



# **Just a simple cloud**

## **Manual RasPi**

## Table of content

|           |  |           |
|-----------|--|-----------|
| <b>1.</b> | <b>JUST A SIMPLE CLOUD ON A RASPBERRY PI</b> | <b>3</b>  |
| 1.1.      | Introduction                                 | 3         |
| 1.2.      | Use a JASC-RasPi or your own?                | 3         |
| <b>2.</b> | <b>USE YOUR OWN RASPBERRY PI</b>             | <b>4</b>  |
| 2.1.      | Hardware requirements                        | 4         |
| 2.2.      | Installation JASC-Software                   | 4         |
| <b>3.</b> | <b>USING A JASC-RASPBERRY PI</b>             | <b>5</b>  |
| 3.1.      | Scope of delivery                            | 5         |
| 3.2.      | Setup  | 5         |
| 3.3.      | Power on                                     | 5         |
| <b>4.</b> | <b>SETTING UP A CONNECTION</b>               | <b>6</b>  |
| 4.1.      | Address of the RasPi in the network          | 6         |
| 4.2.      | Connection via VNC                           | 6         |
| <b>5.</b> | <b>SETTING UP A JASC LICENSE</b>             | <b>9</b>  |
| <b>6.</b> | <b>CONFIGURATION OF THE RASPI SERVER</b>     | <b>15</b> |
| <b>7.</b> | <b>CLIENTS</b>                               | <b>20</b> |
| <b>8.</b> | <b>UPDATING THE SERVER</b>                   | <b>24</b> |
| <b>9.</b> | <b>REMARKS</b>                               | <b>25</b> |
| 9.1.      | Switching off a RasPi                        | 25        |
| 9.2.      | Time zone of the RasPi                       | 25        |

## 1. Just a simple cloud on a Raspberry Pi

### 1.1. Introduction

“Just a simple cloud” (named “JASC” in this document) gives you the possibility to store your files on your own server and access them through the clients from all over the world. You have the full control about your data and do not need to share them with other providers, not knowing, who else can read them.

As not all users have the possibility to run their own Windows server, we provide you the possibility with the help of a Raspberry Pi, one of the most successful miniature computers of the world, to run a cost and energy effective server.

**In order to set up your Raspberry Pi,  
we suggest you to follow this manual step by step.**

### 1.2. Use a JASC-RasPi or your own?

You have the possibility to choose whether to buy a Raspberry Pi on your own or to buy one of the already pre-configured ones from us through our website.

If you want to use your own Raspberry Pi, continue with chapter 2.

In order to use one of our Raspberry Pis, have a look to chapter 3.

## 2. Use your own Raspberry Pi

This chapter describes the preparation of a Raspberry Pi (shortly "RasPi"), which you have purchased by your own.

### 2.1. Hardware requirements

Just a simple cloud will run on all models of the Raspberry Pi starting with model „2B V1.2“ running a current version of the operating system "Raspian".

If you want to use your own RasPi, you will need the following hardware:

- RasPi including housing
- Micro SD-Card
- Power supply
- Network cable

Please use at least a class 10 card! Slower cards will slow down your RasPi. We recommend to use as a minimum a 32GB SD-Card in case, you want to store your data on the RasPi. Of course, JASC could also be configured in a way to use external storage (e.g. a NAS device).

### 2.2. Installation JASC-Software

Download the file „JASC.tar.gz“ on your RasPi from this link:

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

Unpack the archive to

```
/home/pi/JASC
```

And follow the instructions from the file

```
Read_me.txt
```

which is included in the archive.

Continue in chapter 4.

### 3. Using a JASC-Raspberry Pi

This chapter describes the preparation of a Raspberry Pi (shortly "RasPi"), which you have purchased by our website.

#### 3.1. Scope of delivery

You will receive your RasPi already pre-configured. You only need to install your personal JASC license and change the default credentials. This manual will assist you.

Your delivery will contain:

- RasPi Model 3 B+ including SD card, mounted in a housing
- Power supply for all countries
- Network cable

The type of SD card depends on the version, you have ordered.

#### 3.2. Setup

Connect the network cable with your internet router or any other network port in your LAN. Experienced users can also use the wireless connection.

Choose the power plug, which is suitable for your country and ensure, it is properly inserted into the power supply.

Insert the micro USB connector into the port of the RasPi and afterwards to your power outlet.

#### 3.3. Power on

The SD card is already mounted in your RasPi.

As soon, as the RasPi is powered, it will start automatically and the network LEDs will start blinking.

## 4. Setting up a connection

### 4.1. Address of the RasPi in the network

Your RasPi will automatically connect to your network and ask the router for an IP address (by the “DHCP” service running on your router). This may last some minutes.

You can either connect to your RasPi using the IP address or by its network name

### JASC-RasPi

#### **Attention!!!**

The network name is a system setting, which can not be influenced by JASC.  
If you have purchased a RasPi on our website, the network name is set to JASC-RasPi.  
If you are using your own RasPi, you have set the network name by your own and it will differ. For a connection to the RasPi, you need to use the name, which is currently set in the system settings or the IP address of your device. To make things easier, we will use the name JASC-RasPi in this document.

You do not need to matter about upper or lower case, both will work.

**It may happen, that the network name does not work. In this case, the setup has the possibility to search for your RasPi in the local network.**

#### Note for experienced users:

To get to know the IP address of your RasPi, open a console window on your PC and enter the following command:

```
nslookup jasc-raspi
```

### 4.2. Connection via VNC

**The VNC connection is not mandatory for the setup of your RasPi. It will just help you understanding the process and therefore it is optional.**

If you encounter difficulties with the VNC connection, skip this chapter and continue in chap. 5.

