



Just a simple cloud

User Manual Raspberry Pi Server & Clients

Contents

1.	JUST A SIMPLE CLOUD ON RASPBERRY PI AND CLIENTS	5
1.1.	Introduction	5
1.2.	Using your own RasPi, a virtual RasPi or buying one from us?	6
1.3.	Connecting your RasPi to the internet	7
1.4.	Basic notes for entering data	7
1.5.	Storage size / file size	7
1.6.	Considerations on the SD-card / usage of SSD	7
1.7.	Overttemperature on your RasPi	8
1.8.	Some basics on synchronisation	8
1.9.	Clients	8
2.	USING YOUR OWN RASPI	9
2.1.	Hardware requirements	9
2.2.	Installing an image on the RasPi	10
3.	USING A RASPI PURCHASED FROM US	11
3.1.	Scope of delivery	11
3.2.	Assembly	11
3.3.	Starting up	11
4.	SETUP OF A VIRTUAL RASPI	12
5.	INSTALLING JASC SETUP (WINDOWS)	13
5.1.	Windows installer	13
5.2.	Portable edition	13
6.	SETTING UP THE RASPI (WINDOWS)	14
6.1.	Using a virtual RasPi	16
6.2.	Wi-Fi connection	17
6.3.	Initial setup of the RasPi	18

7.	WINDOWS CLIENT	21
7.1.	Client installation	21
7.2.	Configuration of the client	21
7.3.	Client update	23
8.	INSTALLING JASC SETUP (LINUX)	24
9.	SETTING UP THE RASPI (LINUX)	25
9.1.	Hints for “real” RasPi	25
9.2.	Hints for virtual RasPi	25
9.3.	Wi-Fi connection (only for “real” RasPi)	26
9.4.	Initial setup of the RasPi	29
10.	LINUX CLIENT	30
10.1.	Configuration of the client	30
10.2.	Client installation	31
10.3.	Client update	31
11.	ANDROID CLIENT	32
11.1.	Installation basics (Windows)	32
11.2.	Installation basics (Linux)	33
11.3.	Installing the app	34
11.4.	Select folders for synchronisation	37
12.	UPDATING THE RASPI SERVER (WINDOWS)	41
13.	UPDATING THE RASPI SERVER (LINUX)	43
14.	YOUR RASPI SERVER AS A NAS	44
15.	USER MANAGEMENT ON THE RASPI SERVER	45
15.1.	Starting user management (Windows)	45
15.2.	Starting user management (Linux)	46
15.3.	Managing the users	47

16. LICENCE MANAGEMENT ON THE RASPI SERVER	49
16.1. Starting license management (Windows)	49
16.2. Starting license management (Linux)	50
16.3. Managing your license	51
17. OTHER FUNCTIONS	53
17.1. Access your RasPi server by browser	53
17.2. Connection via VNC	55
18. NOTES	57

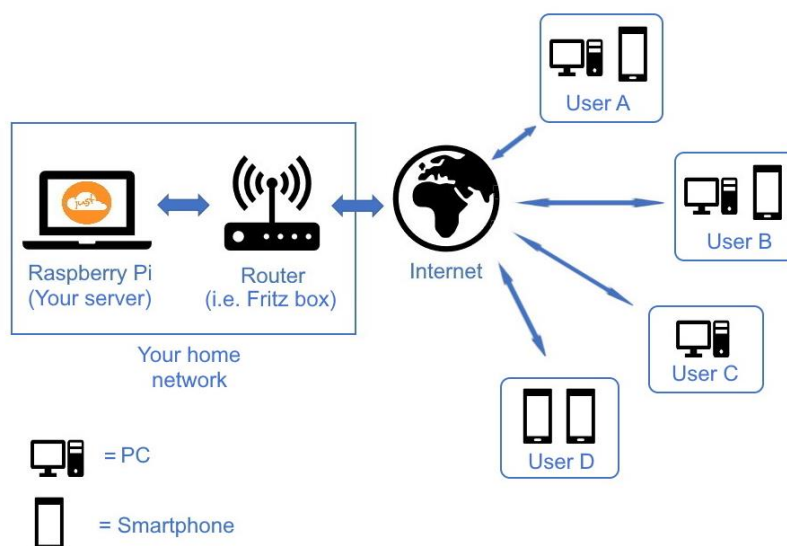
1. Just a simple cloud on Raspberry Pi and clients

1.1. Introduction

“Just a simple cloud” (**JASC** for short) offers you the possibility of keeping your **files** on **your own Raspberry Pi server (RasPi for short)** and **accessing** or **sharing** them **securely from anywhere in the world** with the aid of the client applications (i.e. on PC running Windows / Linux or smartphone). At the same time, it makes sure that your files are always kept synchronised on all clients. The connection between the RasPi and the clients is always fully encrypted so that only you have access to it. **That means you keep full control of your files** and do not have to make them available to a service provider with the risk of not knowing who else apart from yourself can access your files.

As the **server** you use a **RasPi**, one of the most successful and cheapest microcomputers in the world, which you can set up at home, for example. The RasPi is distinguished by its easy installation and low power consumption.

This manual aims to help you **set up the RasPi server** and then **install and configure the client** applications.



To make sure you set up your RasPi successfully, we recommend that you follow the instructions in this manual step by step.

This manual describes the **basics of using JASC**. You can find more detailed information in the [Expert's Manual](#).

1.2. Using your own RasPi, a virtual RasPi or buying one from us?

You have the choice of either using your own RasPi or buying one ready-made from our website.

If you wish to use your own RasPi, continue reading from Section 2. That is only advisable for users who have already been using a RasPi for some time.

If you have purchased a RasPi from us, you should continue reading from Section 3.

If you have decided to use a virtual RasPi provided by us, jump now to Section 4.

1.3. Connecting your RasPi to the internet

You can connect your RasPi either via a LAN cable or by using Wi-Fi to your router.

The **easiest way is to use a network cable**. You do not need to take care for the **network settings**; this will be done **automatically**.

Plug in the network cable BEFORE switching on the RasPi, otherwise the RasPi may not find the network.

In case, you prefer **Wi-Fi**, the setup will assist you choosing the Wi-Fi network (choosing the SSID and entering the password), see chapter 6.

We recommend connecting your RasPi on the initial setup via a LAN cable to the internet for automatic installation of updates (at least for 15 minutes).

1.4. Basic notes for entering data

To ensure a safe functionality of the system, the length of user input is limited. The following maximum values will apply:

- | | | |
|--------------------|---------|--------------------------------------|
| • Email address | 60 char | |
| • User credentials | 30 char | (project- / usernames, passwords...) |
| • Short input data | 10 char | (port numbers...) |
| • Other | 40 char | |

1.5. Storage size / file size

There is no limitation on the storage size, your RasPi will provide. You will find more information in the **expert's manual** on how to use external hard disks.

The maximum size of a single file is 5GB. The operating system of the RasPi needs 16GB.

1.6. Considerations on the SD-card / usage of SSD

The RasPi is equipped with an internal SD card, from which is booted. SD cards have a limited lifetime, depending on the number of write accesses.

The operating system of the RasPi is already configured in a way to minimize write accesses.

We recommend moving the data folder and the backups to a USB-SSD or a network drive.

You will find the necessary information on how to set up the data and the backup folder in chapter "user management".

1.7. Overtemperature on your RasPi

If you are using a housing for the RasPi, which does not allow efficient cooling, the RasPi may get very hot. If it reaches more than 80°C in the CPU, the RasPi could shut down the network connection to protect itself. You will see warnings in the log, as soon, as the temperature reaches 70°C.

Ensure cooling – use a fan!

1.8. Some basics on synchronisation

- The synchronisation will be done on a timely basis and not triggered by changes done to the files. The synchronisation interval can be adjusted in the configuration of the client.
- Empty files (file size 0 bytes) will not be synchronized.
- Folders, that does not contain any files will not be synchronized.

1.9. Clients

There can be only one client installed on a PC.

2. Using your own RasPi

This section describes how to prepare a RasPi that you already own.

2.1. Hardware requirements

JASC can run on any RasPi from model **3B** onwards which is running a current version of the operating system Raspbian. We recommend using the model **4B** or **5**.

To be able to run JASC on your own RasPi, you need the following hardware:

- a RasPi complete with casing
- a micro SD card
- an AC adaptor
- a network cable (in case of using a cable connection, not needed for Wi-Fi)

It is essential to use an **SD card** that meets at least **Class 10** specifications. Other cards are too slow and will unnecessarily slow down the RasPi! We recommend you use an **SD card with a capacity of at least 32GB** to enable you to store your files on the RasPi. Of course, you can also configure JASC to store your files on an external drive (i.e. an USB drive or a NAS drive) if you wish.

The next step is to install the JASC software on your RasPi. To do so, you download a complete image from our website and then write it to the SD card (see next section).

2.2. Installing an image on the RasPi

Download the image matching your RasPi model from the following website:

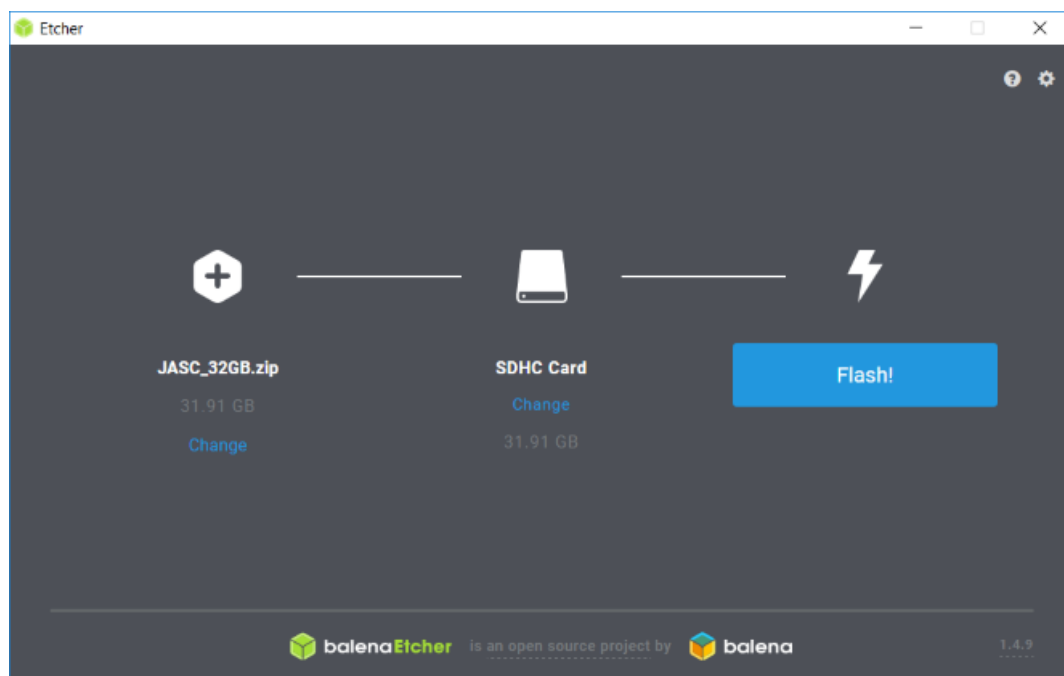
<https://www.just-a-simple-cloud.com/download-software/>

You will also require the program **balenaEtcher** to be able to write the image to your memory card. You can find the relevant link on the above website as well.

balenaEtcher requires a path to the image on your Windows PC that does **not contain any spaces**.

After you have installed balenaEtcher, insert the SD card in your Windows PC or card reader and launch the image software.

The process for writing the image works very simply. Select the downloaded image (in ZIP file format; you do not need to unpack it) and click the **Flash!** button.



Please ignore any warnings regarding problems with the SD card or requests to format the card.

Once the image has been successfully written to the SD card, insert the SD card in the RasPi.

If you want to connect your RasPi with a cable to the internet, you need now to connect the RasPi to your router (or other network connection) with a network cable and power it up (please **ensure, the plug is locked**). As soon as your RasPi is connected to the power, it starts up automatically. After a few seconds, both LEDs on the network socket of the RasPi will start flashing / shine. If you prefer Wi-Fi, you do not need to do anything now, this will be done later.

The RasPi is now in operation and the server software is running.

During the very first time, you start your RasPi, it takes up to 7 minutes for the automatic setup of the RasPi.

Please be patient before running the initial setup.

3. Using a RasPi purchased from us

This section describes how to prepare a RasPi that you have purchased from us.

3.1. Scope of delivery

We supply your RasPi already pre-configured. All you have to do is install your personal JASC licence and enter the access credentials (user names and passwords). This manual explains how to do that.

The delivery includes the following:

- a RasPi complete with micro SD card and ready-installed in the casing
- an AC adaptor
- a network cable (if you want to use a cable connection for internet instead of Wi-Fi)

3.2. Assembly

If you want to connect your RasPi with a cable to the internet, you need now to connect the RasPi to your router (or other network connection) with a network cable and power it up (please **ensure, the plug is locked**).

If you prefer Wi-Fi, you do not need to do anything now, this will be done later.

