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# Stata® Release 16 Installation Guide

## Contents

Simple installation .....	1
Installing Stata for Windows .....	2
Installing Stata for Mac .....	8
Installing Stata for Unix .....	12
Platforms and flavors .....	21
Documentation .....	22



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Version 16

# Simple installation

## Before you install

Before you begin the installation procedure:

1. Make sure you have a *License and Activation Key*.
2. Determine from the *License and Activation Key* whether you should install Stata/MP, Stata/SE, or Stata/IC.

## Stata for Windows installation

1. Insert the installation media.
2. If you have **Auto-insert Notification** enabled, the installer will start automatically. Otherwise, you will want to navigate to your installation media and double-click on `SetupStata16.exe` to start the installer.
3. Go to page [2](#) for detailed instructions about the rest of the installation.

## Stata for Mac installation

1. Insert the installation media.
2. Open the installation media on the Desktop, and double-click on the **Install Stata** file.
3. Go to page [8](#) for detailed instructions about the rest of the installation.

## Stata for Unix installation

1. Become superuser, and then insert and mount the installation media.
2. Create the installation directory (we recommend `/usr/local/stata16`), and change to that directory.
3. Type `/media/Stata/install` (assuming that `/media/Stata` is the path to the installation media), and follow the prompts. Nothing will be written to disk until you say it is okay to do so.
4. Go to page [12](#) for detailed instructions about the rest of the installation.

# Installing Stata for Windows

## Upgrade or update?

If you are using an earlier Stata release and you are upgrading to Stata 16, or if you have never installed Stata before on this computer, you need to read this Installation Guide. If you have already installed Stata 16 and you would like to install the latest updates to Stata 16, please refer to [\[GSW\] 19 Updating and extending Stata—Internet functionality](#).

## Upgrading to Stata/MP or Stata/SE

If you have already installed Stata/IC for version 16 and have purchased an upgrade to Stata/MP or Stata/SE for version 16, run the installer again. Check **Modify**, click on **Next**, and choose the flavor(s) of Stata you wish to install. Your existing copy will not be affected.

Make sure that you have your *License and Activation Key* before doing this. After installation, you will immediately want to update Stata.

## Before you install

Before you begin the installation procedure:

1. Make sure you have the Stata installation media.
2. Make sure you have a *License and Activation Key*.
3. Determine from the *License and Activation Key* whether you should install Stata/MP, Stata/SE, or Stata/IC.
4. Decide where you want to install the Stata software. We recommend C:\Program Files\Stata16.
5. If you already have an old version of Stata on your system, decide whether you want to keep it or uninstall it. We do not recommend having more than one version of Stata installed at a time, because it can cause confusing file-association behavior.

## Installation

Have your Stata *License and Activation Key* with you.

1. Insert the installation media.
2. If you have **Auto-insert Notification** enabled, the installer will start automatically. Otherwise, you will want to navigate to your installation media and double-click on `SetupStata16.exe` to start the installer.
3. You might be asked to verify that you want to install the software; if so, confirm that you wish to do so.
4. The Stata 16 Installation Wizard will start. Proceed as you would with any other software installation.
5. Read and accept the software license agreement to proceed with the installation.
6. The installer will display options for personalizing your installation and making Stata accessible to all users who share your computer. The default choices are probably what you want. If not, make any necessary changes, and click on **Next**.
7. At the **Select Flavor** step, you can choose which flavor of Stata to install. Choose the flavor of Stata that matches your *License and Activation Key*.
8. The installer will ask you where you want to install Stata.
  - a. We recommend that you choose the default directory.
  - b. If you want to install Stata on a network drive, you will need a network license. You can install Stata from the server, or if you have the appropriate privileges, you can install Stata directly to the network drive.
  - c. When you have chosen an installation directory, click on **Next**.

