



Just a simple cloud

Manual RasPi

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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:

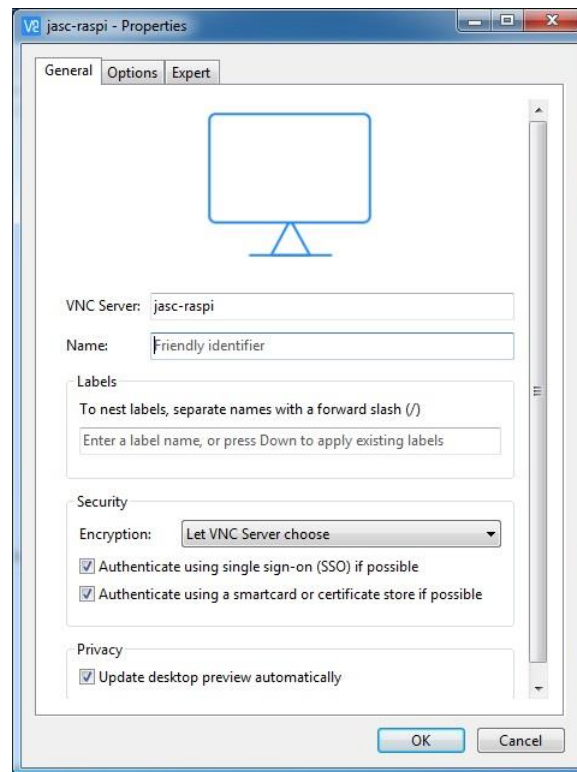
<https://www.just-a-simple-cloud.com/download-software/>

Skip the “first steps” at the installation.

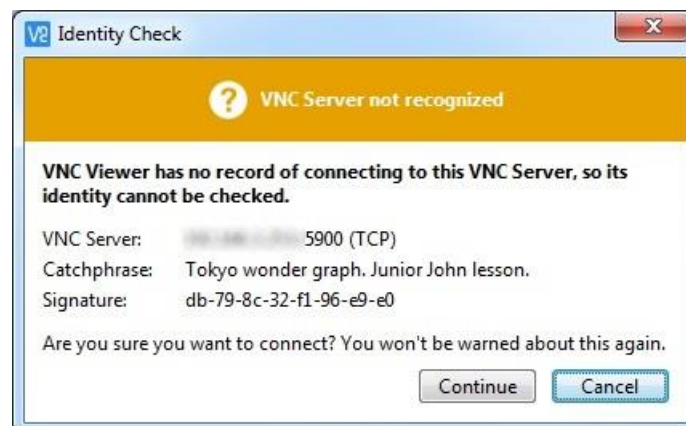
After installation of VNC, run it and choose

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:

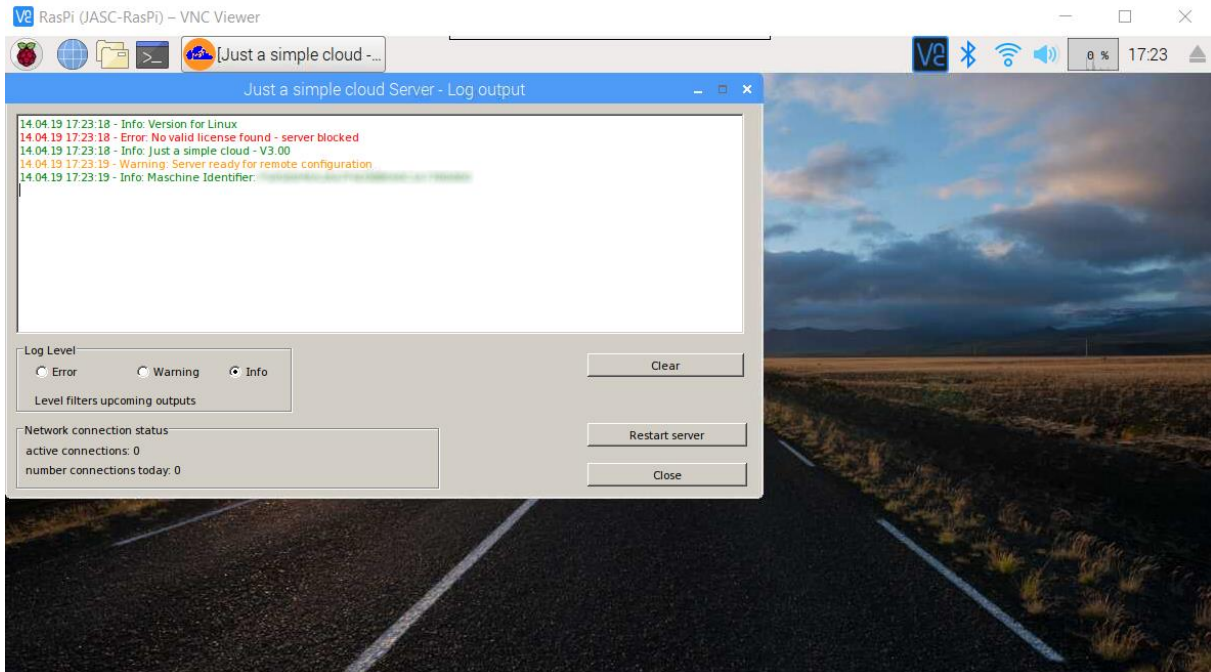


You will be asked to enter user name and password:

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

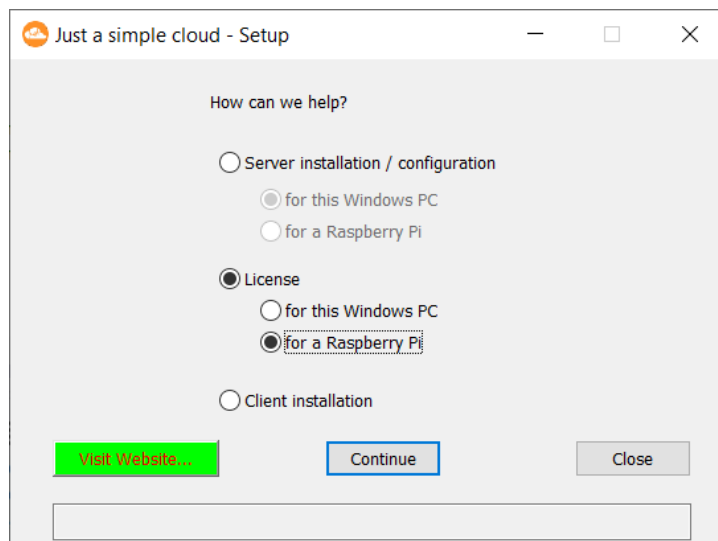
Download the installer from our website and start the installation. At the end, you will be prompted to start the setup tool automatically.

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

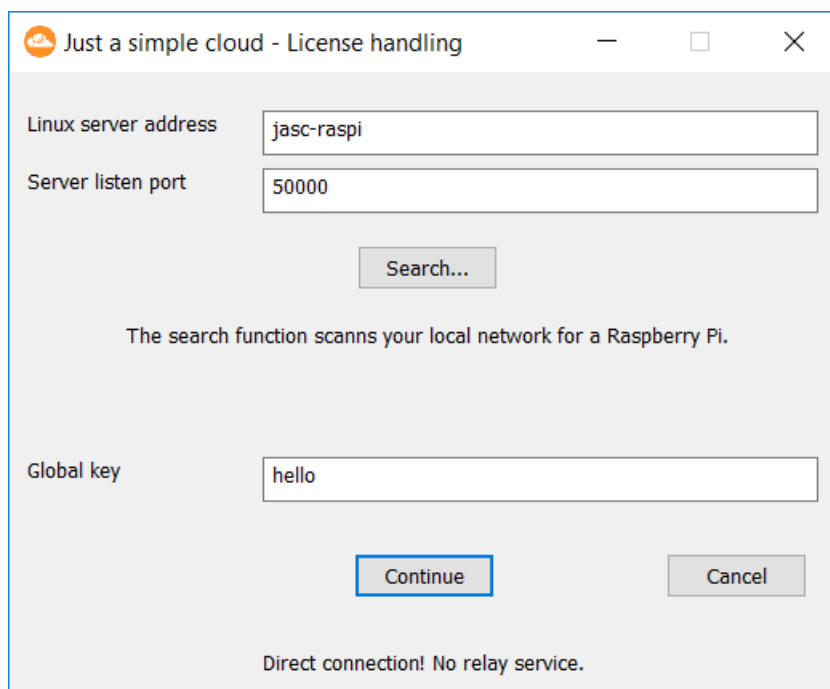
Note: the setup is intended for use on Windows 7 to Windows 10.

Run the setup and choose

„License – for a Raspberry Pi“:



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.