Then plug the USB connector of the AC adaptor into the socket provided on the RasPi and plug the AC adaptor into the mains power outlet socket.

3.3. Starting up

The SD card is already installed in your RasPi.

As soon as your RasPi is connected to the power, it starts up automatically. If you use a network cable, both LEDs on the network socket of the RasPi will start flashing / shine after a few seconds.

The RasPi is now in operation and the software is running.

During the very first time, you start your RasPi, it takes up to 7 minutes for the automatic setup of the RasPi.

Please be patient before running the initial setup.

If you prefer Wi-Fi, you do not need to do anything now, this will be done later.

4. Setup of a virtual RasPi

Instead of using a real RasPi, we also provide a virtual RasPi.

Your virtual RasPi will be hosted by us in a secured data center located in Germany and can be ordered on our website. It will provide all possibilities like a real RasPi. The storage space is limited to 32 GB, a part of it is used by the operating system giving you 23 GB of space for your data.

At the end of the ordering process, we will send you all credentials by email. Please store this information in a secure place, you will need it during the setup process.

The virtual RasPi can be reached by WWW and FTP.

**We will not create any backups of the virtual RasPi,
please take care by yourself for periodic backups.**

5. Installing JASC Setup (Windows)

To set up your RasPi and install the clients, you need a Windows PC on which JASP Setup has to be installed.

Note: JASC Setup is designed for use with Windows versions 7 to 11 or Windows Server 2016 or later.

You will find all downloads here:

<https://www.just-a-simple-cloud.com/download-software/>

There are two editions of the Windows software available:

- Windows installer: need local (Windows) admin rights.
- Portable edition: works without local admin rights.

5.1. Windows installer

The easiest way to get started with the Windows software is to use the Windows installer version. It will automatically prepare everything for you, but needs local (Windows) admin rights.

Download the installation software for JASC Setup (link see above) and then perform the installation. At the end of the installation process, you will be offered the option of allowing JASC Setup to start automatically.

The **client configuration** will be stored at:

%localappdata%\JASC_Client\Config

5.2. Portable edition

If you do **not have local admin rights (Windows)**, you may use the **portable edition**. Simply download (link see above) and unzip the archive into a folder, where you have **read and write access** and start the setup.

The portable edition differs from the installer by the following topics:

- **No entries** in the Windows **start menu**
- The client software will **not start automatically with Windows**. You need to start it manually on every Windows boot
- The **client configuration** will be **automatically** stored locally in the same folder as the client executable and must not be moved somewhere else

6. Setting up the RasPi (Windows)

On the very first start of the RasPi, he will configure itself automatically, this will take up to 7 minutes. Please be patient and wait before starting the setup.

During the first configuration and every time, you create a new user, the system will create a configuration file (XML). This XML files will be needed during the later configuration steps und especially during the setup of clients. Store these files in a secure location and do not provide access to any third party.

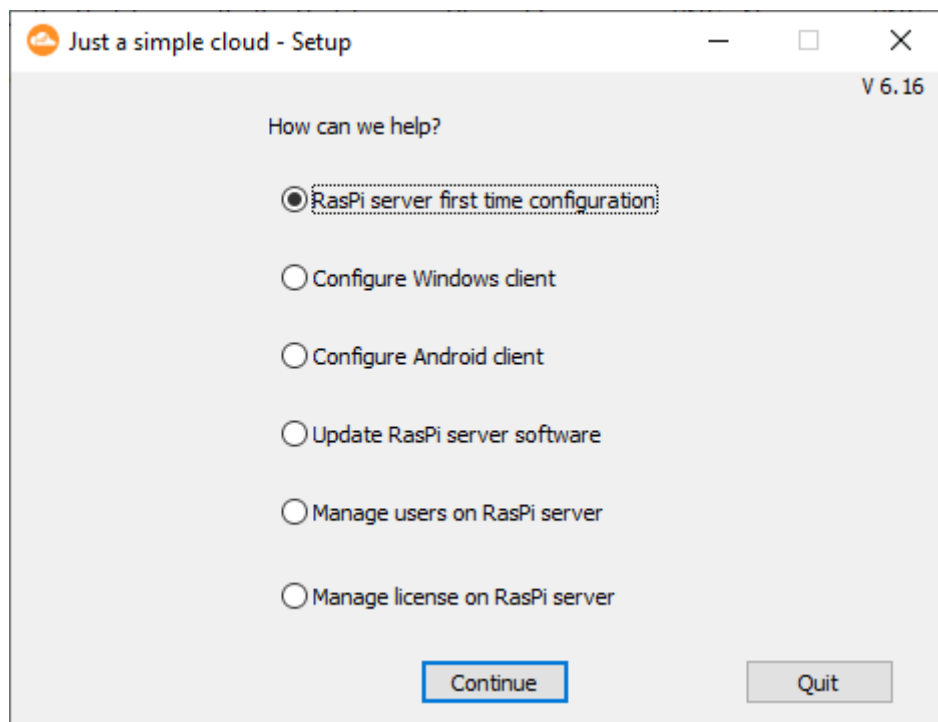
The XML file contains the IP address of the RasPi. In case, this address will change at a later date, you need to manually update the file.

The RasPi server has a special mode that is designed to make the setup process as easy as possible for you. It automatically logs onto the network and shares its network address with JASC Setup.

Start **JASC Setup** (from the **Windows start menu**) and select the option

RasPi Server first time configuration:

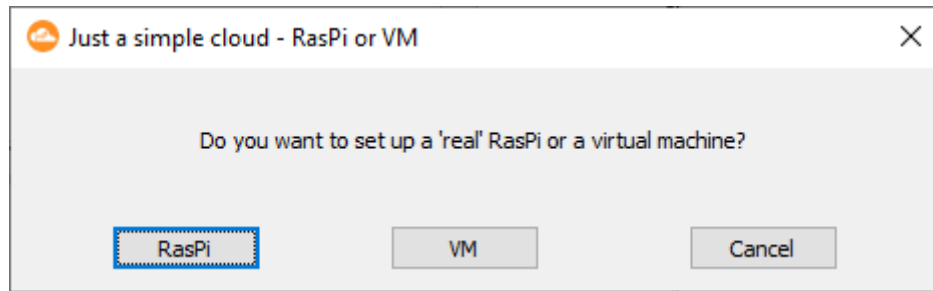
then click "**Continue**".



Attention (only for real RasPi, not for virtual ones): To get the automatic configuration to work, both RasPi and your PC must be connected to the same router

If the RasPi is unable to connect to the internet after booting, it will try to restart automatically every 10 minutes. Please give it a few minutes.

As the first step, you will be asked, whether you want to setup a real RasPi or a virtual one:

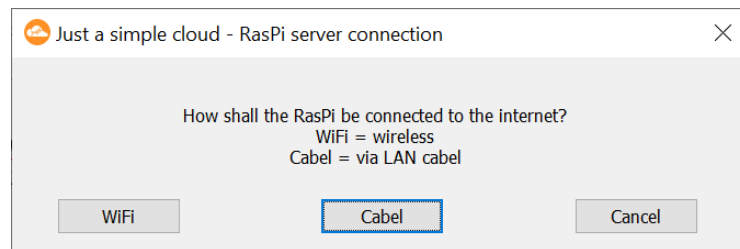


In case of using a virtual RasPi, please continue in chap 6.1.

If you are using a real RasPi, you need now to choose the type of the internet connection of your RasPi.

Your RasPi can **either** be connected using a **cabel connection ("LAN")** with the internet (using your router) or via **Wi-Fi**.

The setup will ask you, **which connection you want to use**:

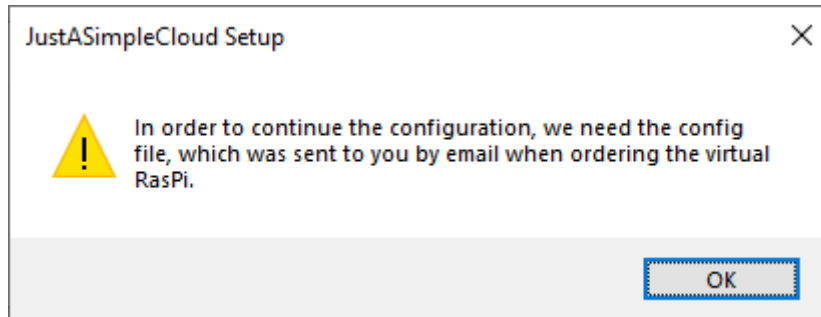


If you have already connected your RasPi using a cable connection, click on "Cabel" and continue in chapter 6.3.

If you want to connect the RasPi wireless via Wi-Fi, you be instructed in chapter 6.2 how to configure the connection.

6.1. Using a virtual RasPi

To set up the connection to your virtual RasPi, you need the “pre configuration XML” file, you have received at the end of the ordering process on our website:



Please continue in chap. 6.3

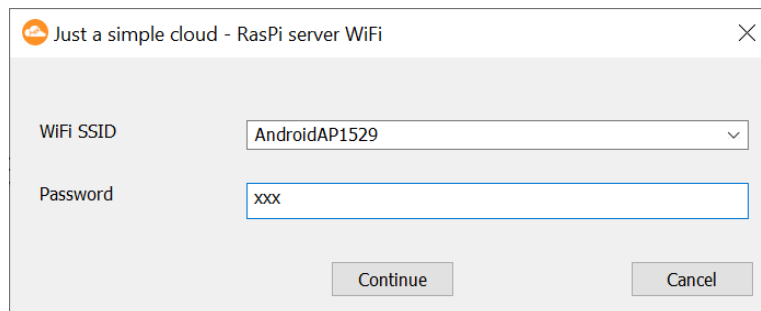
6.2. Wi-Fi connection

To setup the Wi-Fi connection of your RasPi, the setup will save the Wi-Fi configuration on an USB stick and transfer it to the RasPi.

Format the USB stick with FAT32.

Attention: If you are using Wi-Fi, you may encounter short interruptions on the network connection, which may lead to an abort of the synchronization. On the next synchronization, the client will start over and try again.

Click on **“Wi-Fi”**. You will be forwarded to a **dialog** where you can **enter the credentials**.



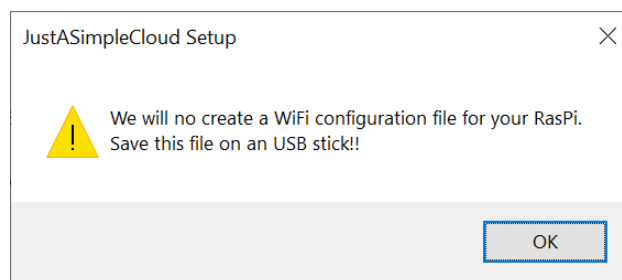
Just a simple cloud - RasPi server WiFi

WiFi SSID: AndroidAP1529

Password: xxx

Continue Cancel

Choose your network from the list and enter the Wi-Fi password, then click “Continue”.

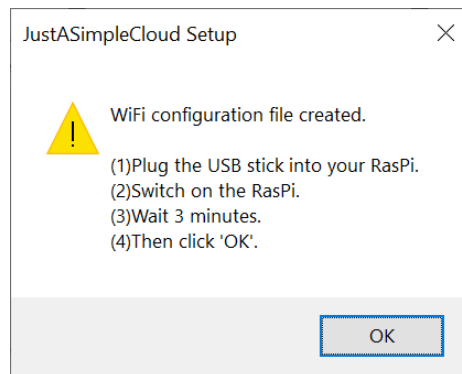


JustASimpleCloud Setup

! We will no create a WiFi configuration file for your RasPi.
Save this file on an USB stick!!

OK

The setup will now create a **configuration file** for the **Wi-Fi connection** of your RasPi. Save this file on a **USB stick (in the root folder of the stick)** and **close the dialog**.



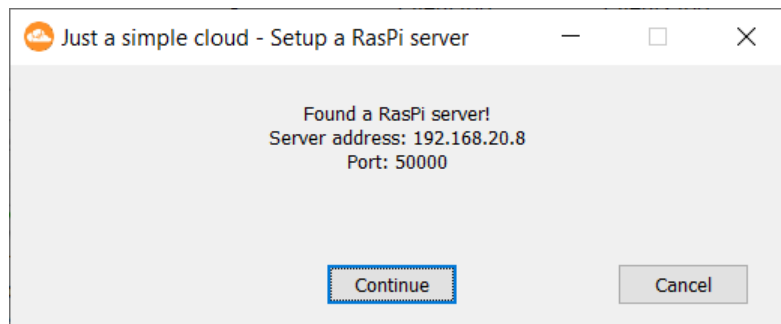
Follow the instructions in the dialog, As soon, as you have connected the USB stick to your RasPi, the **configuration file will be automatically installed** and the RasPi will **reboot**.

Please wait 3 minutes before you click “OK” in the dialog. The setup will continue to search the network for your RasPi.

For **security reasons**, the RasPi will **delete** the configuration file from your USB stick.