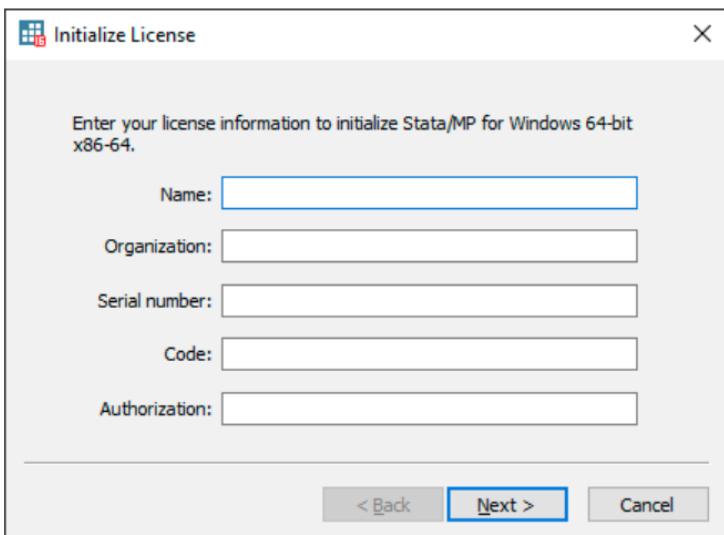
9. The installer will then ask you where you want to set the default working directory.
  - a. The default working directory is the default location for your datasets, graphs, and other Stata-related files.
  - b. We recommend that you choose *Use each user's documents folder*.
  - c. When you have chosen a default working directory, click on **Next** to begin the installation.
10. When the installation is complete, click on **Finish** to exit the installer.
11. If you would like to modify your installation or install other flavors of Stata that are below the flavor of your license, you can run the installer a second time. It will bring up the *Application Maintenance* dialog. Check **Modify**, and click on the **Next** button. You can then choose the flavor(s) of Stata that you would like to add.

If you would like to install Stata by using the command line, please consult <https://www.stata.com/support/faqs/win/autoinstall.html>. Do this even if you have installed previous versions of Stata via the command line, because the arguments have changed.

## Initialize the license

You now need to start Stata so that you can initialize the license. Go to the Stata 16 program group in the **Start** menu, and click on the version of Stata you installed.

The first time that you start Stata, it will prompt you for the information on your *License and Activation Key*. You must enter something for all fields in the dialog before you can continue. The code and authorization are not case sensitive. If you make a mistake typing the codes, you will be prompted to try again.



If you get the message “The serial number, code, and authorization are inconsistent”, try the initialization again. Be careful when typing your code and authorization. Anything that looks like “o” is the letter *oh*, anything like “0” is a zero, anything like “1” is the number one, and anything like “L” is the letter *el*.

**Important:** Do not lose your *License and Activation Key*. You may need it again in the future.

## Update Stata if necessary

StataCorp releases updates to Stata often. These updates may include new features and bug fixes that can be automatically downloaded and installed by Stata from the Internet. There may be updates to Stata more recent than the version of Stata on your installation media.

The first time Stata is launched, a dialog will open asking you if you would like to check for updates now. Click on **OK** to do so. If an update is available, follow the instructions. If you have trouble connecting to the Internet from Stata, visit <https://www.stata.com/support/faqs/web/> for help.

By default, automatic update checking is enabled. This ensures that your Stata is up to date, it is convenient, and it causes no problems even if you are not connected to the Internet. If you disable automatic update checking, it is a good idea to periodically check for updates to Stata. See [GSW] 19 Updating and extending Stata—Internet functionality for more information about updating.

## Register your copy

Make sure that your copy of Stata is registered. As a registered Stata user, you are entitled to free technical assistance should you have any questions, and we will keep you informed of any new products or advancements that have been announced. To register your copy of Stata, fill out the online registration form at <https://www.stata.com/register/>.

## Read the Getting Started manual

After installing Stata, you should read the *Getting Started with Stata for Windows* manual. See page 22 of this *Installation Guide* for a complete list of Stata's documentation.

## Creating network shortcuts

If you installed Stata on a network drive, you will need to create shortcuts on the workstations that will be using Stata.

1. Mount the network drive that Stata is installed on from a workstation. Right-click on the Desktop or on the Windows **Start** menu, and select **New > Shortcut**. Type the path for the Stata executable into the edit field, or click on **Browse...** to locate it. Enter “Stata” for the name of the shortcut.
2. Once a shortcut for Stata has been created, right-click on it, and select **Properties**. Set the default working directory for Stata by changing the **Start in** field to a local drive that users have write access to. This is where Stata will store datasets, graphs, and other Stata-related files. If the workstation will be used by more than one user, consider changing the **Start in** field to the environment variable `%HOMEDRIVE%/%HOMEPATH%`. Doing so will set the default working directory to each user’s home directory.

## Other ways to start Stata

You can start Stata in multiple ways:

- From the **Start** menu.
- Double-click on its application icon (as with any other application).
- Double-click on a Stata do-file. See [\[GSW\] 13 Using the Do-file Editor—automating Stata](#) and [\[U\] 16 Do-files](#) for more information.
- Double-click on a Stata data file. Stata data files are files created by Stata and have the extension `.dta`. When you double-click on a Stata data file, Stata is started and the data file is loaded into Stata; see [\[GSW\] 5 Opening and saving Stata datasets](#).