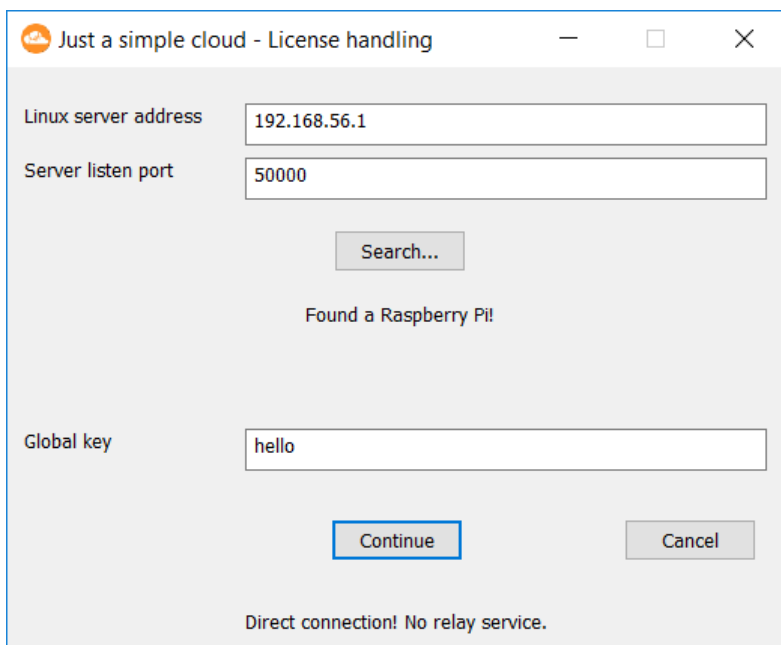
Attention!!!

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 = BA54 [redacted]
License found: License valid until 2019-11-06
Free license - License does not contain backups
A free license cannot be extended.

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: 2019-11-06 Auto renew

License
 Free Personal (1.49 EUR/Month) Personal + (2.99 EUR/Month) Professional (14.99 EUR/Month) Enterprise (24.99 EUR/Month)
'Relay Service' only available for 'Free' and 'Personal +' license.

Backup
 Included (0.30 EUR/Month) Not included

Coupon
 [Redeem](#)

User email
[redacted]

Payment
Price: 2.99 EUR Credit card PayPal
[Go to payment page...](#)

[Cancel](#)

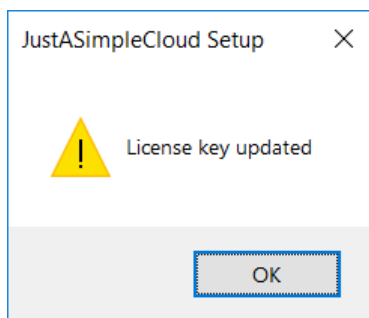
Enter your **email address** and click **“Go to payment page”** (if you choose a free license, the payment process will be skipped.).

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.

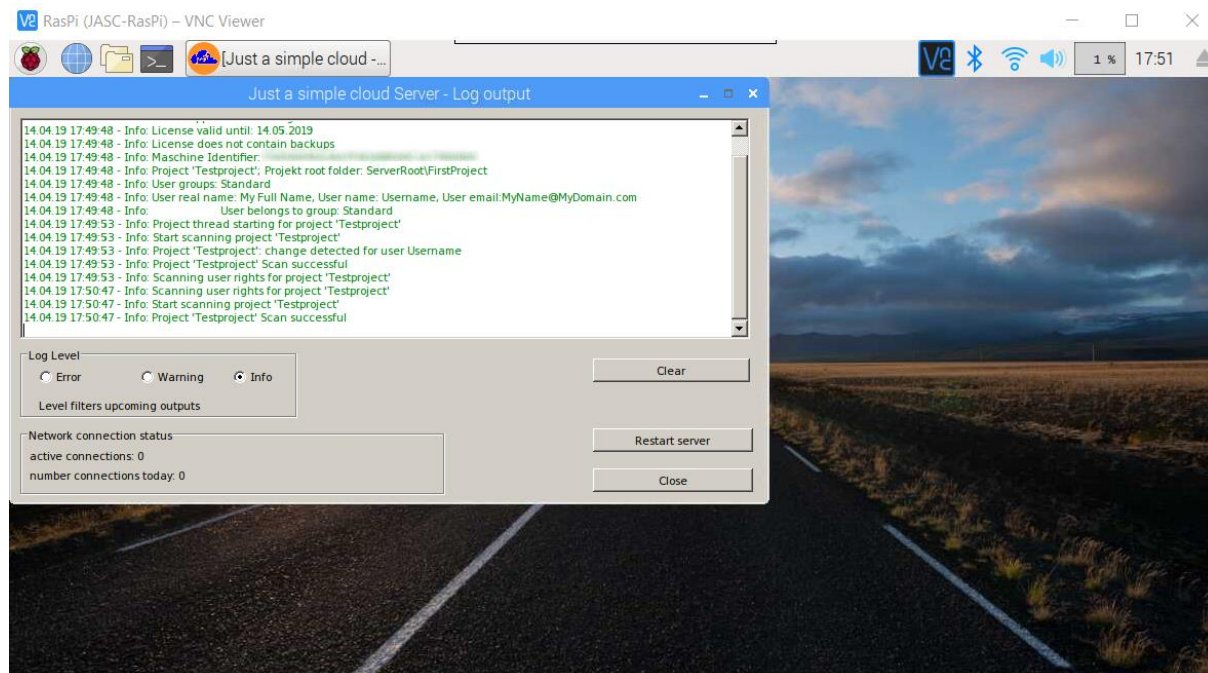
If you have a **Coupon**, you can enter it on this page and the discount will be subtracted automatically.