6.3. Initial setup of the RasPi

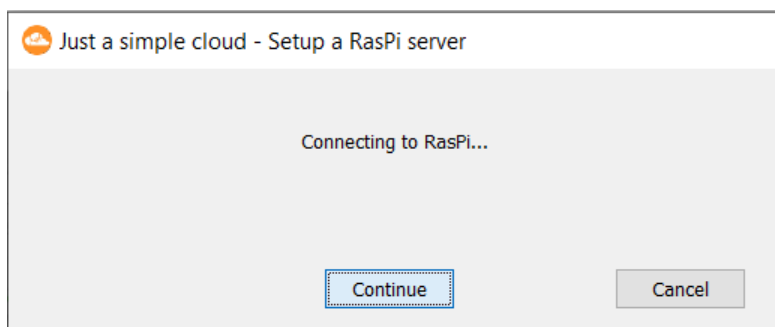
As soon, as the RasPi server was found, its address and port number will be shown for informational purpose. You do not need to note these settings.



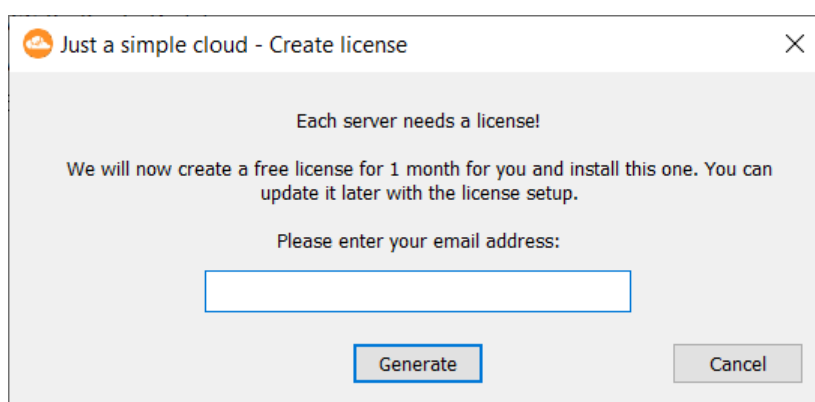
Click **Continue**.

If you have **configured the Wi-Fi connection** of your RasPi with a USB stick (see chap. 6.2), you can now **remove** it.

Setup will then connect to your RasPi:



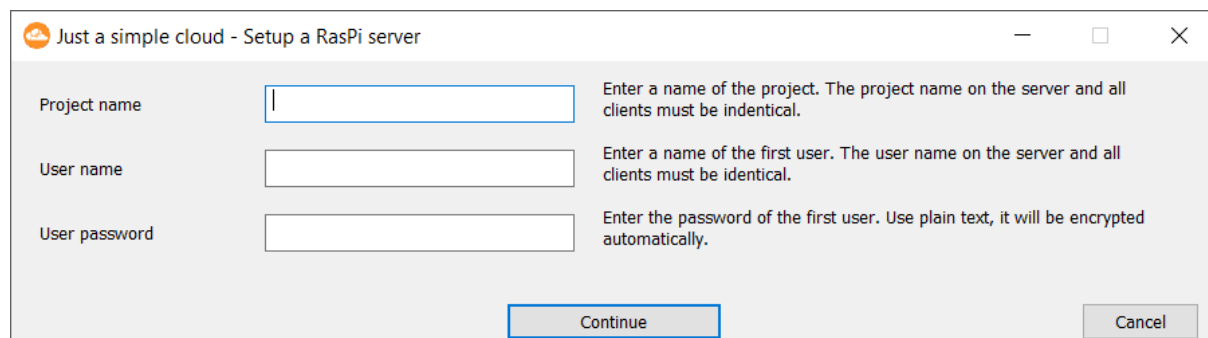
To be able to use your RasPi server, you need a licence. Initially you are granted a free (no-cost) licence, which you can upgrade later on. This requires you to provide your e-mail address:



You will then automatically be sent an e-mail containing your licence details within a few minutes. Keep that e-mail safe and confidential.

Your RasPi manages your data in **projects**. You can create additional projects later, for example for a different group of users. **You can use any name here.**

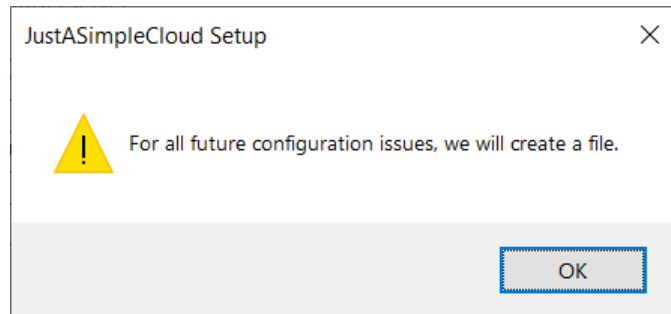
To complete configuration of the RasPi server, you should now enter a name for the project and the user name and password of the first user. You can add or delete more users in this setup program later on.



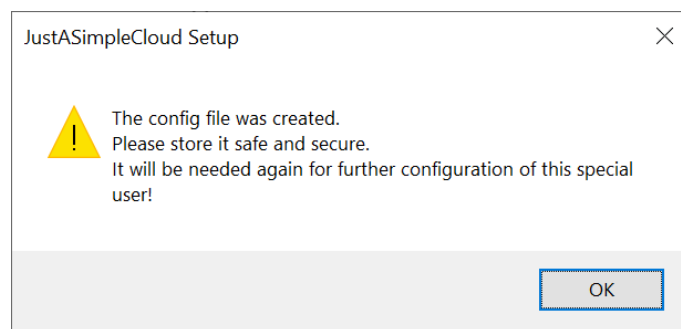
Entries must be unique! Translations into other languages will not be recognized. I.e. project names "My Project" and "Mein Projekt", will obviously be treated as separate projects.

After entering the details, click **Continue**.

Setup will now create a **configuration file** containing all the data required to be able to access the RasPi again later on.

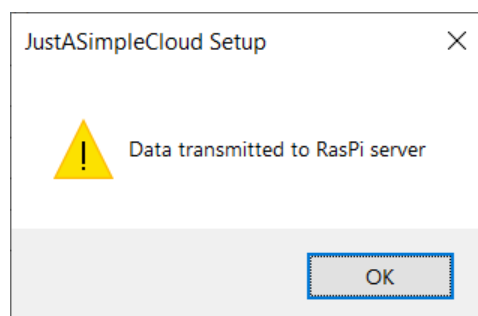


Click **OK** and save the file when prompted. After that, the following dialog will show up:



As well as the address of the RasPi, the configuration file created also contains the personal access credentials of the first user. Therefore, please make sure that only that person has access to that information and keep the configuration file in a suitable storage location. You will need to refer to it again several times in the following steps.

Click **OK** to start transfer of the access credentials to the RasPi (this can take one or two minutes because the RasPi has to automatically restart during the process). Once, this is done, you will receive a confirmation message.



Click **OK**.

The RasPi server is now licensed, set up and ready to use.

Attention: Due to **security restrictions**, the **first time configuration can not be repeated**. Therefore, you need to store the configuration file safe and secure. In case you need to repeat it, please contact us by email:

support@just-a-simple-cloud.com

7. Windows client

7.1. Client installation

The client is already installed by the JASC installer package. All you need to do is to configure it

7.2. Configuration of the client

Now that the RasPi server is ready to use, you should configure the client software on the Windows PCs from which you wish to be able to access your files. If you only want to use your smartphone, you can skip this section and continue in chap. 11.

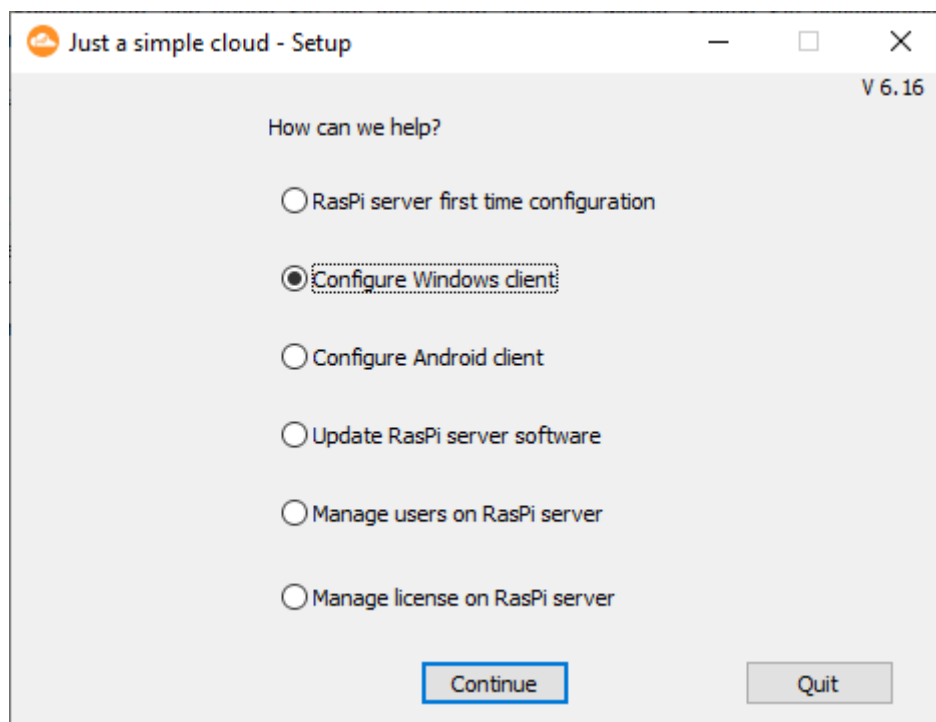
Attention: The system will create a XML file containing the client configuration in this folder

%localappdata%\JASC_Client\Config

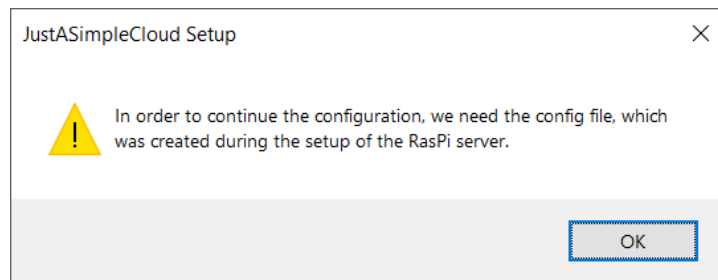
Overwriting this configuration by the setup may lead to a data loss, therefore it is not possible. In case, you need to update the settings, please edit the configuration file manually.

To install the Windows client, start JASC Setup and select the option

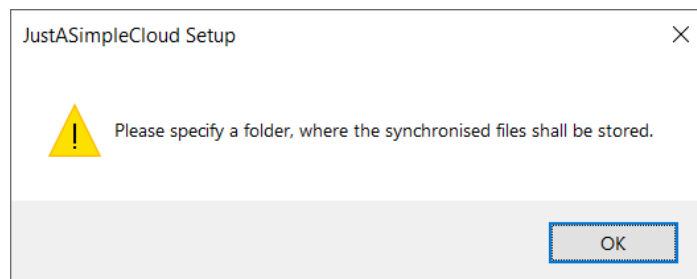
Configure Windows Client:



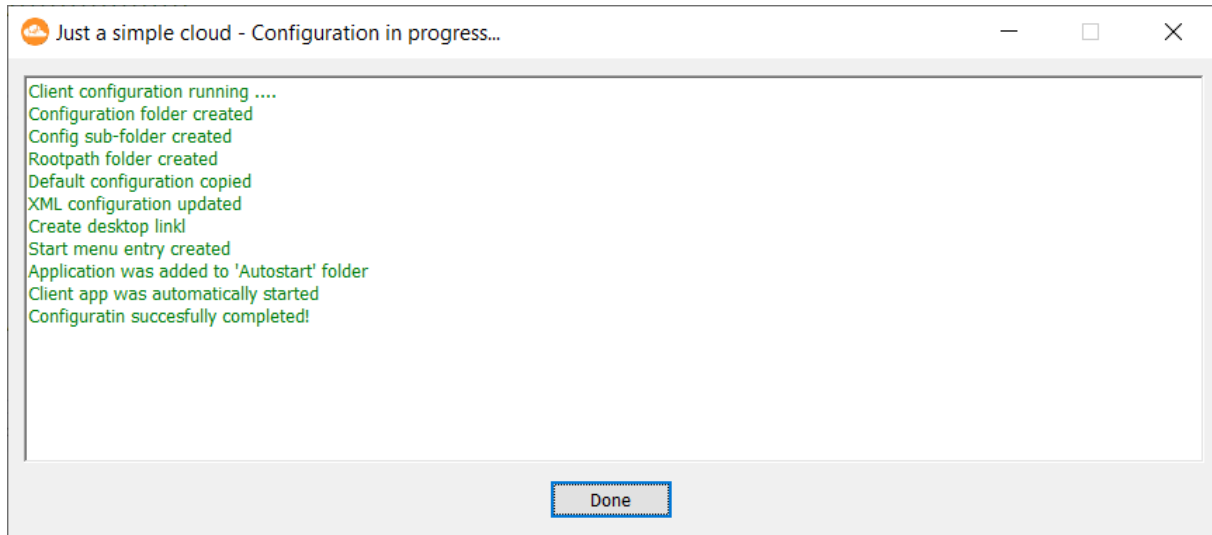
You will then be prompted to reload the configuration file created at the end of the initial setup of the RasPi server.