If you experience any problems when trying to start Stata, see [GSW] A Troubleshooting Stata. (We are assuming that you have successfully installed Stata and have initialized the license. Please see page 22 for how to access the PDF documentation from outside Stata.)

## Exiting Stata

To exit Stata, select **Exit** from the **File** menu or press **Alt+F4**. If you have made any changes to the data in your dataset, including creating a new dataset, you will be prompted to save the changes.

If you exit Stata by typing the equivalent `exit` command, you will see the following in the Results window if you have made changes to your data:

```
. exit  
no; dataset in memory has changed since last saved  
r(4);
```

If you would like to save your changes, you could save the dataset as you save any other file by using **File > Save** or **Ctrl+S**. You can also save the dataset by typing `save filename`. You could then type `exit` again, and Stata will exit. If you do not wish to save your changes, you can force Stata to exit without saving the dataset by typing `exit, clear`.

## Verifying installation

If you need to create a report to verify that Stata has been installed properly, point your browser to <https://www.stata.com/support/installation-qualification/>. There you will find instructions for downloading and using the Stata Installation Qualification Tool (IQT). The tool will verify your installation not only after you initially install Stata, but also after every update you apply.

# Installing Stata for Mac

## Upgrade or update?

If you are using an earlier Stata release and you are upgrading to Stata 16, or if you have never installed Stata before on this computer, you need to read this Installation Guide. If you have already installed Stata 16 and you would like to install the latest updates to Stata 16, please refer to [\[GSM\] 19 Updating and extending Stata—Internet functionality](#).

## Upgrading to Stata/MP or Stata/SE

If you have already installed Stata/IC for version 16 and have purchased an upgrade to Stata/MP or Stata/SE for version 16, run the installer again and select the flavor you are upgrading to for the **Installation Type**.

Make sure that you have your *License and Activation Key* before doing this. After installation, you will immediately want to update Stata.

## Warning against multiple Stata applications

We recommend against having more than one Stata application installed on the same computer, because it can confuse the Finder. Why? Because when you double-click on a Stata file, the Mac may choose the wrong Stata to run. You will not be able to predict which one will start. If you typically do not start Stata by double-clicking on Stata files, you can have multiple versions, but be forewarned that the first time you start Stata by double-clicking, you may be confused.

## Before you install

Before you begin the installation procedure:

1. Make sure you have the Stata installation media.
2. Make sure you have a *License and Activation Key*.
3. Determine from the *License and Activation Key* whether you should install Stata/MP, Stata/SE, or Stata/IC.
4. You should not have any of your personal files in the **Stata** folder. But if you do and wish to keep them, move them out of the **Stata** folder first.
5. If you are upgrading, drag the current **Stata** folder to the Trash, and empty the Trash. *Note: You must empty the Trash before proceeding.*
6. You are now ready to install.

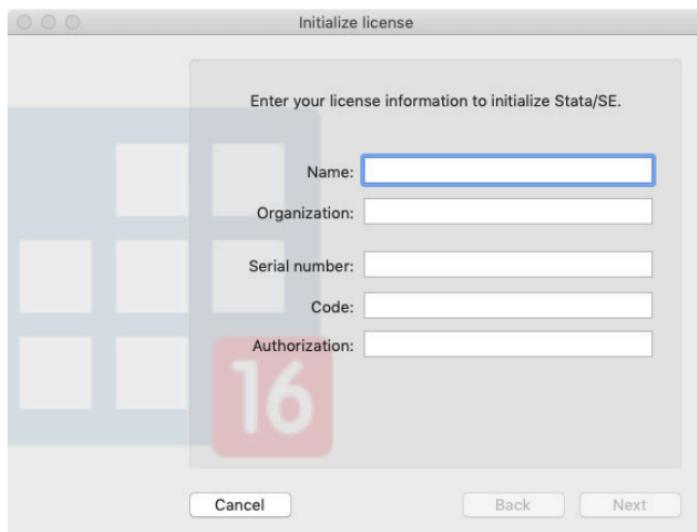
## Installation

1. Insert the installation media.
2. Open the installation media from the Finder, and double-click on the **Install Stata** file to start the installation.
3. After you have carefully read the **Introduction**, click on **Continue**.
4. After you have carefully read the **License**, click on **Continue**, and then click on **Agree** to accept the terms of the license agreement.
5. If you see **Destination Select**, we recommend that you accept the default destination by clicking on **Continue**.
6. Choose the flavor of Stata that matches your license, and then click on **Continue**.
7. Click on the **Install** button.
8. Click on **Close** after you see the message **Installation was successful**.

