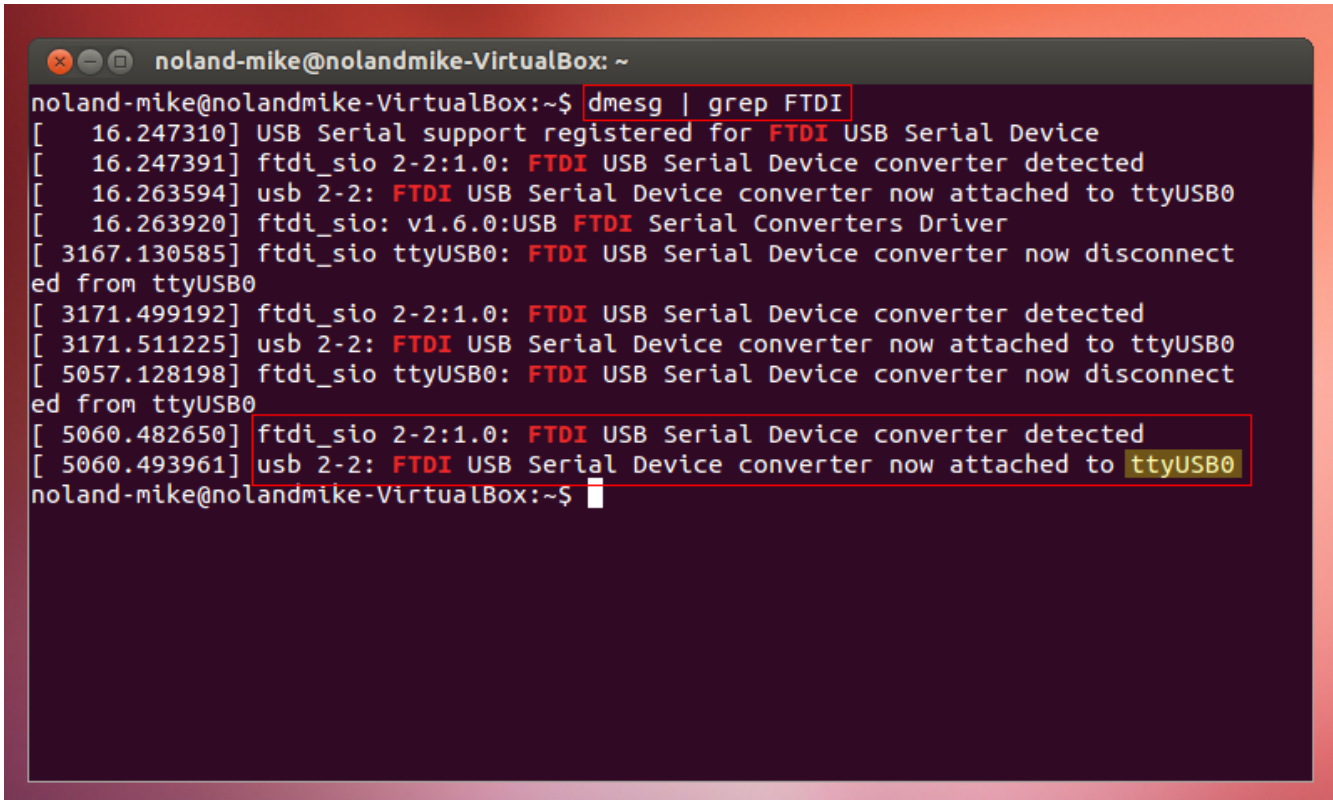


Installing FTDI Drivers on Linux systems

Note: The screen shot in this tutorial is from Ubuntu 12.04 using Oracle VM VirtualBox. The process should be very similar, if not exactly the same, for other versions/variants of this operating system.

1. Plug in the FTDI device (HR12, RS11, MD33) to a USB port.
2. Open up Linux terminal window (Ctrl+Alt+T) and type in “dmesg | grep FTDI” and press Enter.

A screenshot of a Linux terminal window titled "noland-mike@nolandmike-VirtualBox: ~". The terminal shows the command "dmesg | grep FTDI" being executed. The output consists of several lines of kernel messages, with the most recent two lines highlighted in yellow. The highlighted lines are: "[5060.482650] ftdi_sio 2-2:1.0: FTDI USB Serial Device converter detected" and "[5060.493961] usb 2-2: FTDI USB Serial Device converter now attached to ttyUSB0".

```
noland-mike@nolandmike-VirtualBox:~$ dmesg | grep FTDI
[ 16.247310] USB Serial support registered for FTDI USB Serial Device
[ 16.247391] ftdi_sio 2-2:1.0: FTDI USB Serial Device converter detected
[ 16.263594] usb 2-2: FTDI USB Serial Device converter now attached to ttyUSB0
[ 16.263920] ftdi_sio: v1.6.0:USB FTDI Serial Converters Driver
[ 3167.130585] ftdi_sio ttyUSB0: FTDI USB Serial Device converter now disconnect
ed from ttyUSB0
[ 3171.499192] ftdi_sio 2-2:1.0: FTDI USB Serial Device converter detected
[ 3171.511225] usb 2-2: FTDI USB Serial Device converter now attached to ttyUSB0
[ 5057.128198] ftdi_sio ttyUSB0: FTDI USB Serial Device converter now disconnect
ed from ttyUSB0
[ 5060.482650] ftdi_sio 2-2:1.0: FTDI USB Serial Device converter detected
[ 5060.493961] usb 2-2: FTDI USB Serial Device converter now attached to ttyUSB0
noland-mike@nolandmike-VirtualBox:~$
```

3. As shown above, you will see the FTDI devices connected and their Port location (ie. /dev/ttyUSB0). This is what you will use to view the data.
4. To check if working correctly, open a Serial Terminal window. For this example, I used GtkTerm. Click “Configuration > Ports”. For the “Port:” setting, select the USB port discovered in the previous step. It should be the last selection in the list. Change the “Speed:” to “4800”. Click OK.
5. If you have data turned on, you should see the data displaying in the GtkTerm window.
6. CONGRATULATIONS!!! You have successfully set up your FTDI device to work with a Linux system.

Notes of concern:

1. Permission denied error message.

If, while connecting to a Serial Terminal window, you get the following error “Cannot open /dev/ttyUSB0: Permission denied”, it means the port or tty devices belong to the "dialout" group, in which your linux username is not a member. Hence you were denied access to /dev/ttyUSB0, so you need to add yourself to that group.

First check if your username is a member of that group, let us suppose your username is theuser, do the following:

```
groups theuser
```

This will list all the groups you belong to. If you don't belong to the dialout group then add yourself to it, for example:

```
sudo gpasswd --add theuser dialout
```

You then will need to log out and log back in again for it to be effective.

2. Make sure all your updates for the Linux version being used are up to date.