As soon as the configuration file has been read, you have to specify (or create it, in case it does not exist) a folder on your PC in which the synchronised files are to be placed:



JASC Setup then configures the client software and registers the client with Windows autostart so that it is launched automatically every time Windows is booted up.



The folder you have selected / created for the synchronised files is identified in Windows Explorer by the JASC icon.

The Windows client is now fully installed and immediately starts synchronising files with the RasPi server. All files, you wish to have synchronised with all other clients have to be stored in this folder.

The RasPi sever will automatically create a “Home” folder (on the RasPi). Access to this folder is restricted to the user himself (and JASC administrators).

Note: In case of communication failures (i.e., due to a loss of the internet connection), it may happen, that the RasPi server remains in a connected state and refuses new incoming connections. The system will heal these cases automatically.

7.3. Client update

In order to update the client, first close it using the tray icon, install the current version of the installer package and reboot your PC.

8. Installing JASC Setup (Linux)

To set up your RasPi and install the clients, you need a Linux PC on which JASP Setup has to be installed.

You will find all downloads here:

<https://www.just-a-simple-cloud.com/download-software/>

You will find a link to a tar.gz archive there, which you need to need to download and extract.

Download from the command line:

```
wget https://www.just-a-simple-cloud.com/download/JASCLinuxClient.tar.gz
```

It may happen on older distributions, that you get an error message saying, the SSL certificate of the webserver could not be verified. In this case, please use:

```
wget --no-check-certificate https://www.just-a-simple-cloud.com/download/JASCLinuxClient.tar.gz
```

Unzip the archive with the following command:

```
tar -xzf JASCLinuxClient.tar.gz
```

Both the setup and the client are command line tools. There is no graphical user interface.

**All command line commands must be executed from within the folder,
you have unpacked the archive.
Use your “normal” account, not “root”.**

You may add **spaces or special characters inside parameters**, e.g., in case of a username or password. Always **use single quotation marks** for these parameters!

```
./jascsetup initial_real -mail myemail@email.com -project 'test' -user 'John Doe' -password 'passw@rd'
```

You will need to have the “openssl” package to be installed before using JASC. In case, it is missing, the setup will install it automatically.

You will also need “**sudo**” rights to go through the installation process. The corresponding packets need to be installed first and the local user must be a member of the “sudo” group.

9. Setting up the RasPi (Linux)

On the very first start of a “real” RasPi, he will configure itself automatically, this will take up to 7 minutes. Please be patient and wait before starting the setup.

During the first configuration and every time, you create a new user, the system will create a configuration file (XML). This XML files will be needed during the later configuration steps und especially during the setup of clients. Store these files in a secure location and do not provide access to any third party.

The XML file contains the server address of the RasPi. In case, this address will change at a later date, you need to manually update the file.

The setup is a command line tool. Use the command:

`./jascsetup --help`

to get help on all available commands. Some commands have even more help available, you max use the „**--help**“ also.

9.1. Hints for “real” RasPi

Attention: To get the automatic configuration to work, both RasPi and your PC must be connected to the same router

If the RasPi is unable to connect to the internet after booting, it will try to restart automatically every 10 minutes. Please give it a few minutes.

If you have already connected your RasPi using a cable connection, continue in chapter 9.3.

If you want to connect the RasPi **wireless via Wi-Fi**, you be instructed in chapter 9.4. how to configure the connection.

9.2. Hints for virtual RasPi

To set up the connection to your virtual RasPi, you need the “pre configuration XML” file, you have received at the end of the ordering process on our website:

Please continue in chapter 9.4.

9.3. Wi-Fi connection (only for “real” RasPi)

In order to setup the Wi-Fi connection of your RasPi, the setup will save the Wi-Fi configuration on an USB stick and transfer it to the RasPi.

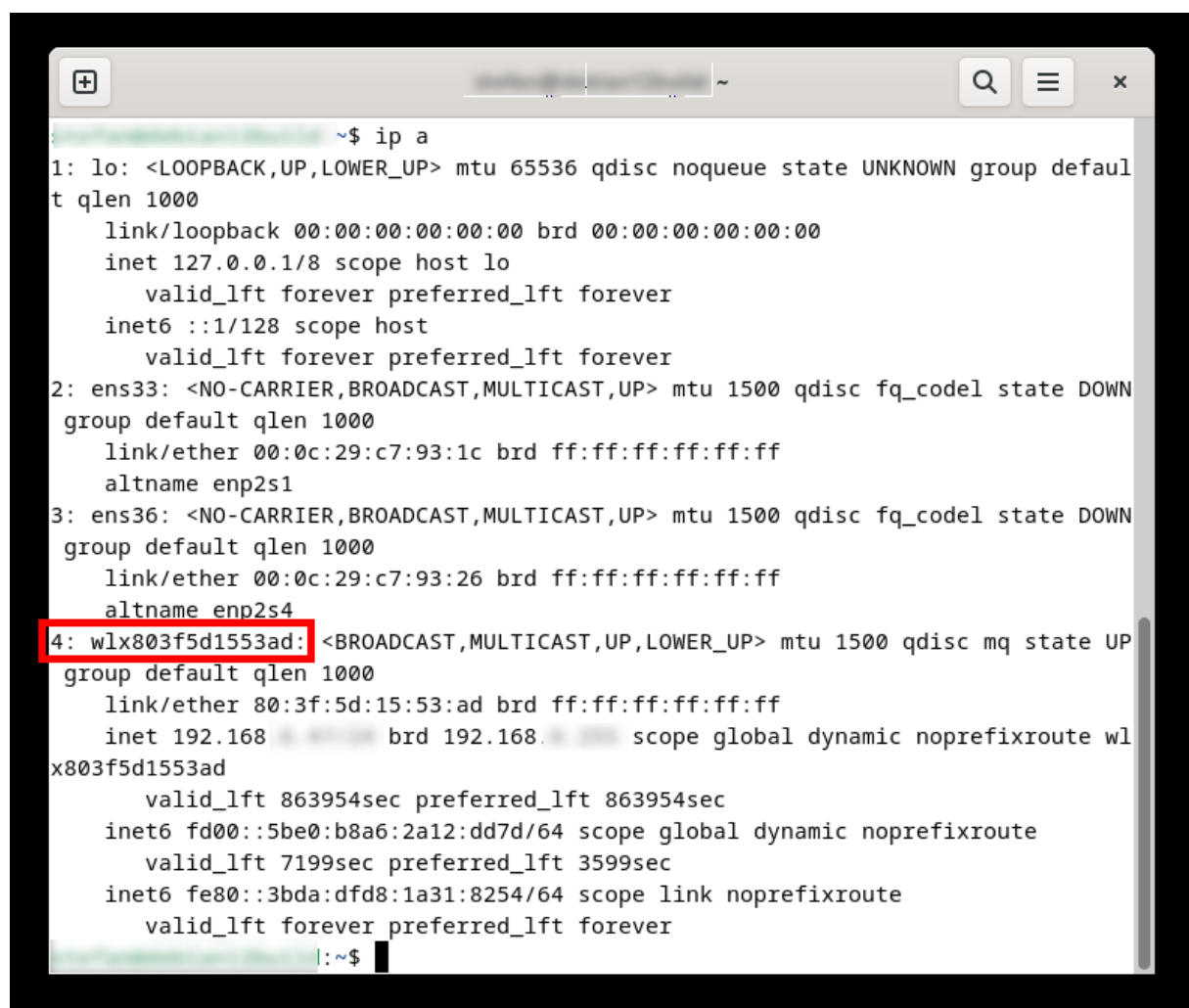
Format the USB stick with FAT32.

Your **PC needs to be connected to your Wi-Fi** network. To make things easier, **disconnect any LAN** connections.

You will get a list of all available network connections with:

ip a

Example:

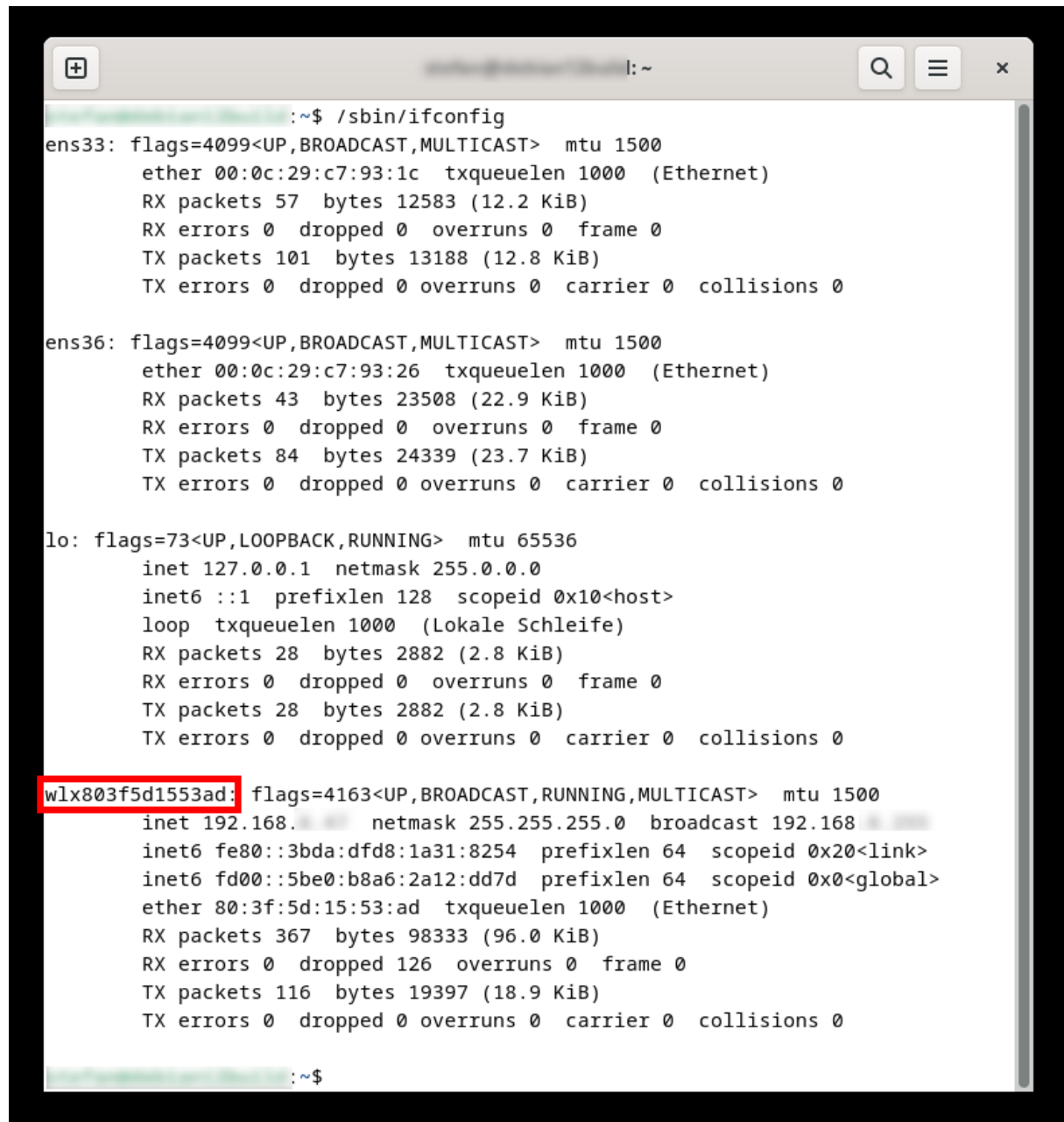


```
~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOWN
    group default qlen 1000
    link/ether 00:0c:29:c7:93:1c brd ff:ff:ff:ff:ff:ff
    altname enp2s1
3: ens36: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOWN
    group default qlen 1000
    link/ether 00:0c:29:c7:93:26 brd ff:ff:ff:ff:ff:ff
    altname enp2s4
4: wlx803f5d1553ad: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP
    group default qlen 1000
    link/ether 80:3f:5d:15:53:ad brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.100/24 scope global dynamic noprefixroute wlx803f5d1553ad
        valid_lft 863954sec preferred_lft 863954sec
    inet6 fd00::5be0:b8a6:2a12:dd7d/64 scope global dynamic noprefixroute
        valid_lft 7199sec preferred_lft 3599sec
    inet6 fe80::3bda:dfd8:1a31:8254/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
```

As an alternative, you could use:

ifconfig

Example:



```
~$ /sbin/ifconfig
ens33: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 00:0c:29:c7:93:1c txqueuelen 1000 (Ethernet)
    RX packets 57 bytes 12583 (12.2 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 101 bytes 13188 (12.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

ens36: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 00:0c:29:c7:93:26 txqueuelen 1000 (Ethernet)
    RX packets 43 bytes 23508 (22.9 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 84 bytes 24339 (23.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Lokale Schleife)
    RX packets 28 bytes 2882 (2.8 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 28 bytes 2882 (2.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlx803f5d1553ad: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.10 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::3bda:dfd8:1a31:8254 prefixlen 64 scopeid 0x20<link>
    inet6 fd00::5be0:b8a6:2a12:dd7d prefixlen 64 scopeid 0x0<global>
    ether 80:3f:5d:15:53:ad txqueuelen 1000 (Ethernet)
    RX packets 367 bytes 98333 (96.0 KiB)
    RX errors 0 dropped 126 overruns 0 frame 0
    TX packets 116 bytes 19397 (18.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

~$
```

If the command "*ifconfig*" was not found on your PC, try:

/sbin/ifconfig

or install it:

sudo apt-get install net-tools

Using the command:

./jascsetup wifi -scan -adapter <WiFi adapter>

will generate an XML file, which lists all available Wi-Fi networks. Replace **<WiFi adapter>** with the name of the Wi-Fi network adapter.