## Initialize the license

You now need to start Stata so that you can initialize the license.

The first time that you start Stata, it will prompt you for the information on your *License and Activation Key*. You must enter something for all fields in the dialog before you can continue. The code and authorization are not case sensitive. If you make a mistake typing the codes, you will be prompted to try again.



If you get the message “The serial number, code, and authorization are inconsistent”, try the initialization again. Be careful when typing your code and authorization. Anything that looks like “o” is the letter *oh*, anything like “0” is a zero, anything like “1” is the number one, and anything like “L” is the letter *el*.

**Important:** Do not lose your *License and Activation Key*. You may need it again in the future.

## Update Stata if necessary

StataCorp releases updates to Stata often. These updates may include new features and bug fixes that can be automatically downloaded and installed by Stata from the Internet. There may be updates to Stata more recent than the version of Stata on your installation media.

The first time Stata is launched, a dialog will open asking you if you would like to check for updates now. Click on **OK** to do so. If an update is available, follow the instructions. If you have trouble connecting to the Internet from Stata, visit <https://www.stata.com/support/faqs/web/> for help.

By default, automatic update checking is enabled. This ensures that your Stata is up to date, it is convenient, and it causes no problems even if you are not connected to the Internet. If you disable automatic update checking, it is a good idea to periodically check for updates to Stata. See [\[GSM\] 19 Updating and extending Stata—Internet functionality](#) for more information about updating.

## Register your copy

Make sure that your copy of Stata is registered. As a registered Stata user, you are entitled to free technical assistance should you have any questions, and we will keep you informed of any new products or advancements that have been announced. To register your copy of Stata, fill out the online registration form at <https://www.stata.com/register/>.

## Read the Getting Started manual

After installing Stata, you should read the *Getting Started with Stata for Mac* manual. See page 22 of this *Installation Guide* for a complete list of Stata’s documentation.

## Other ways to start Stata

You can start Stata in multiple ways:

- Double-click on its application icon (as with any other application).
- Double-click on a Stata do-file. See [\[GSM\] 13 Using the Do-file Editor—automating Stata](#) and [\[U\] 16 Do-files](#) for more information.
- Double-click on a Stata data file. Stata data files are files created by Stata and have the extension .dta. When you double-click on a Stata data file, Stata is started and the data file is loaded into Stata; see [\[GSM\] 5 Opening and saving Stata datasets](#).

If you experience any problems when trying to start Stata, see [\[GSM\] A Troubleshooting Stata](#). (We are assuming that you have successfully installed Stata and have initialized the license. Please see page [22](#) for how to access the PDF documentation from outside Stata.)

## Quitting Stata

To quit Stata, select **Quit** from the **Stata** menu or press *Command–Q*. If you have made any changes to the data in your dataset, including creating a new dataset, you will be prompted to save the changes.

If you quit Stata by typing the equivalent `exit` command, you will see the following in the Results window if you have made changes to your data:

```
. exit  
no; dataset in memory has changed since last saved  
r(4);
```

If you would like to save your changes, you could save the dataset as you save any other file by using **File > Save** or *Command–S*. You can also save the dataset by typing `save filename`. You could then type `exit` again, and Stata will quit. If you do not wish to save your changes, you can force Stata to quit without saving the dataset by typing `exit, clear`.

# Installing Stata for Unix

## Installation overview

The outline of the installation process is as follows:

1. Ensure that you have the Stata installation media and the *License and Activation Key*.
2. As superuser, create the directory in which you want to install Stata.
3. Change to that directory and run the installation script that is on the Stata installation media.
4. Follow the instructions during the installation process.
5. Once the installation is complete, enter your license codes.

The details for each of these steps are below, with some pointers for troubleshooting.

## Find your installation media and license

You should have received the installation media and a *License and Activation Key*. You will need both to install Stata. The codes in the *License and Activation Key* are necessary for initializing the Stata software.

## Obtain superuser access

You must be logged in as superuser (root) to install Stata. For varieties of Unix that disable the root account by default, issue either the command `sudo su` – or the command `su` – to run as superuser during the installation. The # prompt below indicates that you are running as superuser.

## Create a directory for Stata

We recommend that you install Stata in `/usr/local/stata16`.

