
Subject: Re: IDL without X on Linux

Posted by [Michael Wallace](#) on Thu, 03 Mar 2005 17:27:48 GMT

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Here's how to run IDL without X.

1.) If you can modify source code and do not need to make plots

Just simply avoid any calls to device or other command that'd have the effect of trying to produce a window on the screen (plot, window, etc).

It's probably best to be explicit and set the plotting device to NULL.

2.) If you can modify source code and you need to make plots

Set the plotting device to the Z-buffer (set_plot, 'Z') and leave it that way. Your plots will now be going to an "offscreen" device that will not be displayed anywhere, but everything all the plotting commands will still work.

If using Object Graphics, use IDLgrBuffer instead of IDLgrWindow.

3.) If you can't modify source code and the code needs an X server

Download Xvfb, run it and set the DISPLAY variable to the Xvfb session.

Xvfb (X virtual frame buffer) is basically an X server which runs offscreen and doesn't need to have any physical display. Programs which need X servers don't realize that it's running off screen. Let's say that I start an Xvfb session on server 1, screen 0. Before running the IDL program you'd need to set the DISPLAY environmental variable to your_machine_name:1.0. Typically I will write a little shell script that sets the DISPLAY and then runs my IDL program. That way I don't have to remember to set DISPLAY each time.

Benjamin Hornberger wrote:

> Hi all,

>

> can I start IDL on Linux without an X server available? I frequently run

> IDL on a Linux machine remotely, logged on from a Windows machine. If

> the Windows machine doesn't run an X server at that moment, IDL won't

> start ("X connection to localhost:11.0 broken (explicit kill or server

> shutdown)").

>

> I know I somehow can run (non-interactive) IDL programs from a cronjob,

> as long as they don't involve windows.

>
> I found the section "Command Line Options for IDL Startup" in the help
> file, but it doesn't mention anything :-(.
>
> Thanks,
> Benjamin