Your RasPi does not have a display or keyboard / mouse. You can connect whatever USB keyboard and mouse you want and use the HDMI connector for your monitor.

But it is much easier to use the software “VNC”: It will set up a connection to your RasPi and gives you the possibility to directly access it from your PC.

You will find a link for downloading VNC on our website:

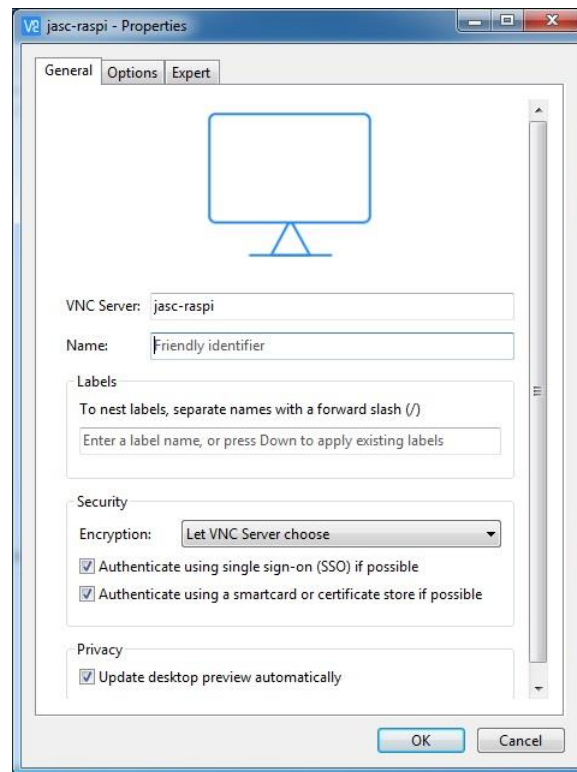
<https://www.just-a-simple-cloud.com/download-software/>

Skip the “first steps” at the installation.

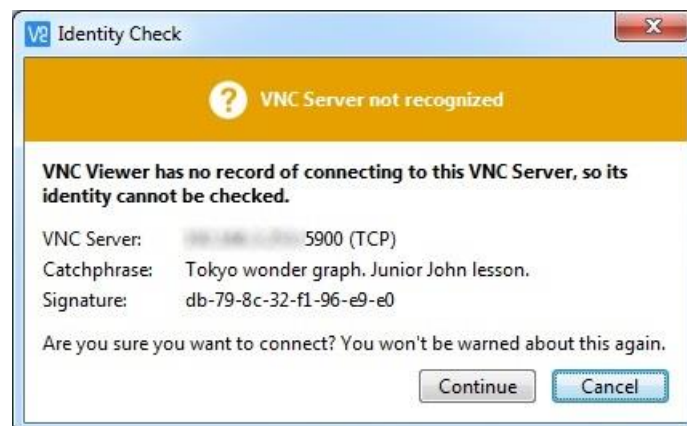
After installation of VNC, run it and choose

**File → New connection**

to set up a new connection. You only need to enter the address „**jasc-raspi**”. Leave all other settings as is.



VNC will create the connection with a network symbol on its desktop. Click this icon and acknowledge the following dialog:

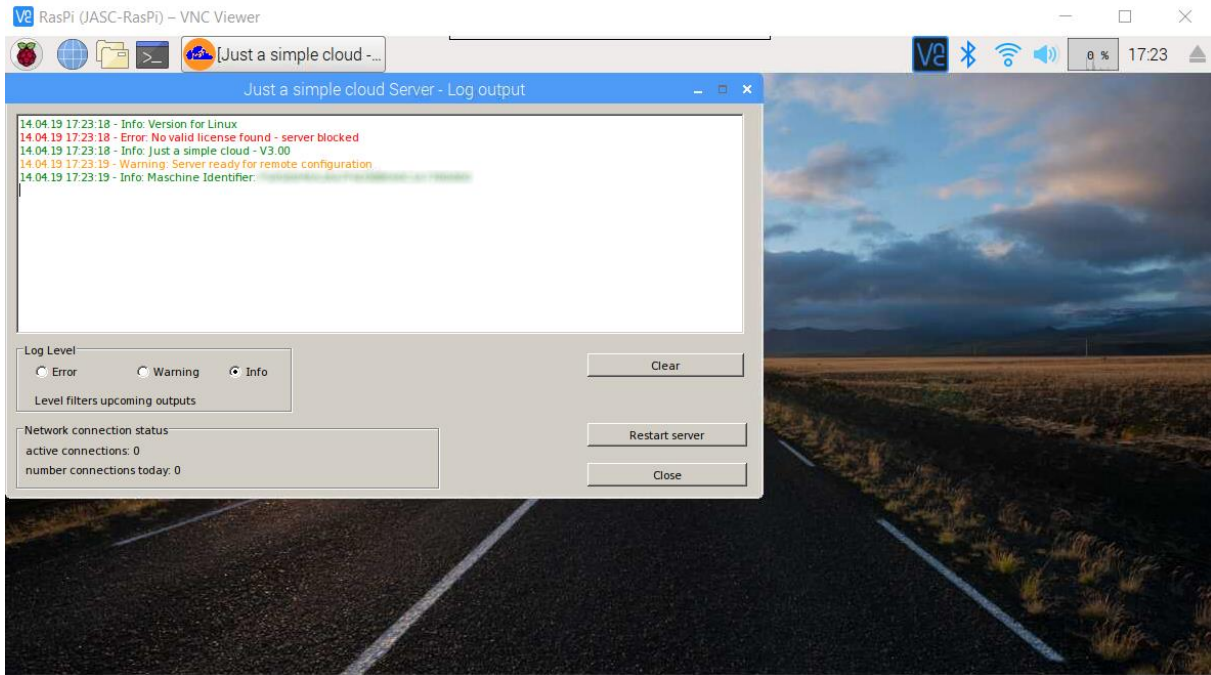


You will be asked to enter user name and password:

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

**If you are using your own RasPi, you may have changed the password.  
Use the one, which is valid for your personal RasPi.**

Check “Save Password” and acknowledge.