If you would like the path to the executables as seen by users to remain stable as you upgrade Stata in the future, you can create a symbolic link (type `man ln` for more information) from `/usr/local/stata16` to `/usr/local/stata`:

```
# ln -s /usr/local/stata16 /usr/local/stata
```

If you wish to install Stata in a different directory, you are free to do so.

Users who want to access Stata must modify their `.profile` or `.cshrc` or `.login` shell start-up scripts to include the Stata installation directory in their PATH. Throughout this manual, we will assume that you have installed Stata in `/usr/local/stata16` and used a symbolic link to `/usr/local/stata`.

## Upgrading

If you are upgrading from Stata 15, you can leave Stata 15 installed where it is, allowing you to have both Stata 15 and Stata 16. Install Stata 16 in `/usr/local/stata16` and leave Stata 15 alone.

Have your users modify their shell start-up scripts to use the proper PATH for Stata 16. Otherwise, when they run Stata, they will be running Stata 15.

If you want to uninstall Stata 15, type

```
# rm -r /usr/local/stata15
```

to remove it. If Stata 15 is installed in a different directory, you will have to change the above command accordingly.

## Install Stata

Set your current directory to `/usr/local/stata16` and run the installation script,

```
# cd /usr/local/stata16  
# ./media/Stata/install
```

replacing `/media/Stata` with the path to the installation media if your device path differs (other common paths are `/dev/cdrom` and `/mount/stata`). If you have trouble running the installer, it could be because your version of Unix will not, by default, allow you to run applications from a installation media. Please see page 17 for more help.

Follow the prompts. Nothing will be written until you say it is okay to do so.

## Initialize the license

Initialize the license by typing

```
# cd /usr/local/stata16  
# ./stinit
```

You will be asked if you accept the software license agreement, which can be found in the file `license.pdf` on your installation media. Read and accept the software license agreement to proceed with the installation.

You will be asked for your serial number, code, and authorization, which are provided in your *License and Activation Key*. The code and authorization are not case sensitive. You will also be asked to specify your name and address if you have a single-user license, or the institution name and department or address if you have a multiple-user license. When you invoke Stata in the future, the license information will be displayed along with the name and address you enter. This information will also be written in system files that Stata creates so that, should you ever need to send a file to us, we will know whom it is from. Whenever you or any of your users calls our technical support line, we will ask for this information, all of which Stata reports when it begins execution.

If, for some reason, you need to reinitialize the license for an installed copy of Stata, you will have to contact Stata Technical Support for special instructions.

## **Set the message of the day (optional)**

Every time Stata is invoked, the contents of `/usr/local/stata16/stata.msg` are displayed. This feature provides a convenient way to communicate with Stata users if you are administering a large site. As superuser, you may edit the file or erase it if you wish.

## **Verify that Stata is working**

Now that you have completed the installation process, you should verify that everything has been installed properly. You must log out as superuser and log in again as a regular Stata user. The prompts below change to \$ to indicate your regular user status.

To use Stata as a user, your path must include the Stata installation directory, and to run the GUI version, you must be running X Windows. For our quick test, we are going to be crude. The following will work whether you use `sh`, `csh`, `bash`, or `ksh`:

```
% sh  
$ PATH=$PATH:/usr/local/stata  
$ export PATH
```

For Stata(console):

```
$ stata
```

For Stata(GUI):

```
$ xstata
```

Stata should launch. Use `stata-se` or `xstata-se` if you have Stata/SE and `stata-mp` or `xstata-mp` if you have Stata/MP. If Stata does not start properly, see page 17.

Assuming that nothing is wrong, type

```
. exit  
$ exit
```

The first `exit` took us out of Stata. The second `exit` took us out of the `sh` that we temporarily invoked.

## Modify shell start-up script

Once you have verified that Stata is working, modify your shell start-up script to include Stata in your path. We will assume that you have created a symbolic link from `/usr/local/stata` to your Stata installation directory. If you did not create the recommended symbolic link, substitute your installation directory for `/usr/local/stata` in the paths below.

If you use `csh` or `tcsh`, there is a line in your `.cshrc` file (in your home directory) that looks like

```
set path = (/bin /usr/bin /usr/local/bin ~/bin)
```

Edit the file and add `/usr/local/stata` to the end of the list:

```
set path = (/bin /usr/bin /usr/local/bin ~/bin /usr/local/stata)
```

If you use `bash`, `sh`, or `ksh`, there is a line in your `.profile` (in your home directory) that looks like

```
PATH="/bin:/usr/bin:/usr/local/bin:$HOME/bin"
```

Edit the file and add `/usr/local/stata` to the list:

```
PATH="/bin:/usr/bin:/usr/local/bin:$HOME/bin:/usr/local/stata"
```

If you are using a symbolic link to your Stata installation directory and you have included the path to the Stata installation directory, be sure that the symbolic link appears before the true directory in the path.

