

## LD\_LIBRARY\_PATH in Mathematica

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When using **Mathematica** from the command line it is not possible to get a plot in a straightforward way; the command `Plot`, for example, replies with `Graphics` instead of actually producing a figure.

```
In[1]:= Plot[Sin[x],{x,0,Pi}]
```

```
Out[1]= -Graphics-
```

One possible way to circumvent this limitation is to export the plot as a `.png` and call a viewer from the **Mathematica** session. I tried out such a solution as described for example here: <https://mathematica.stackexchange.com/questions/121526/> but it did not give the correct result in my case (Ubuntu laptop) because `display` does not work properly when called from **Mathematica** (although it works fine when called from the command line). This is due to the fact that, as I discovered after some fumbling, **Mathematica** redefines `LD_LIBRARY_PATH`, hence confusing `display`.

The solution I found is to reset `LD_LIBRARY_PATH` when launching `display`. For example

```
g = Plot[Sin[x],{x,0,Pi}]
Export["g.png", g]
Run["display g.png"]
```

does not work but

```
g = Plot[Sin[x],{x,0,Pi}]
Export["g.png", g]
Run["export LD_LIBRARY_PATH=''; display g.png"]
```

works as expected (and can be automatized using the code in the link above).