**Congratulations! Your RasPi is up and running.**

But by now, your JASC server does not have a license. That's why there is an error message.



## 5. Setting up a JASC license

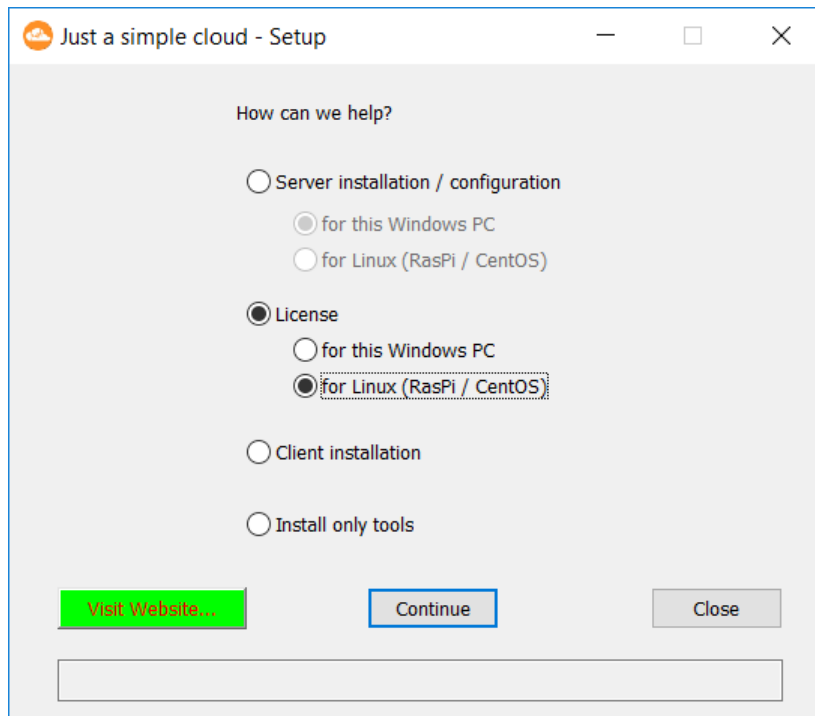
Download the setup from our website:

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

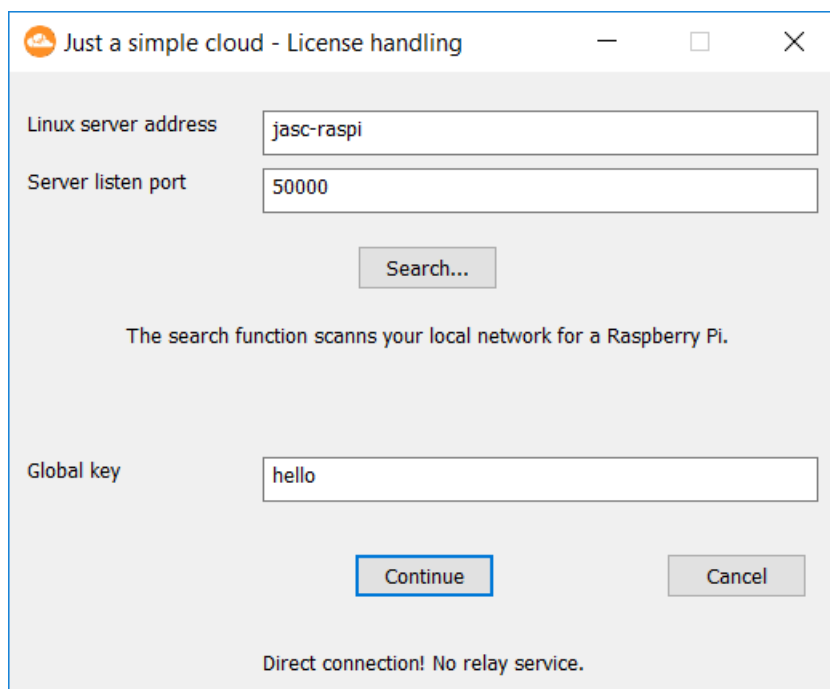
**Note: the setup is intended for use on Windows 7 to Windows 10.**

Run the setup and choose

„License – for Linux (RasPi / CentOS)“:



Click on **“Continue”**



Linux server address: jasc-raspi

Server listen port: 50000

Search...

The search function scans your local network for a Raspberry Pi.

Global key: hello

Continue Cancel

Direct connection! No relay service.

Please enter the following credentials to connect to your RasPi:

- Linux server address: **jasc-raspi**
- Server listen port: **50000**
- Global key: **hello**

These are the default settings; you can change them later.