The command

./jascsetup wifi -list

will list all adapters with an individual ID number.

You can then use

./jascsetup wifi -generate -id <id> -password '<WIFI password>'

to generate the file „wpa.conf“ in the current folder, which needs to be copied to a USB stick. Use the **ID number from the preceding command** for **<id>** and insert the **password for your WIFI network** for **<WIFI password>**.

As soon, as the stick is inserted into the RasPi, your RasPi will **automatically read the file, installs it and reboot the RasPi (may take some minutes)**.

Always enclose your password in **single quotation marks**.

For **security reasons**, the RasPi will **delete** the configuration file from your USB stick.

9.4. Initial setup of the RasPi

The **initial setup** will automatically perform the following steps:

- **Search** for your RasPi in the **local network** (only “real” Raspi)
- Create an **initial license**
- Configure your **first project** and **create the first user** on your RasPi server (You may add more users later)

Each RasPi server needs an individual license. The setup will generate a free license, which can be extended later. Your personal email address is needed for creating the license.

Your RasPi manages your data in projects. You can find a detailed description of how these functions on our website. **Entries must be unique!** **Translations into other languages** will not be recognized. I.e. project names “My Project” and “Mein Projekt”, will obviously be treated as separate projects.

Use the following command to perform the initial setup:

For a „real“ RasPi:

```
./jascsetup initial_real -mail < email address > -project '< project name >'  
-user '< user name >' -password '<password>'
```

For a virtual RasPi:

```
./jascsetup initial_vml -xml <pathname of „pre-conf XML“> -mail < email address >  
-project '< project name >' -user '< user name >' -password '<password>'
```

You may add **spaces or special characters inside parameters**, e.g., in case of a username or password. Always **use single quotation marks** for these parameters!

As an example:

```
./jascsetup initial_real -mail myemail@email.com -project 'test' -user 'John Doe' -password 'passw@rd'
```

In parallel to initialize your RasPi, the setup will create a XML configuration file in the local folder. As well as the address of the RasPi, the configuration file also contains the personal access credentials of the first user. Therefore, please make sure that only that person has access to that information and keep the configuration file in a suitable storage location. You will need to refer to it again several times in the following steps.

You will receive an email after some minutes with your license data. Keep it safe and secure.

If you have **configured the Wi-Fi connection** of your RasPi with a USB stick (see chap.9.3), you can now **remove** it.

The RasPi server is now licensed, set up and ready to use.

Attention: Due to **security restrictions**, the **first time configuration can not be repeated**. Therefore, you need to store the configuration file safe and secure. In case you need to repeat it, please contact us by email:

support@just-a-simple-cloud.com

10. Linux client

The Linux clients needs admin rights. You must be a member of the “sudo” group!

Currently, we only support Linux editions, which make use of the "systemd", such as Debian, Ubuntu or others.

10.1. Configuration of the client

The client will be **automatically configured** using the setup tool on the command line:

```
sudo ./jascsetup client -configure -xml <XML config file> -folder <Rootfolder>  
-linuxname <Your Linux username>
```

Replace **<XML config file>** with the name of the configuration file of the user, who shall use the client on this Linux PC.

<Rootfolder> has to be the path to the folder, where you want to save your synchronised data.

Use your real username (used for logging in on your Linux system) as **<Your Linux username>**.

Use an absolute path for <Rootfolder>, no relative path!

Please also replace **<Your Linux username>** with your Linux username (= the name, you are using for login at Linux). Your Linux username will be used to save the files, which are received from the server with the correct user credentials.

**This command needs admin rights!
Therefore, you need to use “sudo”!**

The configuration will be saved here:

/etc/JustASimpleCloudClient.xml

10.2. Client installation

After configuring the client, the software itself can be installed:

```
sudo ./jascsetup client -install
```

The installation will be done fully automatically. In case there are missing packets, these will be installed by the setup.

The client is using the **rsyslog** service for handling its log messages. They can be viewed by:

```
sudo cat /var/log/jascclient.log
```

The client itself is running as a service. To check its status, use:

```
sudo systemctl status jascclient.service
```

10.3. Client update

In case, there is an updated version of the client available, please download it, unzip and run:

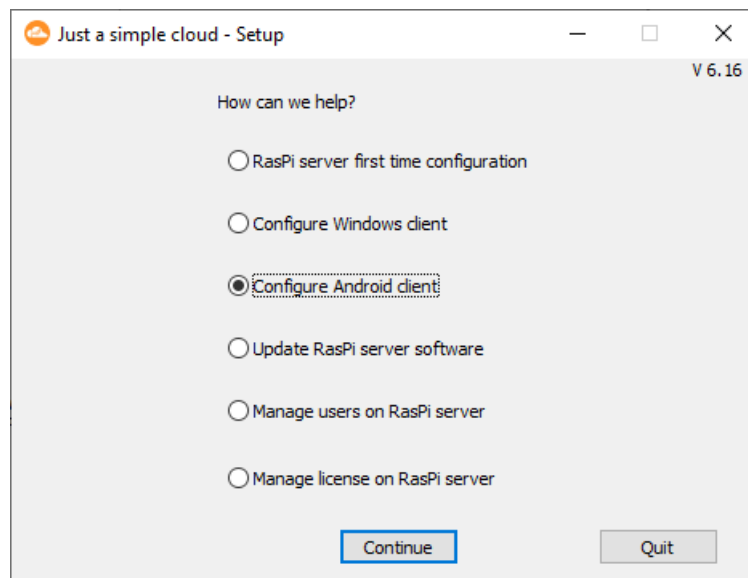
```
sudo ./jascsetup client -update
```

11. Android client

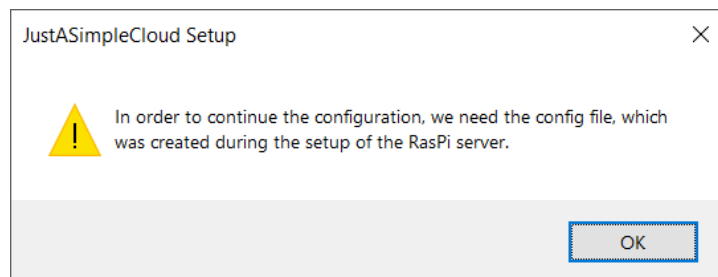
11.1. Installation basics (Windows)

You start the process of configuring the Android client in JASC Setup on your Windows PC. Launch JASC Setup and select the option

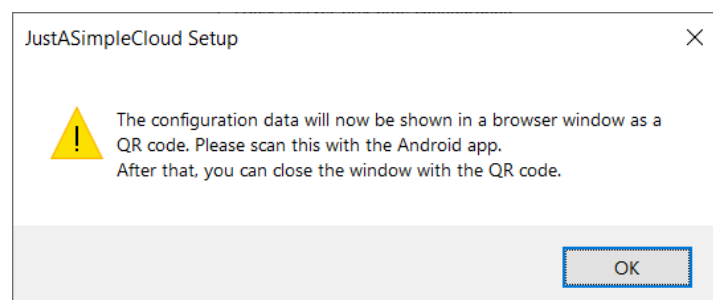
Configure Android Client



You will then be prompted to reload the configuration file created at the end of the initial setup of the RasPi server.



To transfer the data from the configuration file to your Android smartphone, JASC Setup creates from it a QR code that is displayed in the browser on your Windows PC.



11.2. Installation basics (Linux)

You need to have a Linux desktop version, as the command will open the web browser. In case, the browser does not start automatically, please open it manually and try the command again.

You start the process of configuring the Android client in JASC Setup on your Linux PC. Launch JASC Setup and run the following command:

./jascsetup android <XML config file>

Replace **<XML config file>** with the name of the configuration file of a user, for whom you wish to configure the Android client.

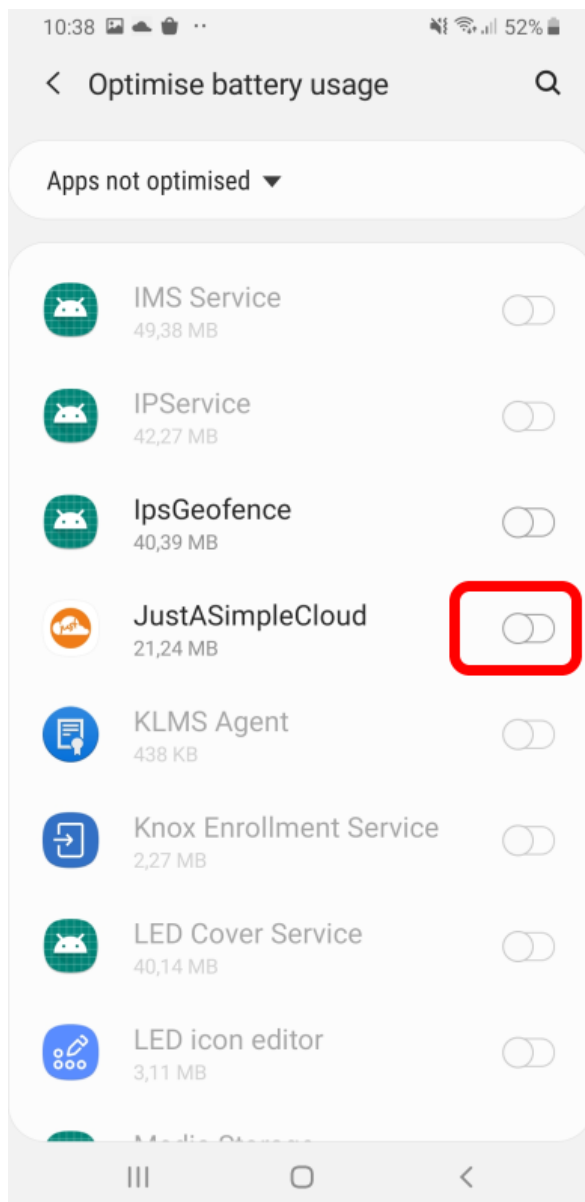
To transfer the data from the configuration file to your Android smartphone, JASC Setup creates from it a QR code that is displayed in the browser on your Linux PC.

11.3. Installing the app

Now download the Android app from Google Play Store and launch the app.

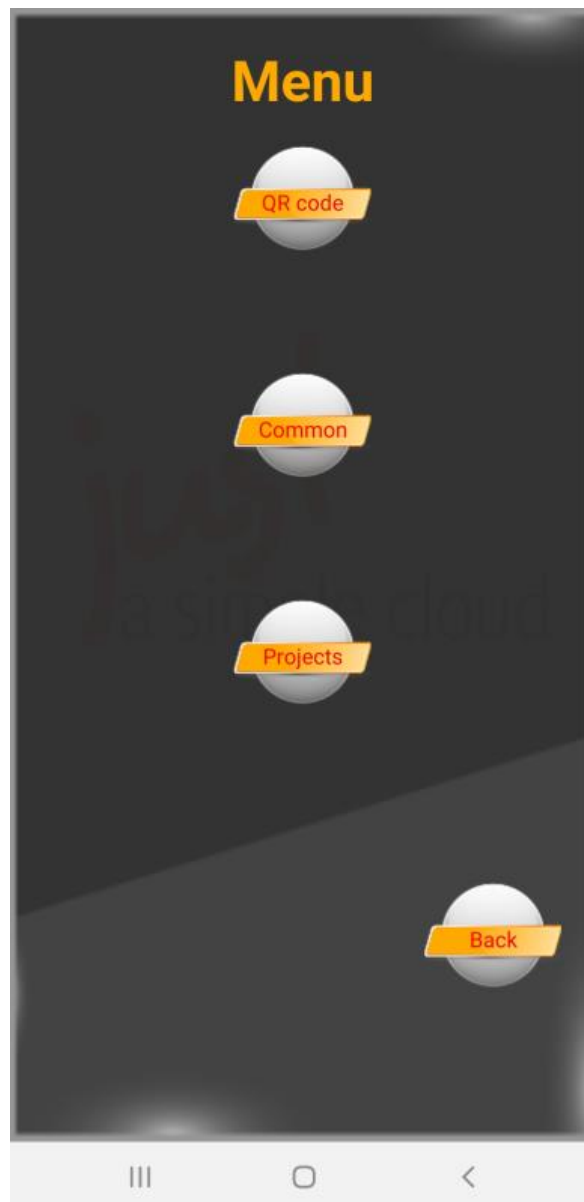
The app requires a number of permissions on your Android smartphone. You can find full details on the **FAQ** page on our website. Please allow all requested permissions.

