- GAUSS User Guide and Language Reference set
(Part No. 008474)

For pricing information on printed documentation, please contact us at:

Aptech Systems, Inc.

Phone: (360) 886-7100

FAX: (360) 886-8922

E-mail for Corporate Sales: corpsw@Aptech.com

E-mail for Academic Sales: acsw@Aptech.com

E-mail for Government Sales: govsw@Aptech.com

Support Services 4

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 8, Windows 7, Vista, XP, RedHat, CentOS, SuSE, Ubuntu, Mac OS X, etc.)
- GAUSS version and revision number
- License ID of GAUSS
- Your phone number and/or email address
- Your name

Support Services

Phone: (360) 886-7100

FAX: (360) 886-8922

E-mail: info@Aptech.com

Our Web address is: www.Aptech.com.

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Licensing Under Linux and Mac

After you install GAUSS or the GAUSS Engine, go to the `gauss1H` directory. If a file called `myhostid.txt` does not already exist, run the following command from a terminal window:

```
lm/./rlmhostid > hostid.txt
```

Send the resulting `hostid.txt` file to `license@apttech.com` along with your GAUSS serial number (found on the license certificate) and your completed registration form to request a license.

If you are requesting a floating network license, please include the hostname of your server, which can be either the friendly name of the computer or the IP address. You will be sent a license code with instructions for installing it. Save the license file in the main `gauss1H` folder.

Licensing Under Windows

After you install GAUSS or the GAUSS Engine, go to the `gauss1H` directory. If a file called `myhostid.txt` does

not already exist, browse to the `res` folder under GAUSS or the GAUSS Engine 14 main folder and double-click on `linfo.exe`. This will generate the information needed to issue your license and display it on the screen as well as save it in a file called `linfo.txt` in the `res` folder. Send that information to `license@aptech.com` along with your GAUSS serial number (found on the license certificate) and your completed registration form to request a license. If you are requesting a floating network license, please include the hostname of your server, which can be either the friendly name of the computer or the IP address.

Aptech will send you a license with instructions for installing it. Save the license file in the main `gauss1H` folder.

Floating Network Licenses

Licenses are not issued based on the `hostid` and `hostname` of the client machines, only on the `hostid` and `hostname` of the machine acting as the license server. Any machine may act as a license server so long as the client machines can ‘ping’ that machine to request license codes. For advanced instructions on setting up floating network licenses through a firewall, with special services, or to start up automatically at power up, see the RLM End User Manual available online at http://www.reprisesoftware.com/RLM_Enduser.html.

You can manage the license service from a browser window after the service by entering the IP address of the server followed by a colon (`:`) and 5054. For example, if the server IP address is 100.100.100.100, you would enter the URL as:

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`http://100.100.100.100:5054`

From this window, you can check the status of the service, shutdown, reread/restart the service, switch reporting, new reporting, manage Windows services (Windows only), run diagnostics, etc.

More detailed information on the license manager used in GAUSS is available at

<http://www.reprisesoftware.com/support/end-users.php>.

Start License Server

1. Open a command prompt/terminal window and go to the `gauss1H` directory (usually `C:\gauss1H`). Run the following command to start the service:

`rlm.exe` (Windows)

or

`./rlm` (Linux/Solaris/Mac)

2. Test by starting GAUSS on the Server.
3. Minimize the command window or follow the instructions in the RLM End User Manual for setting up GAUSS as a service. Closing the command window without starting GAUSS as a service will shut down the service.

Note that if you have a firewall running between your server and clients, you may need to add the Reprise license manager (rlm) and/or Aptech to the list of allowed services in order for your clients to request license codes. It may further be necessary to specify ports in the license file on

both the server and clients; more detailed information on how to do this are provided at <http://www.reprisesoftware.com/support/end-users.php>.

Configure Clients

Copy the license file used for the server or create an abbreviated client license to the `gauss1H` on each client workstation where GAUSS is installed. The client license needs to contain simply the word `HOST` and the hostname or IP address of the server. The name of the file should be `aptechclient.lic`. If you have specified ports in the server license, the client license will also need to include port information. You can choose to use a copy of the server license on the client machine or create a simplified client license that contains the word `HOST`, the hostname or IP address of the server, and the port specified in the first line of the server license, then on a separate line the word `ISV`, the word `aptech`, and the port specified on the second line of the server license.

GAUSS is now ready to run.

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