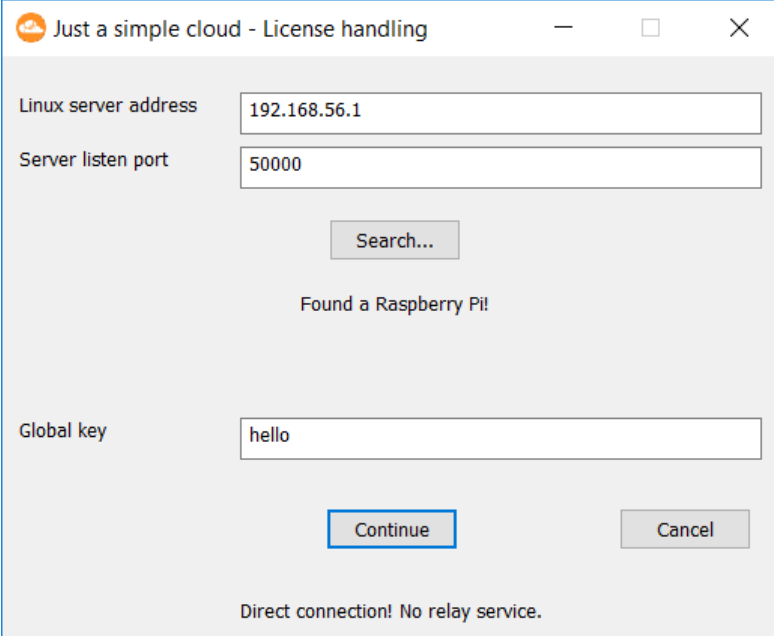
**Attention!!!**

Please remember to use the correct network name or IP address in case, you want to install JASC on your own server!

Click on “**Continue**” to get forwarded for the license handling. The setup will check for a valid license, but by now, of course, it will not find one.

**In case, the setup cannot find your RasPi, you have the possibility to search for your RasPi in your local network. Click on “Search...”.**

You will be asked to choose the network card, which connects your PC with the local network. If you are not sure, which network card to choose, try all of them. During the search, the setup will try all addresses in your local network until it has found the RasPi. This may take some minutes.



Just a simple cloud - License handling

Linux server address: 192.168.56.1

Server listen port: 50000

Search...

Found a Raspberry Pi!

Global key: hello

Continue Cancel

Direct connection! No relay service.

On the following dialog, you can set up your license depending on your personal needs. In this example, we will create a “personal plus” license.

**Of course, you could also generate a “Free” license for trial. This license is without any costs and the payment process will be skipped.**

Just a simple cloud - License handling

Current license, Maschine Identifier = [redacted]  
No valid license found

By now, you do not have a valid subscription.  
Unsubscribe

Setup your new license here:

Duration  
 1 Month     3 Month     6 Month     12 Month     Unlimited  
License valid until: 2019-05-28     Auto renew

License  
 Free     Personal (4.49 EUR/Month)     Personal + (6.49 EUR/Month)     Professional (44.99 EUR/Month)     Enterprise (74.99 EUR/Month)  
'Relay Service' only available for 'Free' and 'Personal +' license.

Backup  
 Included (0.65 EUR/Month)     Not included

Coupon  
[input field]    Redeem

User email  
[input field]

Payment  
Price: 6.49 EUR     Credit card     PayPal  
[Go to payment page...](#)

Cancel

**Now you need to decide, how connections shall be done in the future between your server and the clients.**

If you are using a private internet connection, most likely you will use a router. A router contains a firewall, which blocks incoming connections. To handle with this, you need to set up a “port forwarding” in your router configuration. Additionally your internet connection will change its external IP address once a day. Therefore, you need a dynamic DNS service in order to always know the current address.

More information can be found here (chapter “**Accessibility from the internet**”):

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

As these settings are quite complicate to set them up, you have the possibility to use our **Relay service. This is available in free and personal plus license only and bypasses both restrictions mentioned above.**

**We suggest to use the Relay service.**

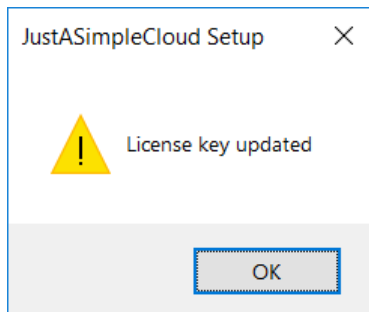
Enter your **email address** and click “**Go to payment page**” (if you choose a free license, the payment process will be skipped.).

You may choose to create a subscription. To do so, click “**Auto renew**” in the “**Duration**” section. Your subscription will be extended, as soon as the duration period is over. If you want to cancel your subscription, start the setup again and use the “**Unsubscribe**” button.

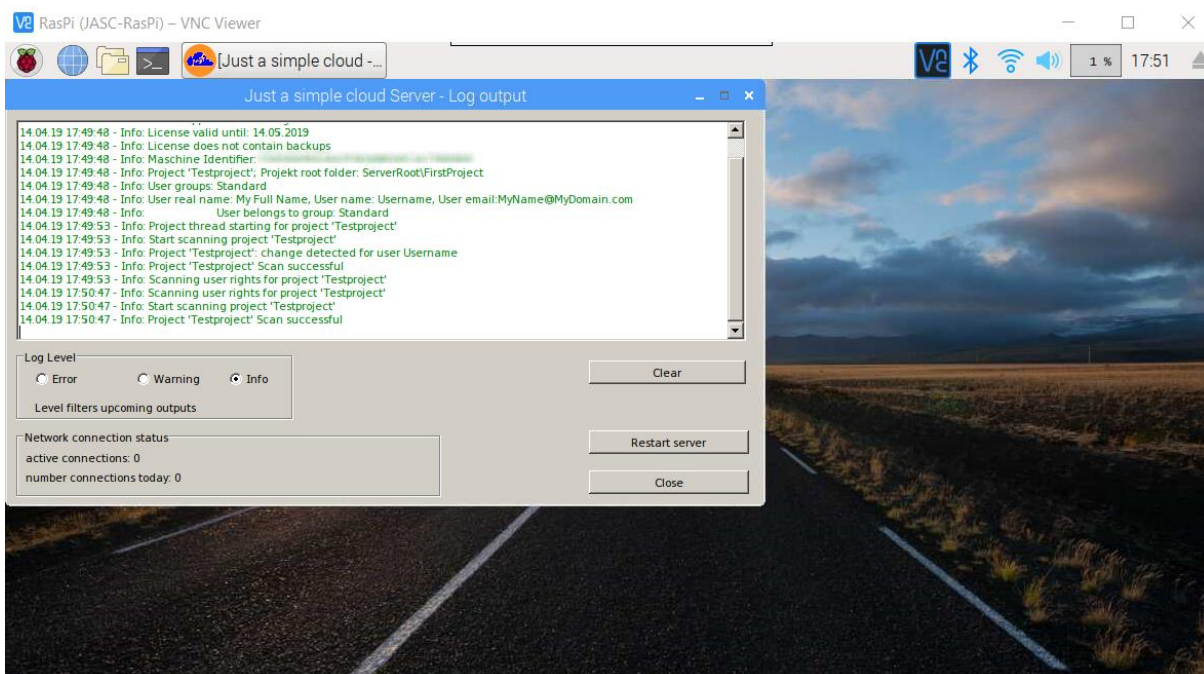
If you have a **Coupon**, you can enter it on this page and the discount will be subtracted automatically.