Log out and log back in so that the changes you have made will take effect. Stata should now work from any directory on your computer.

## Update Stata if necessary

StataCorp releases updates to Stata often. These updates may include new features and bug fixes that can be automatically downloaded and installed by Stata from the Internet. There may be updates to Stata more recent than the version of Stata on your installation media. You should check for updates to Stata before you use it for the first time. You can do this one of two ways:

- Select **Help > Check for updates.**
- Enter `update` query from the command line.

It is also a good idea to periodically check for updates to Stata. See [\[GSU\] 19 Updating and extending Stata—Internet functionality](#) for more information about updating. If you have trouble connecting to the Internet from Stata, visit <https://www.stata.com/support/faqs/web/> for help.

## Register your copy

Make sure that your copy of Stata is registered. As a registered Stata user, you are entitled to free technical assistance should you have any questions, and we will keep you informed of any new products or advancements that have been announced. To register your copy of Stata, fill out the online registration form at <https://www.stata.com/register/>.

## Read the Getting Started manual

After installing Stata, you should read the *Getting Started with Stata for Unix* manual. See page [22](#) of this *Installation Guide* for a complete list of Stata's documentation.

## Starting Stata

With Stata for Unix, you can choose between two user interfaces. The first option is the graphical user interface, or GUI, which we will refer to as Stata(GUI). The second option is the nongraphical user interface, which we will refer to as Stata(console). If instructions apply to either interface, we will simply refer to Stata.

Upon installation, both interfaces are installed, but only the GUI version can display graphs. If you use X Windows, you will be able to invoke either interface, GUI or console, at each session. See [\[GSU\] 2 The Stata user interface](#) for more information about the Stata user interface.

To start Stata from a Unix prompt, type

- `xstata` or `xstata-se` or `xstata-mp` to start Stata(GUI), or
- `stata` or `stata-se` or `stata-mp` to start Stata(console).

If you see a message telling you that Stata could not find the license file or if you receive any other error when you try to start Stata, please see page 17. Stata(GUI) requires X Windows to run.

Stata(console) has a nongraphical interface; it is run in a terminal window, and output is displayed on the terminal.

## Exiting Stata

To exit Stata(GUI), select **Exit** from the **File** menu or press *Ctrl+Q*. If you have made any changes to the data in your dataset, including creating a new dataset, you will be prompted to save the changes.

If you exit Stata by typing the equivalent `exit` command, which is the only way to exit the console version of Stata, you will see the following in the Results window if you have made changes to your data:

```
. exit
no; dataset in memory has changed since last saved
r(4);
```

If you would like to save your changes in Stata(GUI), you could save the dataset as you save any other file by using **File > Save** or *Ctrl+S*. In either Stata, you can also save the dataset by typing `save filename`. You could then type `exit` again, and Stata will exit. If you do not wish to save your changes, you can force Stata to exit without saving the dataset by typing `exit, clear`.

## Troubleshooting Unix installation

If you had trouble with the installation of Stata, it could be because you have a recent copy of Unix that will not allow you to run applications from a DVD or USB drive. Type `df -l` to see what local devices are mounted; one should look like the Stata installation media. For example, you could see something like

```
$ df -l
Filesystem      1K-blocks    Used Available Use% Mounted on
/dev/hda6        23054660   5528268  16336380  26% /
/dev/hdc         274158     274158       0 100% /media/Stata
```

`/dev/hdc` is the device name, and `/media/Stata` is the mount point.

If you see something indicating that the Stata installation media is successfully mounted, you need to see if you are being prevented from running applications directly from the installation media. Type `mount` to get information about any mounted file systems. Somewhere on the list, you should see information about your installation media. Continuing with the above example, you should see your device name and mount point in the output:

```
$ mount  
omitted output  
/dev/hdc on /media/Stata type iso9660 (ro,noexec,nosuid,nodev,uid=220)
```

If you see the term `noexec` appear, you are not allowed to run applications from a DVD or USB drive. Your best course of action is to copy everything from the Stata installation media to a temporary directory and run the installation from there. Substitute your mount point for `/media/Stata` below.

```
$ mkdir /tmp/statainstall  
$ cp -r /media/Stata /tmp/statainstall  
$ mkdir /usr/local/stata16  
$ cd /usr/local/stata16  
$ sudo /tmp/statainstall/Stata/install
```

After you have Stata running and initialized, you can delete the temporary directory `/tmp/statainstall`.

