NextCloud Raspberry Pi 4 HAM Server

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Idea

To use this cost-efficient private cloud solution for example for your HAM-Log e.g. for Log4OM or for other HAM stuff such as documents, webserver, etc.

Introduction

For many years, major cloud providers (e.g. Dropbox, OneDrive, Google Drive or iCloud Drive) have made it easy to access important documents, photos or other files anytime, anywhere.

The flip side: Those who use commercial providers give their data unfiltered into foreign hands. The solution is to set up your own cloud via open source services such as **Nextcloud**. With Nextcloud it is possible to manage files and also various functions such as calendars or online notes on a private web space. Using the various clients of Nextcloud, the data can then be synchronized conveniently and securely on practically any number of systems. But not everyone has their own web space available or wants to bear the associated costs and maintenance effort. As so often, the Raspberry Pi! With a little tinkering, it is possible to equip the mini computer with a Nextcloud instance.

Raspberry Pi 4b (4 GB Ram)

- Raspberry Pi 4 (4 GB Ram)
- SD-Card = 32 GB
- USB-Stick = 32 GB (max) USB 3.0 Stick (Toshiba) for Project Storage

Raspberry Pi 4b Raspian Image
https://www.raspberrypi.org/products/raspberry-pi-4-model-b/

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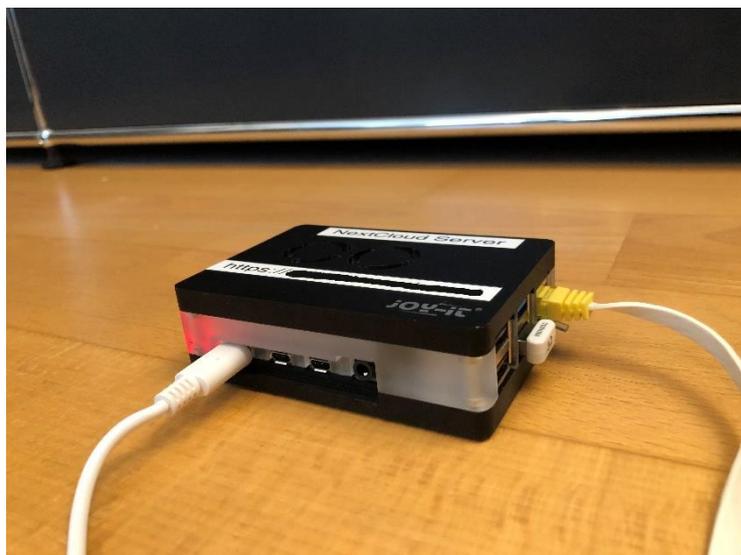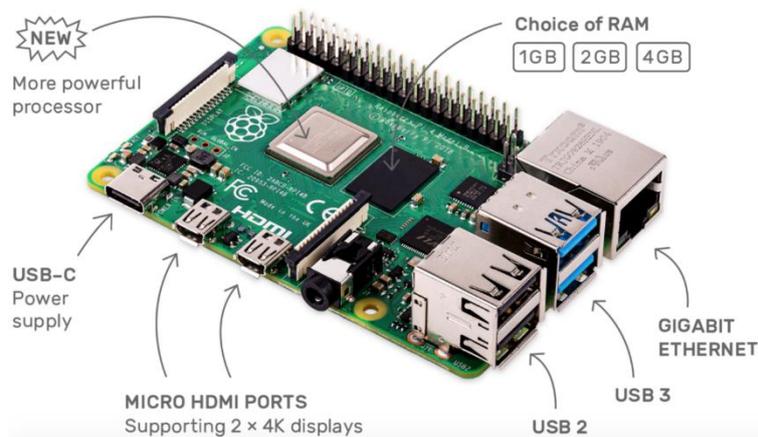
Installation

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As basic I used the **2019-09-26-raspbian-buster-full.img** Image.
https://www.raspberrypi.org/downloads/raspbian/

Apps and Configuration:
- Activate VNC Server in order to see remotely the Raspberry Pi Desktop (GUI)
- Activate Any Desk in order to see remotely the Raspberry Pi Desktop (GUI)
- Bluetooth = OFF, is not used in our case and will save CPU power
- WLAN = OFF, the Raspberry Pi is connected over LAN
- Install the Let's Encrypt Certificate

Installing of NextcloudPi is very easy with an existing installation of Raspbian. If you are already using an existing Raspbian, open a terminal and enter the following command:

curl -sSL https://raw.githubusercontent.com/nextcloud/nextcloudpi/master/install.sh | sudo bash

The installation script takes about 20 minutes without any interaction.

After installation, the following message appears:
Visit https://ip-address of your Raspberry Pi/ to activate your instance of NC, and save or print the auto generated passwords. You may review or reset them anytime by using nc-admin and nc-passwd.

Type **'sudo ncp-config'** to further configure NCP, or access ncp-web on **https://ip-address:4443/**

Note: You will have to add an exception, to bypass your browser warning when you first load the activation and :4443 pages. You can run letsencrypt to get rid of the warning if you have a (sub)domain available.

https://ip-address – the Logon screen of my NextCloud Pi Server in order to use this NextCloud Server as a secure project data exchange server.

Start the wizard to format an USB-Stick as storage https://ip-address:4443/wizard/

In the item "USB Configuration" you set up a connected USB stick or hard drive for data storage with Nextcloud. Click on "Yes", then on "Continue" and finally on "Format USB" to start formatting. This will logically delete any existing data from the media. Finally, click the "Move data to USB" button to move the data directory.

Good luck, best 73 de HB9RYZ, Wolfgang