As soon as you have finished the payment process, the website will ask you to go back to the setup and click **“Continue”**. In case of a free license, the payment will of course be skipped.

The setup will now install the license on your JASC server:



The JASC server will reboot and is now showing a valid license.

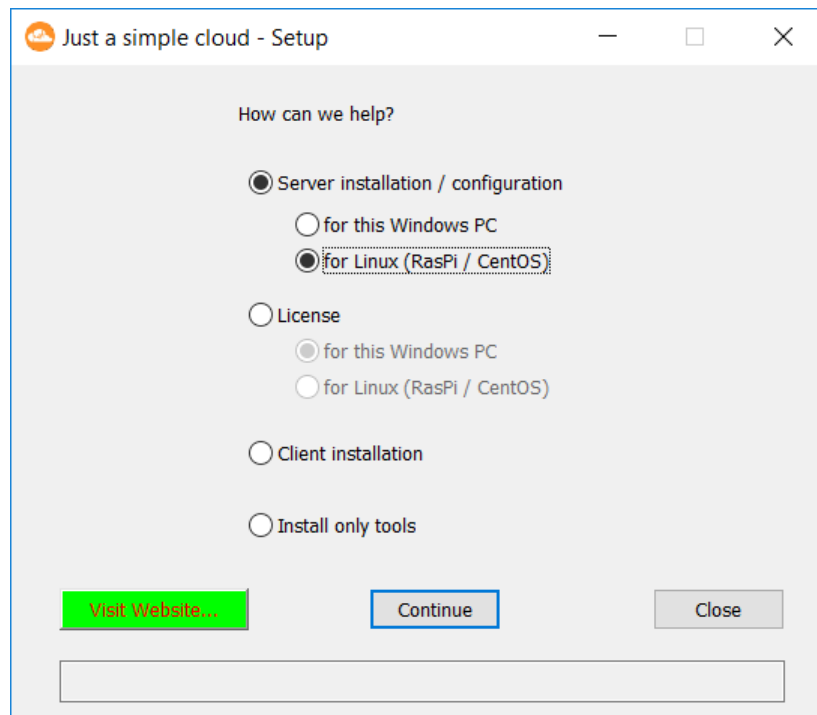


**The JASC server now has a valid license.**  
**It is time now to change your personal credentials!**

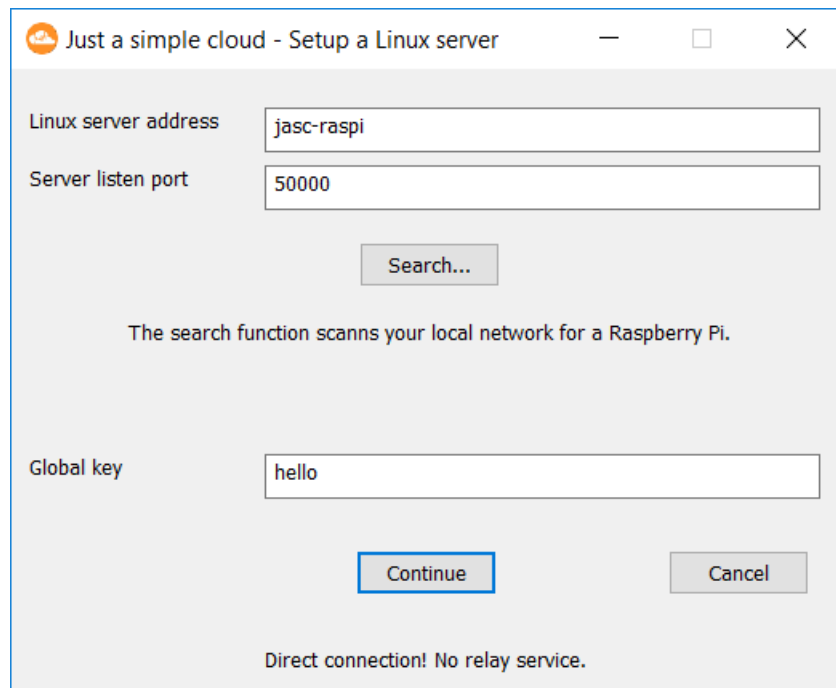
After installing the license, the setup will automatically return to the start dialog.

## 6. Configuration of the RasPi server

Choose the option **“Server installation / configuration – for Linux (RasPi / CentOS)”**:



Click on **“Continue”**



Just a simple cloud - Setup a Linux server

Linux server address

Server listen port

The search function scans your local network for a Raspberry Pi.

Global key

Direct connection! No relay service.

