

SCPI Scripts on Linux Mint

Here I will describe a simple solution to control two units of programmable power supplies via Ethernet.

Setup

- 2 Units, Rigol DP832 with Ethernet (LXI) Extension installed
- Notebook running Linux Mint 17.3









Ethernet Config

First the Ethernet interface on the RIGOLs has to be configured. We have to use fixed IP-addresses so our scripts then will work every time we want to use them.

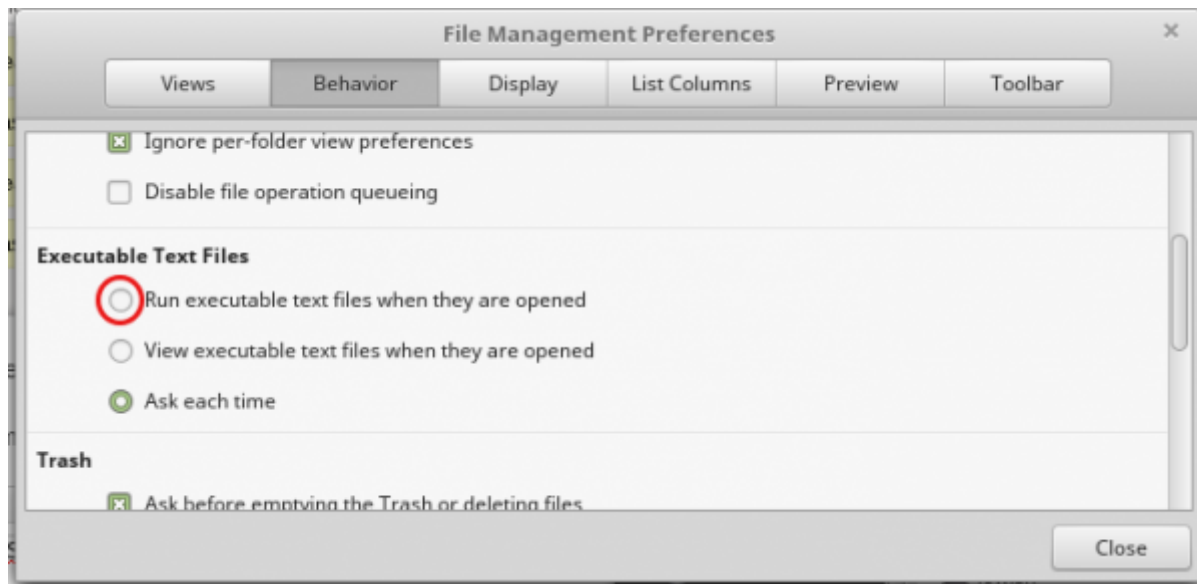


Configure Nemo on Linux Mint

The goal is to have shell scripts, which can be run with a double-click.

Name	Size	Type
 cal12.sh	327 bytes	Program
 high.sh	284 bytes	Program
 idle-current.sh	322 bytes	Program
 low.sh	284 bytes	Program
 off.sh	255 bytes	Program
 on.sh	250 bytes	Program

For this Nemo's config has to be changed, so we don't get annoying dialogs:

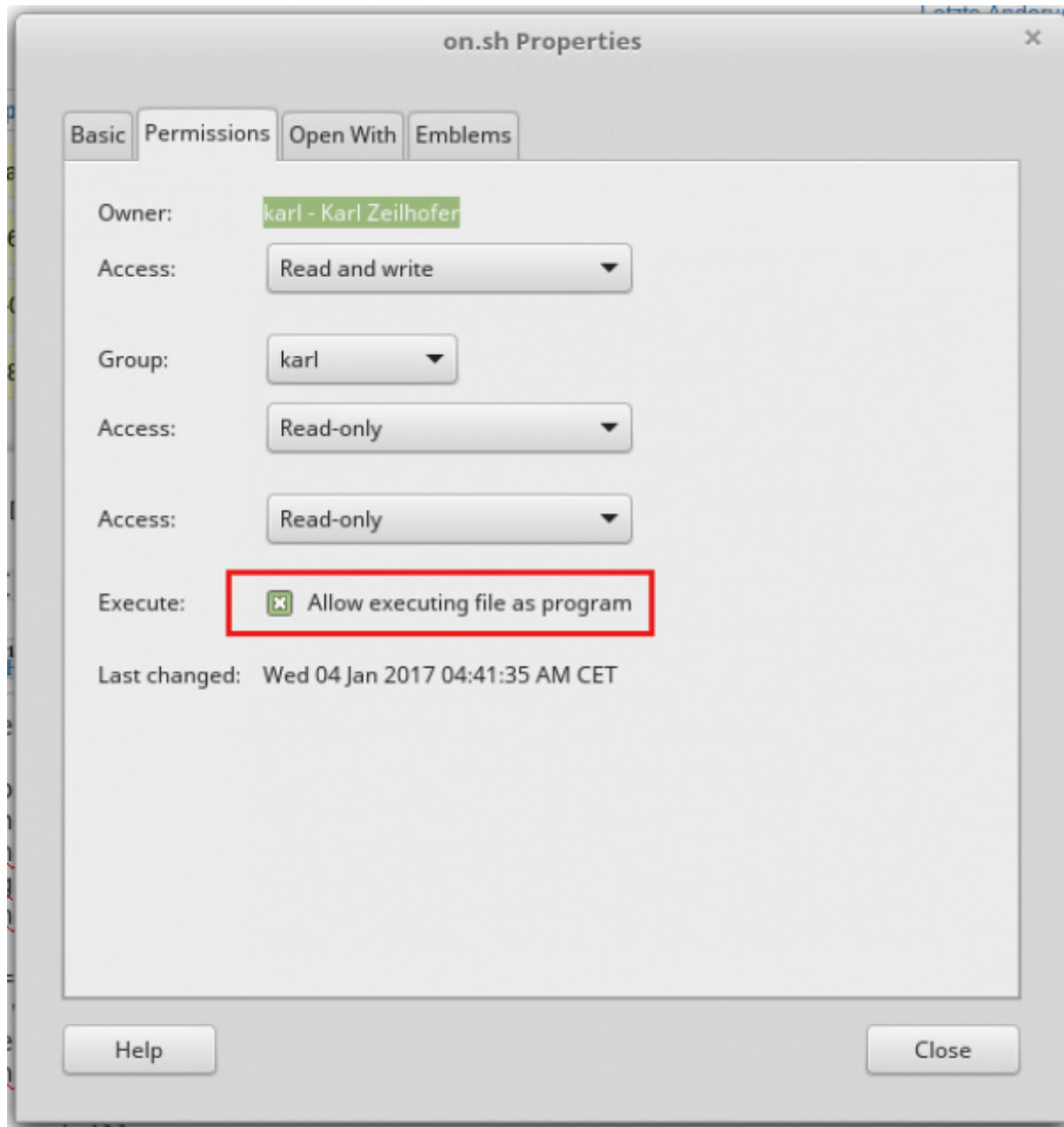


The Scripts

For the shell scripts we use netcat (short nc), which makes a raw TCP connection to the SCPI-Server (the RIGOL instrument). Netcat gets the SCPI command via echo and a pipe.

```
1  #! /bin/bash
2  # calibrated 12.000V on each channel
3  echo "apply ch1,11.996,0.100" | nc 10.0.0.111 5555
4  echo "apply ch2,12.004,0.100" | nc 10.0.0.111 5555
5  echo "apply ch1,12.001,0.100" | nc 10.0.0.112 5555
6  echo "apply ch2,11.998,0.100" | nc 10.0.0.112 5555
7
8  # Karl Zeilhofer, 3.1.2017
```

To make a script runnable/clickable, we have to give it the permission via right-click, Properties:



Downloads

[rigol-dp832-scripts.zip](#) (don't forget to make them executeable)

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