So that the app can run in the background and synchronise the files at regular intervals, you must add the app to the “automatically managed apps” in the phone’s system settings for battery power management. Scroll down the list of apps until you find **JustASimpleCloud** and then tap the button on the right to activate the option.

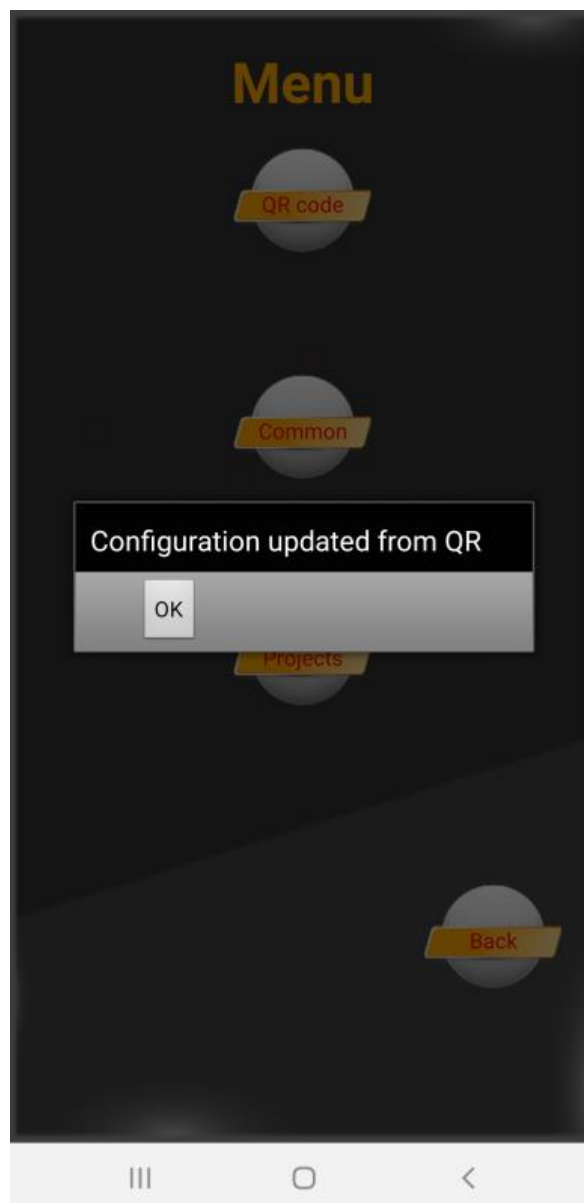


If **JustASimpleCloud** is not listed in the “Apps not optimised” overview, it is already set to optimised.

You are then taken directly to the configuration menu. Click “QR Code”.



The app then activates the phone's camera (preferred the one on the back of the device); use it to scan the QR code displayed in your browser.

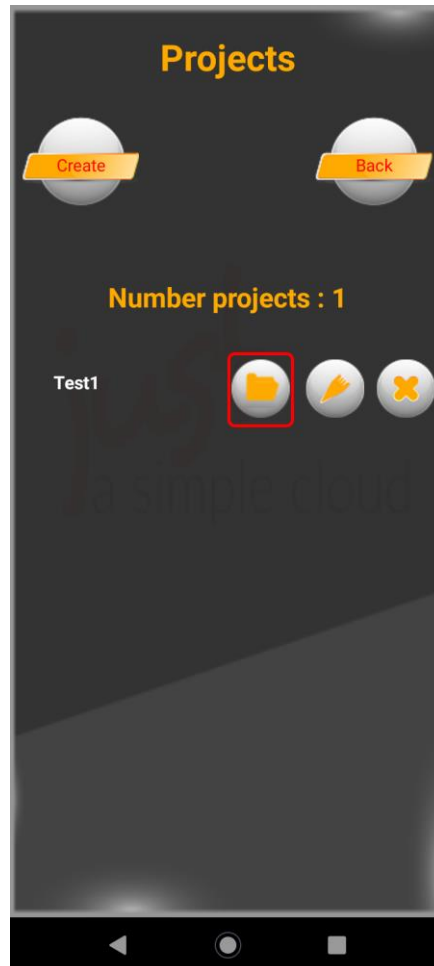


Click **OK**, you will be automatically forwarded to the project overview.

11.4. Select folders for synchronisation

Modern smartphones do have several gigabytes of storage space. Nevertheless, you may want to select only a subset of folders, which shall be synchronised with your smartphone.

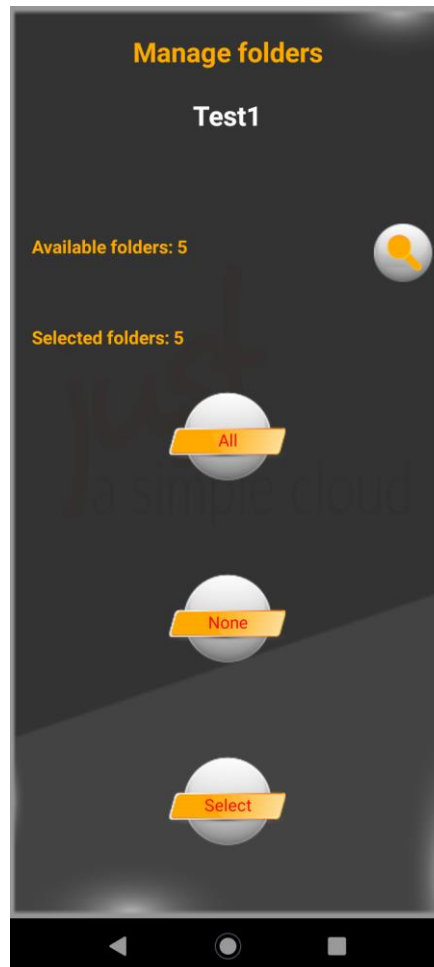
The android client offers the possibility to synchronise only certain folders. Go to the project menu (you will find a button named “**Projects**” on the main menu):



This menu is for manually creating new projects, delete or edit them. You will find a list of all your projects here.

Click on the folder icon.

You will now get an overview for selecting folders on this project.



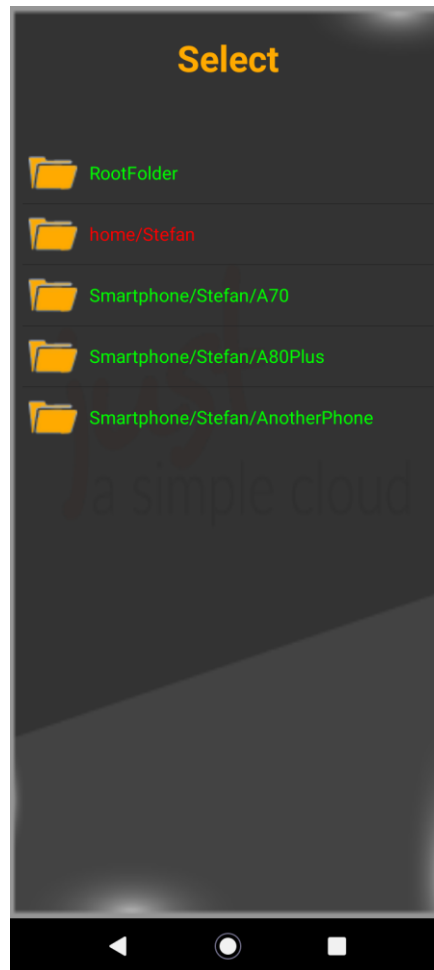
In the first line, the total number of folders available on the server will be shown. Use the magnifier icon to update the list. This may take several minutes.

The second line will inform you about the number of selected folders for synchronisation.

The button **all** will select all folders.

The button **none** will de-select all folders.

The **select** button will guide you to a scrollable list of all folders.



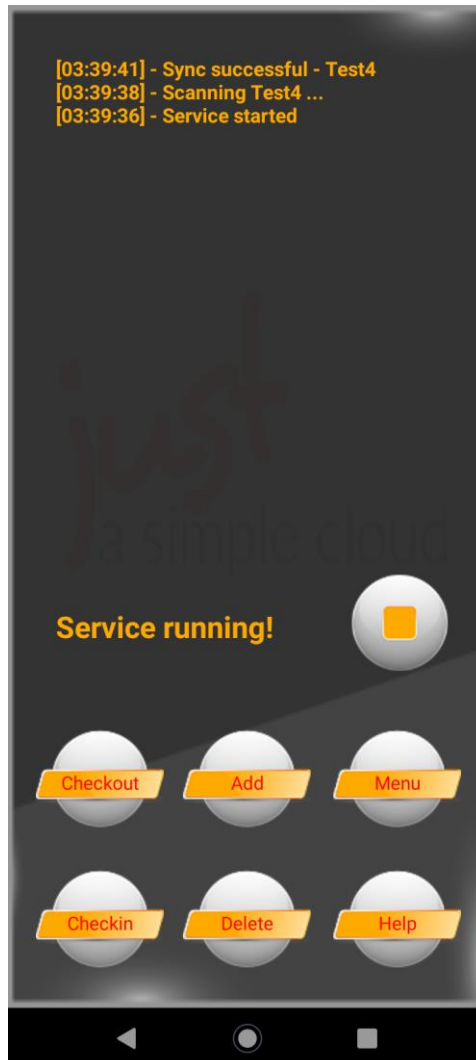
Click on the **name of a folder** to **select** or **de-select** it.

Selected folders will be shown in **green**, **de-selected** ones in **red**.

Use the **back button** of your smartphone to **close this menu**. In case, there are **already files** in folders, you have **de-selected**, you will be asked, whether these files shall be **locally deleted**. The files **on the server will not be affected**.

If an additional message box appears asking for optimising the battery consumption, please click **Allow**.

Go back to the main view of the app, it will already have started synchronising your files.



Depending on your Android version, the appearance of the app may differ.

You will find help in the expert's manual.

You can now close the app. It will continue running automatically in the background and synchronising your files. **Synchronisation will be started every 15 minutes**; you can increase this value in the "Common" menu.

Important: the app will only synchronise your files, in case, the battery has a remaining capacity of at least 30%

12. Updating the RasPi server (Windows)

By default, your RasPi server is configured to automatically check for available updates every day and install them automatically. That means you don't need to worry about updates.

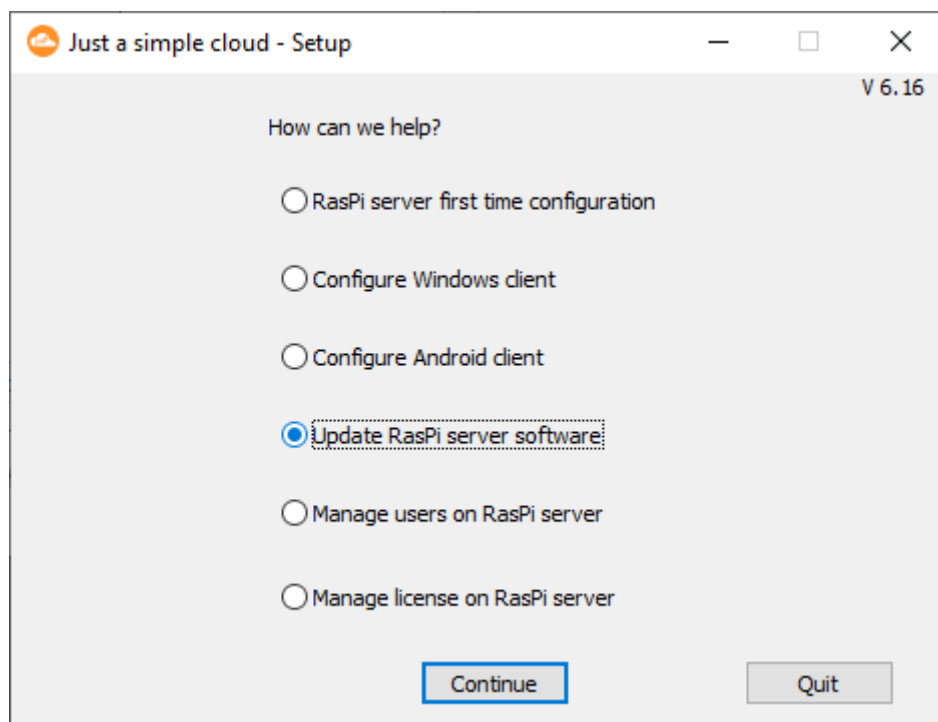
Experienced users can deactivate automatic updates and install them manually if desired. On the RasPi (i.e. use a VNC connection, see chap. 17.2), open the file

/home/pi/JASC/Config/JustASimpleCloudClient.xml

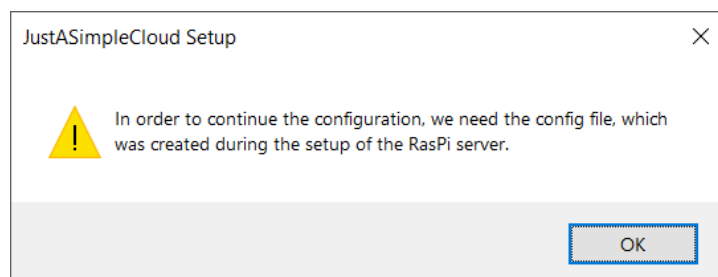
with the text editor and set the value for **AutoUpdate** to **false**, then restart the RasPi server.