Please enter the following credentials to connect to your RasPi:

- Linux server address: **jasc-raspi**
- Server listen port: **50000**
- Global key: **hello**

If the RasPi cannot be found on the address shown above, please click again on **“Search...”**.



You will be forwarded to the configuration page for your RasPi.

On this page, you are able to setup all important settings of your JASC server. Only the settings, which are filled out, will be updated on the server. If you leave a field empty, it will stay unchanged.

Just a simple cloud - Setup a Linux server

**General**

Global key   The global key is used to initialise encrypted communication with clients. It must be unique for this server and all clients. Press 'Generate' to create a random Global key.

Remote password  Password for remote access to the server

Server listen port  This is the port on which the server is listening for incoming connections. Enter a free port on this machine, e.g. 50000

[Help Listen Port](#)

DNS  Use dynamic DNS If you don't have a static IP address, use our service for dynamic resolving your address.

Relay service  Use relay service A direct connection needs 'port forwarding' in your firewall / router. The relay service will eliminate this restriction.

**Your first project**

Project name  Enter a name of the project. The project name on the server and all clients must be identical.

User name  Enter a name of the first user. The user name on the server and all clients must be identical.

User password  Enter the password of the first user. Use plain text, it will be encrypted automatically.

User groups  Enter a name of the first group, the user shall belong to. The group name on the server and all clients must be identical.

User real name  Enter the real name of the first user here. Optional, can be left empty.

User email  Enter the email address of the first user here. Optional, can be left empty.

All data entered in this sheet will only be stored on your server!

If you want to use the relay service, don't forget to activate it here.

**It is most important to change the key and password NOW!**  
**Otherwise, unauthorised persons may get access to your data!**

Please note your settings, especially the passwords.

The **global key** will be need to encrypt the communication between the server and the clients. On each new connection, a brand-new session key will be handled out based on the global key, which protects the communication. Please enter a key, which is as complicated as possible or use the “**Generate**” button to generate one automatically.

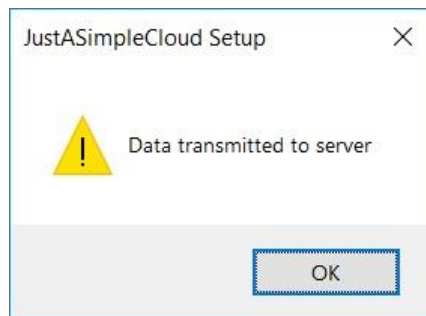
The **Remote password** will be used by the server remote tool, which helps you to update the configuration or download log files. You should also create a complicated password.

The default password for this is: **hello**

The **server listen port** is needed in case, you opt for a direct internet connection. If your are using the Relay service, please leave the settings as is.

Finally enter your personal settings in the chapter “**Your first project**”. You will need them later for the clients.

After everything is done, please click on **“Update”**. The settings will be send to your RasPi server and it will reboot with the new settings.



Finally, the setup will check, if there is an update for your JASC server and will provide you the possibility to install it.

The JASC server is able to handle up to 100 projects (depending on the license) in parallel.

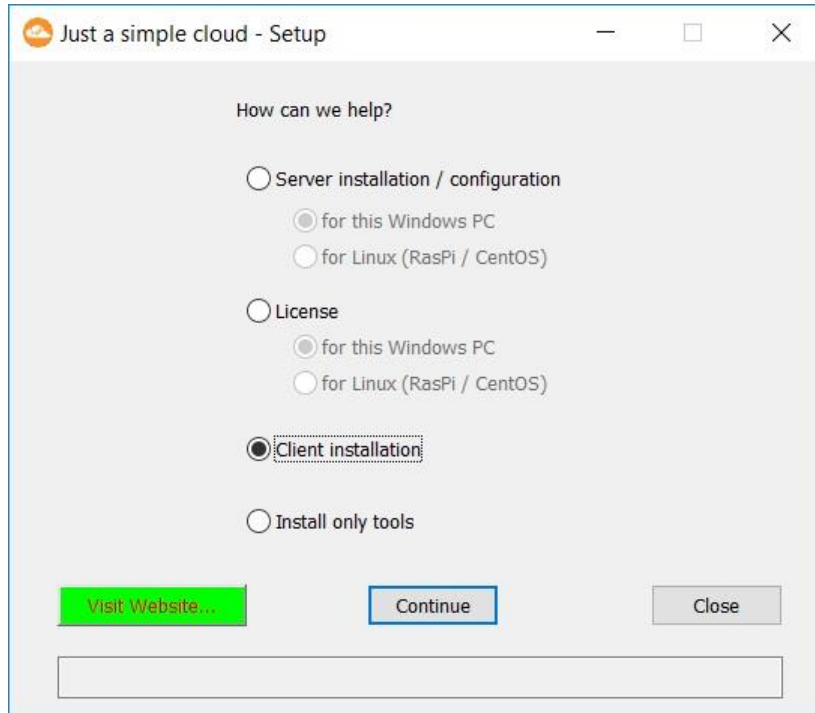
**The server is now completely configured  
and you can continue with the client installation.**

## 7. Clients

Clients are available for several different operating systems. You will find more information at:

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

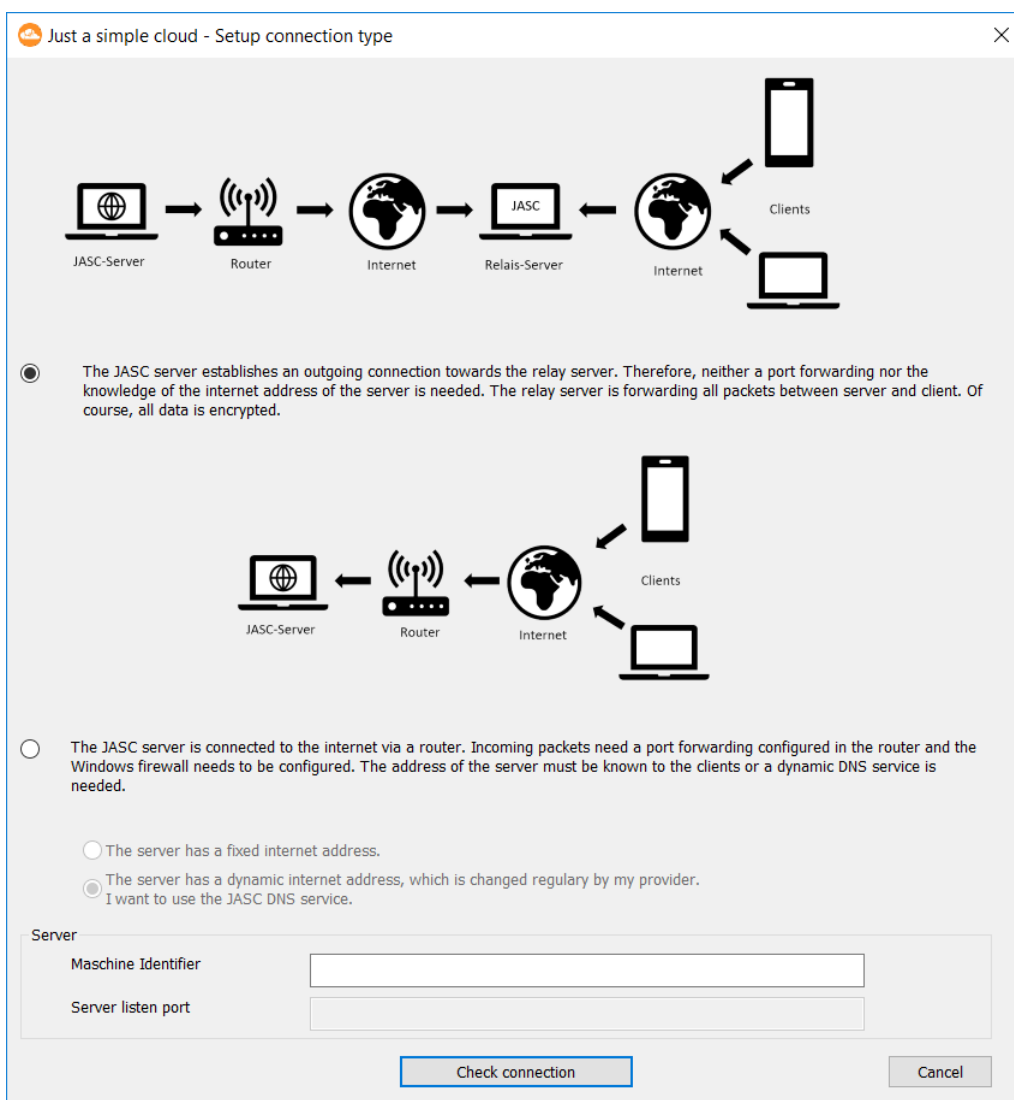
To install a Windows client, choose the option “**Client installation**” in the setup.



As the first step, you will be asked, how to connect to your RasPi JASC-server. You have two possibilities:

- **Connection via the JASC Relay service:** Your RasPi will automatically connect to our relay server. The clients will also connect to this server and the relay server will forward the packets between server and client.
- **Direct connection to the RasPi JASC server:** In most cases, the RasPi will be located in your local network at home or in your office. The local network is connected via a router with the internet. But the router will block incoming packets by default. You need to set up a “port forwarding” in your router. This means, you need to configure your router in a way, that he let the incoming JASC packets pass through and forward them to your RasPi inside your local network. Additionally, most internet connections will have an (IP) address, which changed by your internet provider on a regular basis. But your client needs to know the current address, which is unknown. In order to solve this, you can use our dynamic DNS service.

Choose the option, you have configured on your server. You can change the server setup anytime with the help of the setup application.