If you are still having problems installing or if you have any other troubles, see the Unix FAQs on our website at <https://www.stata.com/support/faqs/unix/>. If this does not help, contact Stata Technical Support. Please gather all the information you can about your system, including your computer model and the type and version of Unix that you are using.

## Troubleshooting Unix start-up

If you have attempted to invoke Stata(GUI) by typing `xstata`, `xstata-se`, or `xstata-mp` at the Unix prompt and it has failed, attempt to invoke Stata(console) by typing `stata`, `stata-se`, or `stata-mp` at the Unix prompt. If Stata(console) fails, continue here. If Stata(console) starts without problems, see the next section of this chapter.

You tried to start Stata and it refused; Stata or your operating system presented a message explaining that something is wrong. Here are the possibilities:

### Cannot find Stata directory

Stata first checks in `/usr/local/stata16` and then checks in `/usr/local/stata` to find the license file. If Stata does not find the license in either of these locations, it looks in every directory in the Unix `PATH`. If you receive this message, most likely the directory where Stata is installed is not in your `PATH`. You need to add this directory to your `PATH`.

### Cannot find license file

This message means just what it says; nothing is too seriously wrong. Stata simply could not find what it is looking for. The two most common reasons for this are that you did not complete the installation process or that Stata is not installed where it should be.

Did you insert the codes on your *License and Activation Key* to unlock Stata? If not, go back and complete the initialization procedure.

Assuming that you did unlock Stata, Stata is merely mislocated, or the location has not been filled in.

### Error opening or reading the file

Something is distinctly wrong and for purely technical reasons. Stata found the file that it was looking for, but either the operating system refused to let Stata open it or there was an I/O error.

The `stata.lic` file could have incorrect permissions. Verify that `stata.lic` is in `/usr/local/stata` (or at least in the directory linked to `/usr/local/stata`) and that everybody has been granted read permission. To change the permissions, become superuser by logging in as root (using `su` or `sudo`) and type `chmod a+r /usr/local/stata16/stata.lic`.

### Other messages

The other messages indicate that Stata thinks you are attempting to do something that you are not licensed to do. Most commonly, you are attempting to run Stata over a network when you do not have a network license, but there are many other alternatives. There are two possibilities: either you really are attempting to do something that you are not licensed to do, or Stata is wrong. In either case, you are going to have to contact us. Your license can be upgraded, or, if Stata is wrong, we can provide codes to make Stata stop thinking that you are violating the license; see [\[U\] 3.8 Technical support](#).

## Stata(console) starts but Stata(GUI) does not

### Trouble with libraries

Stata, like many other programs designed for Unix machines, needs certain system libraries to run. Most of the standard library routines that Stata needs are included in the Stata binary. However, Stata does rely on a few external libraries. For example, Stata assumes that your system will have the standard C library available. Stata(GUI) assumes that you have the X Windows libraries as well. These libraries are often located in different places on different implementations of Unix. For example, under Linux, the standard C libraries can be found in `/lib`, whereas the X Windows libraries are in `/usr/lib`. The operating system needs to know where to find the libraries that Stata needs to run. The Unix environment variable `LD_LIBRARY_PATH` tells the operating system where to find libraries. If you get an error message that says something like

```
ld.so.1: xstata: fatal: some_library.so.#: can't open file
```

the likely reason is that the operating system cannot find the necessary libraries. Stata does not rely on any unique libraries; you can rest assured that the libraries you need are on your system. You should look for the library in question on your system and make sure the environment variable LD\_LIBRARY\_PATH includes the path to the directory where the library in question is located. Your system administrator may be able to help with this task.

### Setting the DISPLAY environment variable

Sometimes when executing Stata in a networked environment, Stata(GUI) will produce the error message

```
You need X Windows for this version of Stata.
```

This means that Stata has not found the DISPLAY environment variable. You need to set the DISPLAY variable to be the screen on which you want Stata(GUI) to appear. For example, in csh, type `setenv DISPLAY machine:0.0`.

### xhost permissions

Another related error message can occur with Stata(GUI). When Stata is being run in a networked environment, the computer on which Stata(GUI) is actually executing may not have permission to draw on the screen of the computer on which you have asked Stata to draw. Then you may see the following:

```
Xlib: connection to machine-name:0.0 refused by server  
Xlib: Client is not authorized to connect to Server  
xhost: unable to open display
```

This means that the machine that is actually executing the Stata instructions (the x-client in X Windows parlance) does not have permission to draw on the screen of the computer that you have asked it to (the x-server). On the machine on which you want to display Stata(GUI), type

```
% xhost +client-machine
```

This will give the client permission to draw on the server.