You can install updates manually using JASC Setup. Launch JASC Setup and select the option

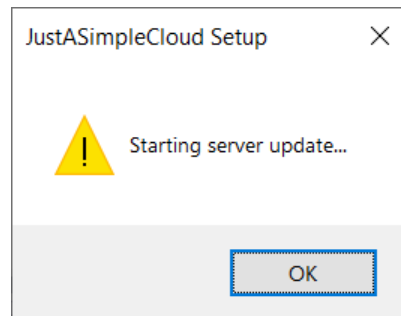
Update RasPi server software:



You will then be prompted to reload the configuration file created at the end of the initial setup of the RasPi server.

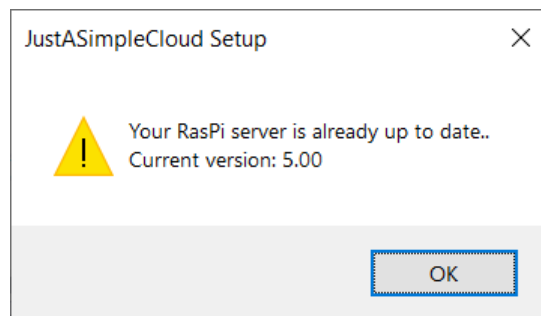


JASC Setup then checks whether there is an update available. If there is, the update of the RasPi server starts automatically.



You can close the dialog box by clicking **OK**. Please wait 2 minutes before attempting to access your RasPi again to make sure the update has time to complete. Your RasPi will restart automatically in the process.

If your RasPi is already running the latest update, a message to that effect will be displayed.



13. Updating the RasPi server (Linux)

By default, your RasPi server is configured to automatically check for available updates every day and install them automatically. That means you don't need to worry about updates.

Experienced users can deactivate automatic updates and install them manually if desired. On the RasPi (i.e. use a VNC connection, see chap. 17.2), open the file

`/home/pi/JASC/Config/JustASimpleCloudClient.xml`

with the text editor and set the value for **AutoUpdate** to **false**, then restart the RasPi server.

You can install updates manually using JASC Setup. Use the following command:

`./jascsetup updateserver <XML config file>`

Replace **<XML config file>** with the name of the configuration file of a user, who has administrative privileges.

Your RasPi will be **restarted** and **updates** (if available) **will be installed**.

14. Your RasPi server as a NAS

Your RasPi will automatically be available as a NAS („Network attached storage“) in your network. You can access your files not only by using a client but also directly over the network.

To use the functionality, login to the RasPi using the IP address (you will find it inside the configuration file which was created upon managing your users) or the network name

jasc-raspi

Username: jasc-samba
Initial password: jasc

The password can be changed by the user management. After any changes, the RasPi will reboot automatically.

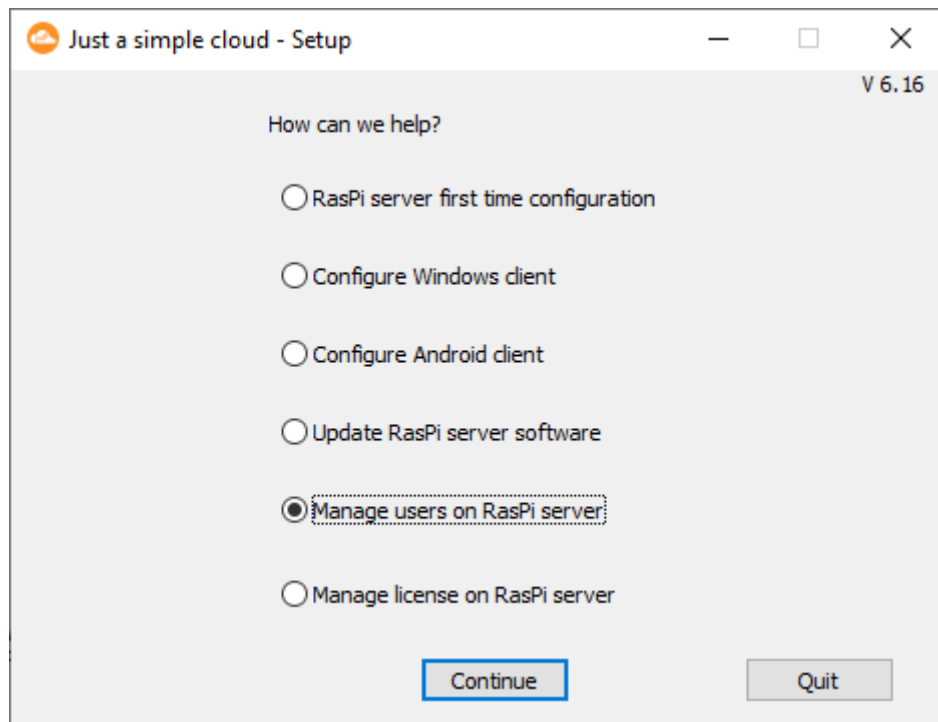
15. User management on the RasPi server

Remark: The user management will only be locally in your browser. You need to save it using the **“Save to server”** button, otherwise, your changes will get lost.

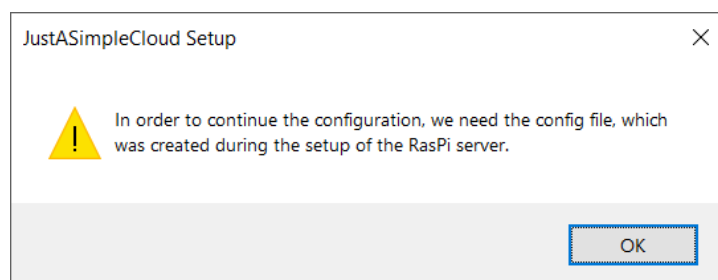
15.1. Starting user management (Windows)

You have already set up the first user when you first installed the RasPi server. If you now want to add or delete any users, launch JASC Setup and select the option

Manage users on RasPi Server:



You will then be prompted to reload the configuration file created at the end of the initial setup of the RasPi server.



**You can only use the user management,
in case, your RasPi server is available in the local network!**

15.2. Starting user management (Linux)

You need to have a Linux desktop version, as the command will open the web browser. In case, the browser does not start automatically, please open it manually and try the command again.

You have already set up the first user when you first installed the RasPi server. If you now want to add or delete any users, launch JASC Setup and use the following command:

./jascsetup user <XML config file>

Replace **<XML config file>** with the name of the configuration file of a user, who has administrative privileges.

**You can only use the user management,
in case, your RasPi server is available in the local network!**

15.3. Managing the users

The RasPi server user management screen then **opens as a website** delivered from your RasPi server: **If you have already opened your browser, please search for the relevant page.**

Just a simple cloud - User handling

Project: Flache **CHANGE NAS PASSWORD**

Rootpath on RasPi: /data2/JASC/Flache **EDIT ROOTPATH**

Backup folder on RasPi: /home/pi/JASC/NetworkMount/Backup **EDIT BACKUP FOLDER**

Groups: Standard **EDIT GROUPS**

Enable home folder: ☒ (activated)

Existing users:

Username	Realname	Email	Member of ...	Admin?	Action
Stefan	My Full Name	buero@flache.de	Standard	yes	not deleteable
DOWNLOAD	EDIT	EDIT	EDIT	TOGGLE	PASSWORD
EMAIL					

Add a new user:

Username:

Password:

Real name (optional):

Email (optional):

Groups: Standard ☒ (user will become member of this group)

Admin? ☐ (no admin privileges)

ADD

RELOAD FROM SERVER **SAVE TO SERVER**

Your RasPi server will show you in the upper part of the screen the following information:

- name of the project
- button for changing the NAS password
- root folder of your cloud data on your RasPi server / button to change the root folder
- folder of your backups on your RasPi server / button to change the backup folder
- list of all available user groups (you can edit the list by clicking on **EDIT**)
- checkbox for enabling the home folders of the users

**If you delete a user group from this list,
it will also be deleted automatically in all user accounts.**

The folders, where your files and the backups (if backups are included in your license) are stored, can be changed using the appropriate buttons. You can store the data at:

- internally on your RasPi
- on an USB hard disk connected to the RasPi
- on a network folder

External USB devices should be formatted using “**ext4**”. Also please name them appropriate to ensure, you choose the right one in the menu on the RasPi.

The next part of the screen shows a list of all available users. For every user, you will find:

- **Username**: the login name of the user
- **Realname**: real name of the user (optional), use **Edit** to change it
- **Email**: email address of the user (optional), use **Edit** to change it
- **Member of**: lists all groups, the user belongs to (click on **EDIT** to perform changes)
- **Admin**: indicates, if this user has admin rights (click **Toggle** to en-/disable)
- **Action**: gives you the possibility to **delete a user (DELETE)** or change his password (**PASSWORD**). The user, who is currently logged in cannot delete himself.

To add a new user, fill in the form „**Add a new user**“. The input fields „**Username**“ and „**Password**“ are mandatory, „**Real name**“ and „**Email**“ are optional. You should also define, which groups the user should belong to and if the new user shall have admin rights.

After clicking **ADD**, the **user will be added**. The system will automatically generate a configuration file for this user (similar to the one, which was created on the initial setup), which can be downloaded with the “**DOWNLOAD**” button. As an alternative, you can directly mail the file to the user in case, you have added a valid email address.

You will only need user groups, if you have activated the user right management on your RasPi server. Please have a look into the “experts manual”.

A user will need admin rights i.e. to gain access to the user management himself.

Clicking **RELOAD FROM SERVER** will reload all data from the server. You could use this, if you have deleted a user by accident or similar cases.

The data will be saved on the server only in case, you click on SAVE TO SERVER.

Saving the data will also restart the server (= server will be unavailable for approx. 1 minute) to take over your changes.

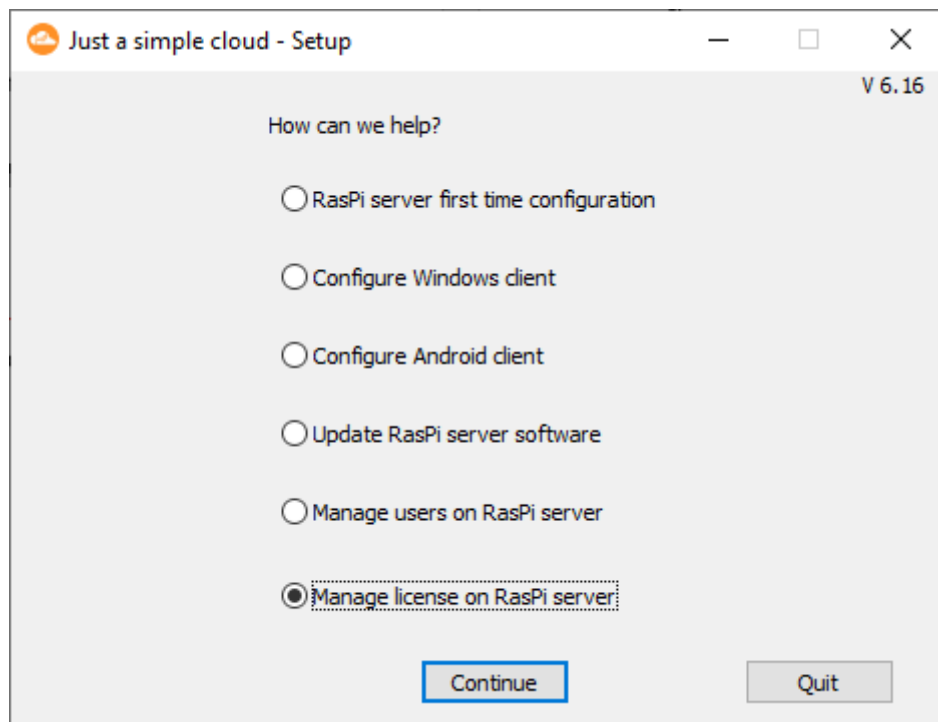
16. Licence management on the RasPi server

16.1. Starting license management (Windows)

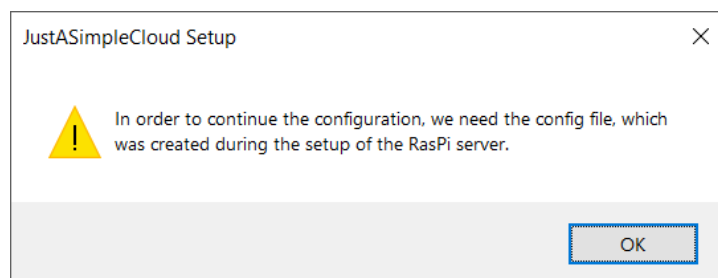
A separate licence is required for each RasPi server that you operate. The clients do not require a licence.