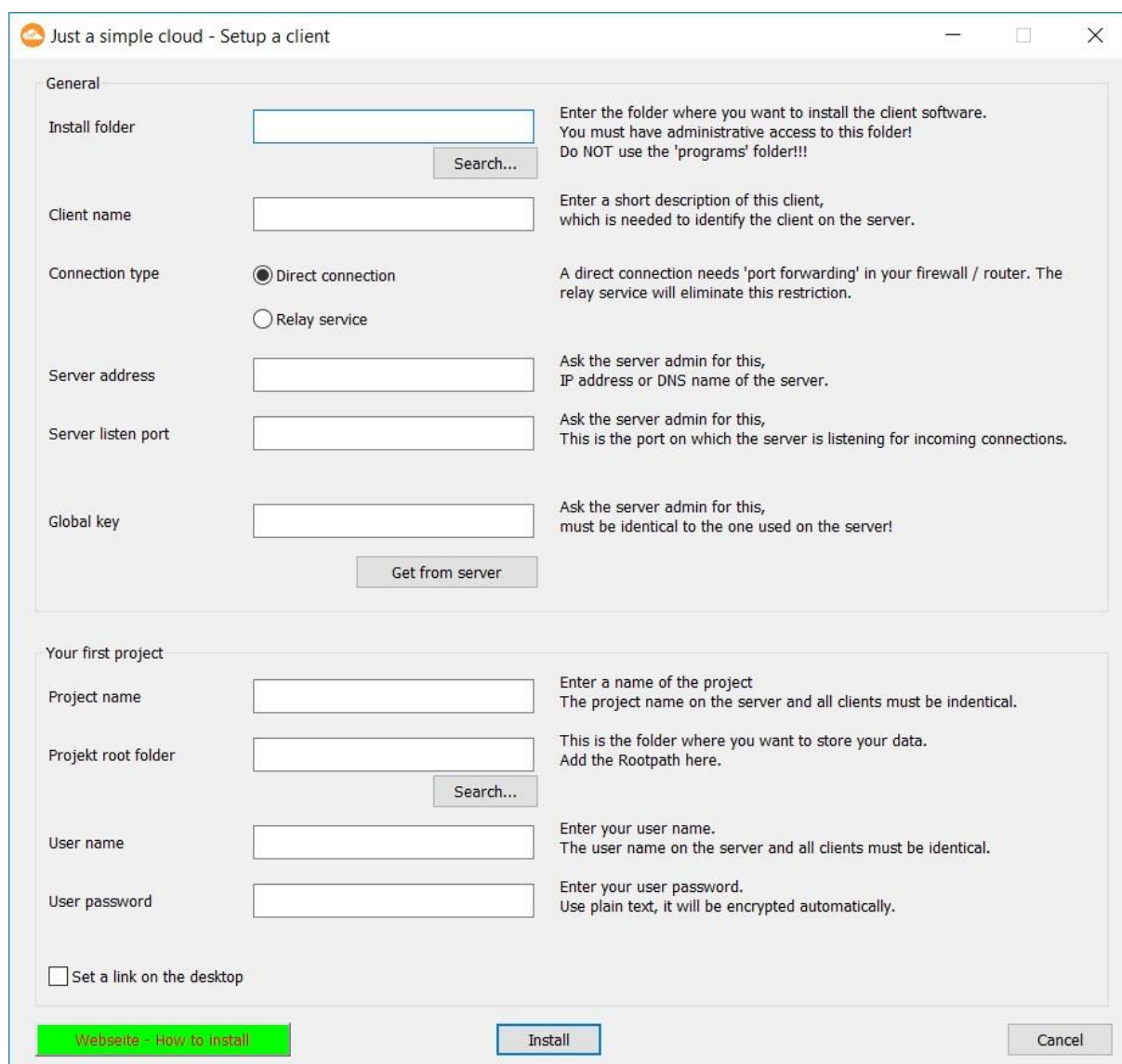


Depending on your decision, please enter your connection details in the lower part of the dialog and click on **“Check connection”**. The machine identifier of the RasPi was sent to you by email together with your license key.

The setup will then try to establish a connection to your RasPi. If this is successful, you will be forwarded to the client setup dialog.

The client saves settings in its install folder. As on most Windows versions, a standard user (a user without administrative rights) has no write access to the **“program”** folder.

**We suggest not to install the client in a “Program” folder.**



Depending on your server settings, please enter the applicable values.

If you have chosen the dynamic DNS service, you need to set up the server address in the format

**[MaschinenIdentifier].just-a-simple-cloud.com**

and replace [Machineldentifier] with your personal machine identifier. This will be done by the setup automatically. The “server listen port” will not be used and may be set to “0”.

For additional information please consult the chapter “**Accessibility from the internet**” at:

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

There will be installed some tools together with the client application on your PC, which will help you configuring your server.

**That's it!**

**Just a simple cloud is completed configured!**

## 8. Updating the server

The JASC server will be shipped with the current version of the server application. We are currently working on improvements and stability.

The server will show its version number upon start-up in the log window. If you want to read it out, click on “Restart server”.

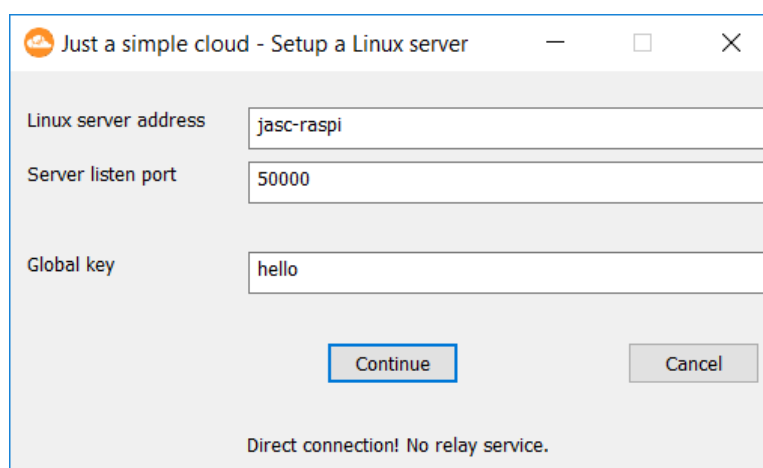
The current version can be found here:

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

If you want to update the server application running on your RasPi, please download the current **Windows version** of the setup, run it and choose the option

### Server installation / configuration – for Linux (RasPi / CentOS)

A new window will open asking you for your credentials (please enter your personal credentials, you should have changed them).



Just a simple cloud - Setup a Linux server

Linux server address: jasc-raspi

Server listen port: 50000

Global key: hello

Continue Cancel

Direct connection! No relay service.

You will be forwarded to the server configuration (as described in chapter 6) showing your personal settings.

In order to just install an update, leave everything as is and click “**Update**”. The configuration will be sent back to the RasPi, but remain unchanged. You will then prompted to install the update.



## 9. Remarks

### 9.1. Switching off a RasPi

As every computer, a RasPi could be quite unhappy, if you directly power it down. Instead of this, please connect with VNC and shut the operating system down before disconnecting the power supply.

### 9.2. Time zone of the RasPi

As the JASC RasPi is foreseen to be used in different time zones and changing the time zone for each and every customer before shipment is impossible, we have decided to run it in general with Greenwich time (Europe / London).