### Getting more help

If you continue to experience problems invoking Stata(GUI), please see the Unix FAQs on our website at <https://www.stata.com/support/faqs/unix/>, or contact Stata Technical Support.

# Platforms and flavors

## Available platforms

Stata for Mac is available for 64-bit Intel-based Macs running OS X El Capitan 10.11 or newer.

Stata for Windows is available for 64-bit x86-64 versions of Windows 10, 8, and 7 and server versions of Windows from 2008 and later.

Stata for Unix is available for 64-bit Linux for x86-64.

Support for other platforms may have been added; contact us for the latest information.

## Available flavors

**Stata/MP** Professional version of Stata.

Parallel-processing capable.

Fastest on multiple-core/multiple-processor machines.

Maximum of 120,000 variables; maximum of 1,099,511,627,775 observations.

**Stata/SE** Professional version of Stata.

Fastest on a single-processor machine.

Maximum of 32,767 variables; maximum of 2,147,483,619 observations.

**Stata/IC** Professional version of Stata.

Very fast.

Maximum of 2,048 variables; maximum of 2,147,483,619 observations.

# Documentation

All the documentation for Stata is included in PDF format. You can open it from within Stata by clicking on **Help > PDF documentation**. It is also linked into Stata's system help. If you want to get to the PDF documents directly, they can be found in the `docs` subdirectory of the Stata installation directory. There is also a copy of the manuals at the top level of the installation installation media. For information about PDF viewers that we recommend for viewing Stata documentation, please visit <https://www.stata.com/support/faqs/resources/pdf-documentation-tips/>.

When reading the manuals, you will find references to other Stata manuals. For example,

- [U] 27 Overview of Stata estimation commands
- [R] regress

The first example is a reference to chapter 27, *Overview of Stata estimation commands*, in the *User's Guide*; and the second is a reference to the *regress* entry in the *Base Reference Manual*. All of these are clickable in the PDF documentation.

All the manuals in the Stata Documentation have a shorthand notation:

[GSM]	<i>Getting Started with Stata for Mac</i>
[GSU]	<i>Getting Started with Stata for Unix</i>
[GSW]	<i>Getting Started with Stata for Windows</i>
[U]	<i>Stata User's Guide</i>
[R]	<i>Stata Base Reference Manual</i>
[BAYES]	<i>Stata Bayesian Analysis Reference Manual</i>
[CM]	<i>Stata Choice Models Reference Manual</i>
[D]	<i>Stata Data Management Reference Manual</i>
[DSGE]	<i>Stata Dynamic Stochastic General Equilibrium Models Reference Manual</i>
[ERM]	<i>Stata Extended Regression Models Reference Manual</i>
[FMM]	<i>Stata Finite Mixture Models Reference Manual</i>
[FN]	<i>Stata Functions Reference Manual</i>
[G]	<i>Stata Graphics Reference Manual</i>
[IRT]	<i>Stata Item Response Theory Reference Manual</i>
[LASSO]	<i>Stata Lasso Reference Manual</i>
[XT]	<i>Stata Longitudinal-Data/Panel-Data Reference Manual</i>
[META]	<i>Stata Meta-Analysis Reference Manual</i>
[ME]	<i>Stata Multilevel Mixed-Effects Reference Manual</i>
[MI]	<i>Stata Multiple-Imputation Reference Manual</i>
[MV]	<i>Stata Multivariate Statistics Reference Manual</i>
[PSS]	<i>Stata Power, Precision, and Sample-Size Reference Manual</i>
[P]	<i>Stata Programming Reference Manual</i>
[RPT]	<i>Stata Reporting Reference Manual</i>
[SP]	<i>Stata Spatial Autoregressive Models Reference Manual</i>
[SEM]	<i>Stata Structural Equation Modeling Reference Manual</i>
[SVY]	<i>Stata Survey Data Reference Manual</i>
[ST]	<i>Stata Survival Analysis Reference Manual</i>
[TS]	<i>Stata Time-Series Reference Manual</i>
[TE]	<i>Stata Treatment-Effects Reference Manual: Potential Outcomes/Counterfactual Outcomes</i>
[I]	<i>Stata Glossary and Index</i>
[M]	<i>Mata Reference Manual</i>