When you first set up your RasPi server, a free (no-cost) licence is automatically generated and installed on your RasPi server. That licence is valid for one month and cannot be renewed. If you wish to continue using the RasPi server after that licence expires, you have to purchase a new licence. Launch JASC Setup and select the option

Manage license on RasPi server



You will then be prompted to reload the configuration file created at the end of the initial setup of the RasPi server.



Only the user, who did the initial setup, is allowed to update licenses.

In case of any questions, please contact us by email.

16.2. Starting license management (Linux)

You need to have a Linux desktop version, as the command will open the web browser. In case, the browser does not start automatically, please open it manually and try the command again.

A separate licence is required for each RasPi server that you operate. The clients do not require a licence.

When you first set up your RasPi server, a free (no-cost) licence is automatically generated and installed on your RasPi server. That licence is valid for one month and cannot be renewed. If you wish to continue using the RasPi server after that licence expires, you have to purchase a new licence. Launch JASC Setup and use the following command:

./jascsetup license <XML config file>

Replace **<XML config file>** with the name of the configuration file of a user, who has administrative privileges.

Only the user, who did the initial setup, is allowed to update licenses.

In case of any questions, please contact us by email.

16.3. Managing your license

Your **default browser will open automatically** and show your current license details and your opportunities for updating the license: **If you have already opened your browser, please search for the relevant page.**

support@just-a-simple-cloud.com FAQ Contact

just
a simple cloud

[CLOUD](#) [RASPI](#) [SHOP](#) [LICENSE](#) [SUSTAINABILITY](#) [DOWNLOAD](#)

The Raspberry Pi 5 is launched! Get a 50% discount on the license fee! Code **raspi5**

Manage your license

Ihre aktuelle Lizenz:

Maschinen Kennung:	
Kontakt:	
gültig bis:	
Lizenz Typ:	Persönlich Plus
Bindung an Haupt-Version des Servers:	nicht enthalten
Backup:	nicht enthalten
Abo:	nicht enthalten

Stellen Sie sich hier Ihre neue Lizenz zusammen.
Um den CO2-Verbrauch zu kompensieren, pflanzen wir Bäume für Sie.

Option 1: Einmalige Zahlung:

- Personal Plus Lizenz
- unbegrenzte Laufzeit
- Updates verfügbar bis einschl. Server-Version: 6

Einmalige Kosten:	99.99 EUR	
Backup (10.00 EUR)	<input checked="" type="checkbox"/> Ja, bitte	
Gutschein	<input type="text"/>	<input type="button" value="Einlösen"/>
Summe:	109.99 EUR	
Gutschein:	0.00 EUR	
Einmalige Zahlung:	109.99 EUR	
Zahlungsart:	<input checked="" type="radio"/> Kreditkarte	<input type="radio"/> PayPal

☐ Ich habe die Datenschutzerklärung gelesen und akzeptiere diese. Die hier erhobenen Daten werden ausschließlich für den Kauf der hier bestellten Lizenz verwendet.

Option 2: zeitlich begrenzte Lizenzen:

<input checked="" type="radio"/> 1 Monat	<input type="radio"/> 3 Monate	<input type="radio"/> 6 Monate	<input type="radio"/> 12 Monate
Neues Ablaufdatum der Lizenz: 04.10.2024		Abo abschließen <input type="checkbox"/> Nein	
<input checked="" type="radio"/> Personal Plus (3.49 EUR/Monat)	<input type="radio"/> Professional Plus (16.99 EUR/Monat)		
Backup (0.35 EUR/Monat)	<input checked="" type="checkbox"/> Ja, bitte		
Gutschein	<input type="text"/> <input type="button" value="Einlösen"/>		
Summe:	3.84 EUR		
Restwert Lizenz:	- 7.40 EUR		
Gutschein:	0.00 EUR		
Einmalige Zahlung (Minimalbetrag):	1.00 EUR		
Zahlungsart:	<input checked="" type="radio"/> Kreditkarte <input type="radio"/> PayPal		

You can then configure your licence. The payment options offered are credit card (validated by the service provider “stripe.com”) or PayPal. If you have a voucher code, enter it in the **Voucher** box and click **Redeem**. The voucher value is then deducted from the total price.

We recommend taking out a licence subscription so that your licence automatically renews at the end of the licence period. If you choose the subscription option, the only payment option offered is “Credit Card”.

Clicking **Order now** will take you to the payment page. After this is done, your license will be **automatically updated within the next 48 hours**. To update the license **manually**, see chap. 17.1

17. Other functions

This is only a **first view** on the extended features of JustASimpleCloud. You will find more detailed information in the **Expert's Manual**.

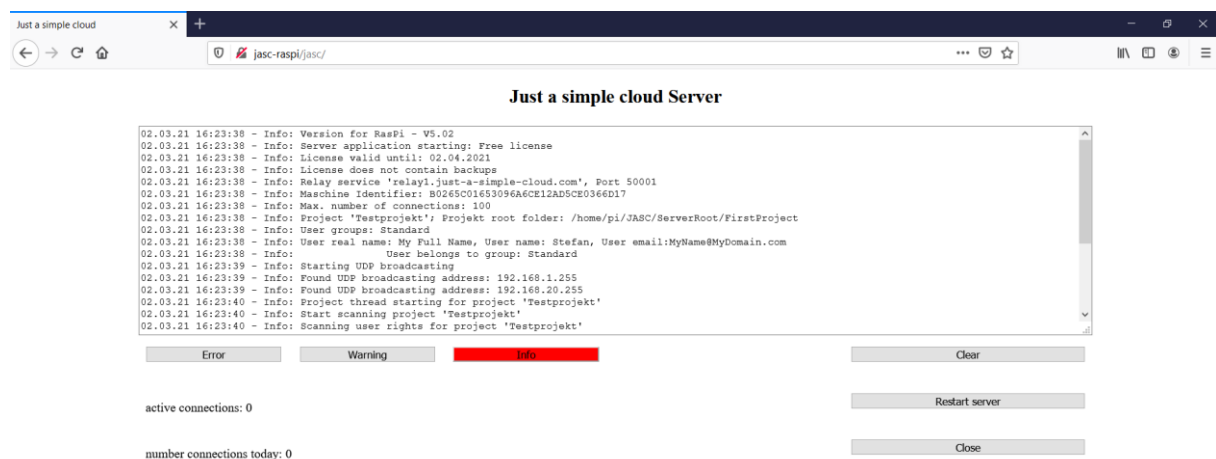
17.1. Access your RasPi server by browser

You can access the user interface of the RasPi server from any browser (Firefox, Microsoft Edge, Chrome, etc.) within the network in which the RasPi server is located by typing the following URL in the address bar. You will get access to the servers log, stop or restart the server:

`http://jasc-raspi/jasc`

In case, you know the ip address of your RasPi, you can also use this as the URL:

`http://<ip address>/jasc`



The webpage of your RasPi is protected with a password.

In case, you use a real RasPi, the password is:

jasc

If you are using a virtual RasPi, you will receive the password during the setup of the virtual machine by email.

Do not use the „Enter“ Key, instead click on the „send“ button.

The log output of the RasPi server will be filtered according to its severity.
You may use the buttons

- **Error**
- **Warning**
- **Info**

to adjust the filter. The current setting is marked in red. As an example, setting the filter to “Warning”, will output errors and warning, but no information.

“**Clear**” deletes the current output, “**Restart server**” will restart the JASC software (which will automatically **install updates** and **changes on your license**) and “**Close**” will end the JASC software (but **not the RasPi** itself).

Note: your RasPi server does not have an SSL certificate so the connection may be flagged up as insecure. However, since the server is within your own network you can trust the connection.

17.2. Connection via VNC

Your RasPi server does not have a keyboard or mouse; it may, however, have an internal display, depending on the model. You can connect any USB keyboard or mouse to the RasPi server and connect a suitable monitor via the HDMI port.

However, it is easier to use the program **VNC**. It establishes a connection with the RasPi server and enables you to access the RasPi server directly from a PC.

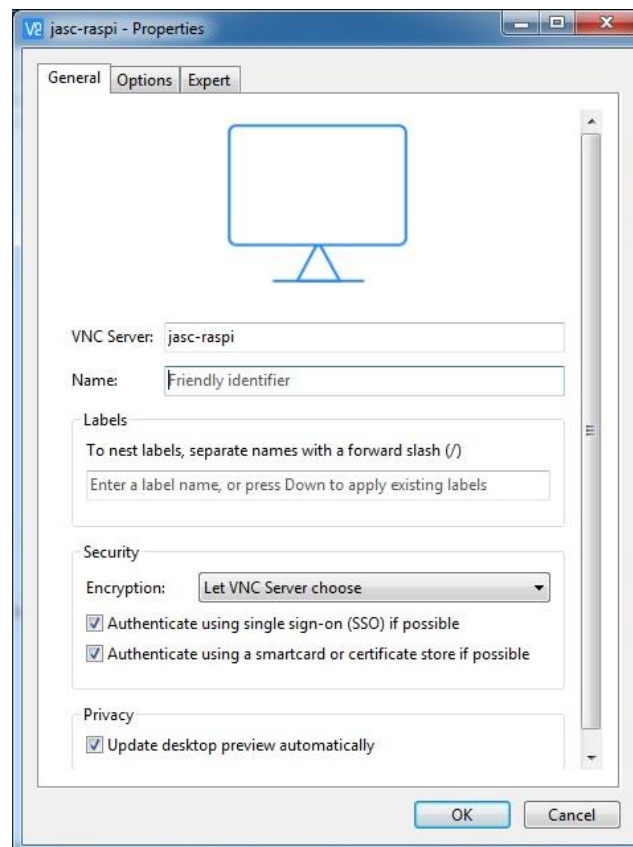
You can find the download link for VNC on our website at:

<https://www.just-a-simple-cloud.com/download-software/>

When installing VNC, skip the stage “First Steps” and select the menu option

File → New Connection

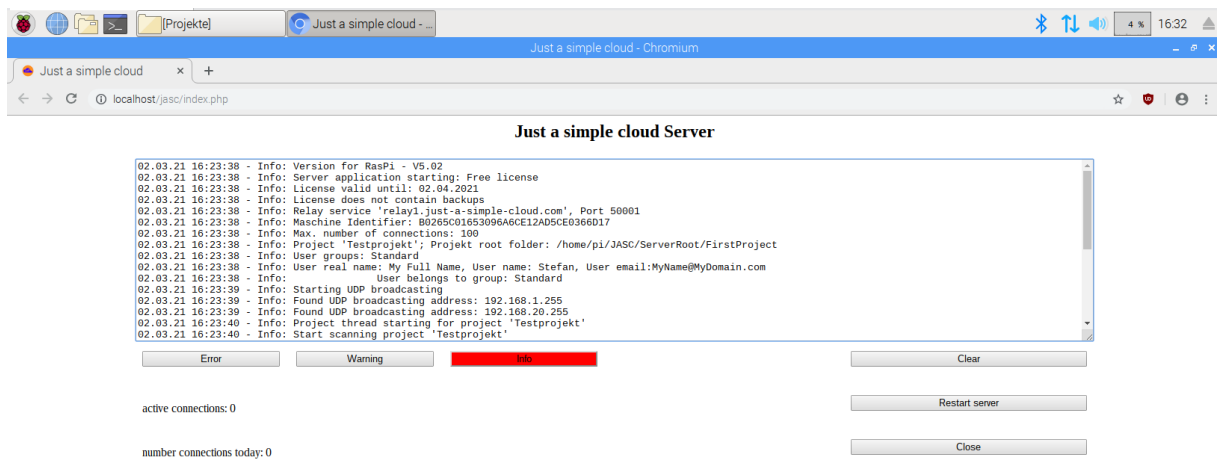
to create a new connection. To do so, you only need to enter the address “**jasc-raspi**” in the input box for **VNC Server**. All other settings should remain as they are.



During the process of establishing the connection you are prompted to enter the user name and password:

User name: **pi**
Password: **raspberry**

Place a tick in the box for “Save Password” and click **OK** to confirm your entries. The VNC view below will then open on your RasPi.



18. Notes

Switching off the RasPi server

Like any other computer, your RasPi server does not like hard shutdowns, i.e. being abruptly disconnected from the power supply.

If you wish to switch off your RasPi server, first connect to it using VNC and shut it down from the system menu.

RasPi server time zone

Because the RasPi server is designed for use anywhere in the world in any time zone and setting it to the user's local time zone prior to delivery is not possible, the RasPi server is always set to GMT (Europe/London).

Third party software

"VNC Viewer" and "balenaEtcher" are third party products and trademark rights of the respective owners.