

This document provided by



Geek Must Have

<https://GeekMustHave.com>

Web

<https://YouTube.com/c/GeekMustHave>

YouTube

<https://GitHub.com/GeekMustHave>

GitHub

Raspberry PI 400 Install Notes

John HR Schuster

Version 2.1b, 04/01/2022: Notes

Table of Contents

1. Introduction	1
2. Additional Software	1
2.1. Double commander	1
2.2. Visual Studio Code	1
2.3. Arduino IDE	1
3. Chrome Extensions	3
3.1. ASCIIDoctor JS extension	3
4. Networking	3
4.1. Mount Windows share	3
5. References	4
6. Document History	5

Installation and customization of Raspberry PI 400 for development environment.

To view a PDF version of this document click this [Link](#)

The GitHub Repository is located at this [Link](#)

The GeekMustHave Blog Post is located at this [Link](#)

1. Introduction

These are notes from the start up installation and configuration of the RPI400.

2. Additional Software

2.1. Double commander

Dual pane file manager

```
sudo apt-get install doublecmd-qt
```

2.2. Visual Studio Code

IDE and editor with great extension library

Reference: <https://code.visualstudio.com/docs/setup/raspberry-pi>

```
sudo apt update  
sudo apt install code
```

2.3. Arduino IDE

C++ IDE editor for arduino based boards

Rference: <https://www.raspberrypi-spy.co.uk/2020/12/install-arduino-ide-on-raspberry-pi/>



The install below results in the installation of Arduino IDE version 1.6. This is an extremely outdated version which makes it difficult to use or impossible to flash certain devices.

```
sudo apt install arduino
```

Download current IDE from website <https://www.arduino.cc/en/software>

Linux Arm 64 bit, as rgw RPI400 project is 64 bit based.

Copy of `arduino-1.8.19-linuxaarch64.tar` is located [here](#)

Go to download and untar

```
tar -xf arduino-1.8.19-linuxarm.tar.xz
```

Move the folder to the `opt` directory.

```
sudo mv arduino-1.8.19 /opt
```

Run the script to install it

```
sudo /opt/arduino-1.8.19/install.sh
```

The scrip will add and entry to the `Programming` tab for Arduino IDE.

3. Chrome Extensions

3.1. ASCIIDoctor JS extension

This Chrome extension will allow viewing of an *.doc file directly in the browser.

Reference: <https://chrome.google.com/webstore/detail/asciidoctorjs-live-previe/iaalpfgpbocpdfblpnhhgllgdbdbchmia>

The extension must be enabled to allow use of File URLs.

4. Networking

4.1. Mount Windows share

Reference: <https://www.bitpi.co/2015/02/16/accessing-a-windows-share-with-a-raspberry-pi/>

This will allow the Dropbox folder on the Windows desktop be available to the RPI400.

We will need to install cifs-utils. This will help us mount SMB directories- which is what we get from Windows. We can install easily on Raspbian by running the following command:

```
sudo apt-get install cifs-utils;
```

Establish mount to a Windows share

Now we will create a mount point in the `mnt` directory:

```
mkdir /mnt/Dropbox/
```

The mount command for the Dropbox folder on the desktop the newly created folder on the RPI400.

```
sudo mount.cifs -o user=jschust2,password=***** //10.1.10.22/Dropbox /mnt/Dropbox
```



No space between user and password, all optional args are comma separated.

In order for your Raspberry Pi to mount the network shares on boot up, we need to modify the `/etc/fstab` file.

```
sudo nano /etc/fstab
```

There may be entries there already. All we need to do is add the following to the end of the file:

```
//10.1.10.22/Dropbox /mnt/Dropbox cifs  
username=jschust2,password=*****,iocharset=utf8,sec=ntlm 0 0
```

Now we can manually run the same mount process at boot up from the command line by running:

```
sudo mount -a;
```

5. References

6. Document History

Table 1. Document History

Date	Version	Author	Description
04/01/2022	V2.1b	JHRS	Initial version