

## How do I set the DISPLAY variable on Linux

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Using Linux, and especially configuring Linux, normally require some insight, and we strongly suggest (to inexperienced linux users) to get some help from a system administrator.

In short, you must open up a shell (csh, bash, etc), so that it is possible to issue commands on Linux. Then you must enter the commands to set the environment variable, as explained in the setup-instructions.

Also, if you are starting Tomcat (or other application server) automatically by calling the startup-script in the this script:

```
/etc/rc.local
```

..then you must make sure that the command for setting the DISPLAY variable is called before starting the application server.

There are many discussions/guides on the Internet regarding this issue. Here is an extract from one:

### "1. A Little Theory

The magic word is DISPLAY. In the X window system, a display consists (simplified) of a keyboard, a mouse and a screen. A display is managed by a server program, known as an X server. The server serves displaying capabilities to other programs that connect to it.

A display is indicated with a name, for instance:

- \* DISPLAY=light.uni.verse:0
- \* DISPLAY=localhost:4
- \* DISPLAY=:0

The display consists of a hostname (such as light.uni.verse and localhost), a colon (:), and a sequence number (such as 0 and 4). The hostname of the display is the name of the computer where the X server runs. An omitted hostname means the local host. The sequence number is usually 0 -- it can be varied if there are multiple displays connected to one computer.

If you ever come across a display indication with an extra .n attached

to it, that's the screen number. A display can actually have multiple screens. Usually there's only one screen though, with number n=0.

Other forms of DISPLAY exist, but this will do for our purposes.

## 2. Telling the Client

The client program (for instance, your graphics application) knows which display to connect to by inspecting the DISPLAY environment variable. This setting can be overridden, though, by giving the client the command line argument `-display hostname:0` when it's started. Some examples may clarify things.

Our computer is known to the outside as `light`, and we're in domain `uni.verse`. If we're running a normal X server, the display is known as `light.uni.verse:0`. We want to run the drawing program `xfig` on a remote computer, called `dark.matt.er`, and display its output here on `light`.

If you have `csch` running on the remote computer:

```
dark% setenv DISPLAY light.uni.verse:0
dark% xfig &
```

Or alternatively:

```
dark% xfig -display light.uni.verse:0 &
```

If you have `sh` running on the remote computer:

```
dark$ DISPLAY=light.uni.verse:0
dark$ export DISPLAY
dark$ xfig &
```

Or alternatively:

```
dark$ DISPLAY=light.uni.verse:0 xfig &
```

Or, of course, also:

```
dark$ xfig -display light.uni.verse:0 &
```

It seems that some versions of `telnet` automatically transport the `DISPLAY` variable to the remote host. If you have one of those, you're lucky, and it's automatic. If not, most versions of `telnet` `_do_` transport the `TERM` environment variable; with some judicious hacking it is possible to piggyback the `DISPLAY` variable on to the `TERM` variable."

