Mesa Configuration Tool

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ONE

DESCRIPTION

The Mesa Configuration Tool is designed to create the configuration files needed by LinuxCNC for Mesa Electronics motion control cards.

1.1 Requirements

Debian 10 or Debian based OS with Python 3.6 or newer.

Raspbian 11 or newer

1.2 Highlights

- Small 800 x 600 size for small monitors.
- Fully editable ini file by the user, when loaded and saved custom sections and key value pairs and comments are not lost.
- Flash Mesa cards and read the config on the card as well as other card operations
- Information about all the cards as well as the manuals for the cards, some cards have additional information.
- Add MDI commands to the ini file
- Add a Smart Serial card and configure the I/O
- Add customs HAL commands
- Change Motion, Debug, Thread Period Options
- Add a VCP Panel
- Add and configure the Classicladder PLC options
- Get Motherboard, CPU, and NIC information about the PC
- Test the Thread Period
- Check the configuration for errors at any time during the creation
- Load a configuration at startup
- Create a backup of the entire configuration directory with a date and time stamp
- Board layout image of all the daughter boards as well as the selected board
- Wiring diagram for the Smart Serial connection
- HAL funtion assistant to help create custom HAL code

CHAPTER

TWO

INSTALLING

Mesa Configuration Tool II

Note: Tested on Debian 10, 11, 12, 13 and Linux Mint 20.2 but it should work on other Debian type OS's.

Note: Does not work on Raspbian Debian 10 due to python3-pyqt5 library version.

Note: Requires Python 3.6 or newer to work.

Use the Debian deb for installing the Mesa Configuration Tool!

Latest Version of the Mesa Configuration Tool II

PC 64 bit

Raspberry Pi 4 32 bit

Raspberry Pi 4 64 bit

Previous Version of the Mesa Configuration Tool if you experiance growing pains with current version

PC 64 bit Version 1.2.5

Raspberry Pi 4 32 bit Version 1.2.4

Raspberry Pi 4 64 bit Version 1.2.4

Or use wget from a terminal

```
wget https://github.com/jethornton/mesact/releases/download/2.0.1/mesact_2.0.1_amd64.deb
wget https://github.com/jethornton/mesact/releases/download/2.0.1/mesact_2.0.1_armhf.deb
wget https://github.com/jethornton/mesact1/releases/download/2.0.1/mesact_2.0.1_arm64.deb
```

If you get *bash: wget: command not found* you can install it from a terminal with

```
sudo apt install wget
```

Open the File Manager and right click on the file and open with Gdebi then install.

If you don't have Gdebi installed you can install it from a terminal

```
sudo apt install gdebi
```

If the graphical version of gdebi has problems you can run it from a terminal in the directory where you downloaded the deb with n.n.n replaced by the version your installing.

```
sudo gdebi mesact_n.n.n_amd64.deb
```

If you don't have LinuxCNC installed then the mesact Configuration tool will show up in the Applications > Other menu otherwise it will be in the CNC menu.

If you have problems try running from a terminal with:

```
mesact
```

To flash firmware to the mesact you need to install mesaflash from the LinuxCNC repository.

To uninstall the mesact Configuration Tool right click on the .deb file and open with Gdebi and select *Remove Package*.

To check for newer versions Help > Check for Updates

To upgrade the mesact Configuration Tool delete the .deb file and download a fresh copy then right click on the .deb file and open with Gdebi and select *Reinstall Package*