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.

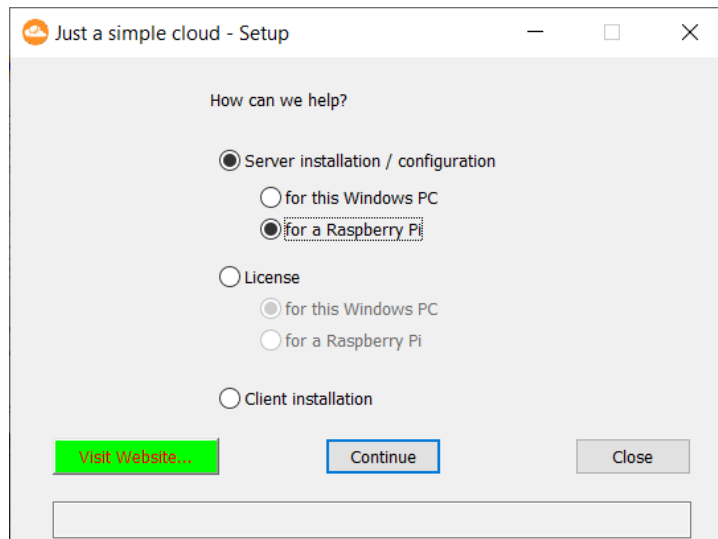


**The JASC server now has a valid license.
It is time now to change your personal credentials!**

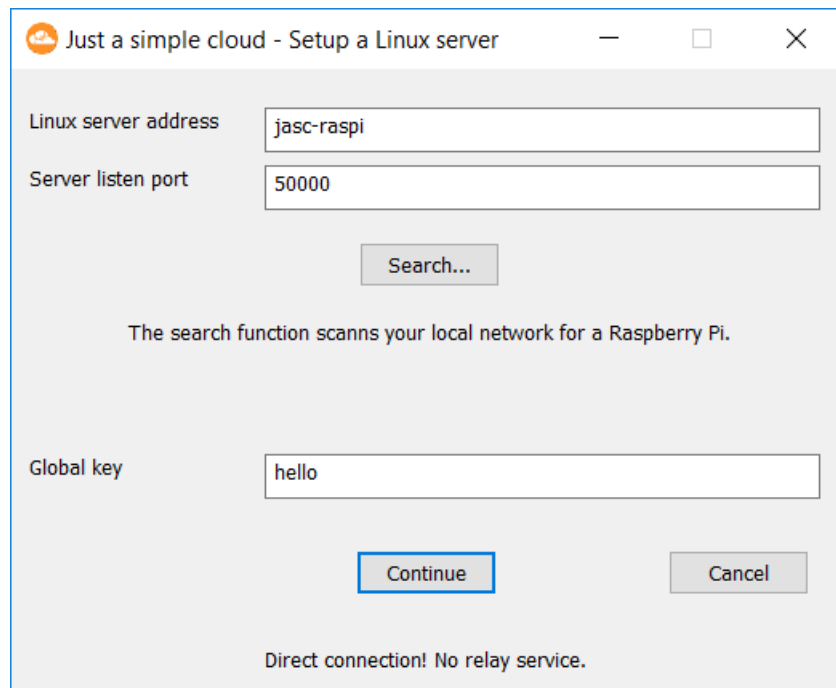
After installing the license, the setup will automatically return to the start dialog.

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: 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**

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

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

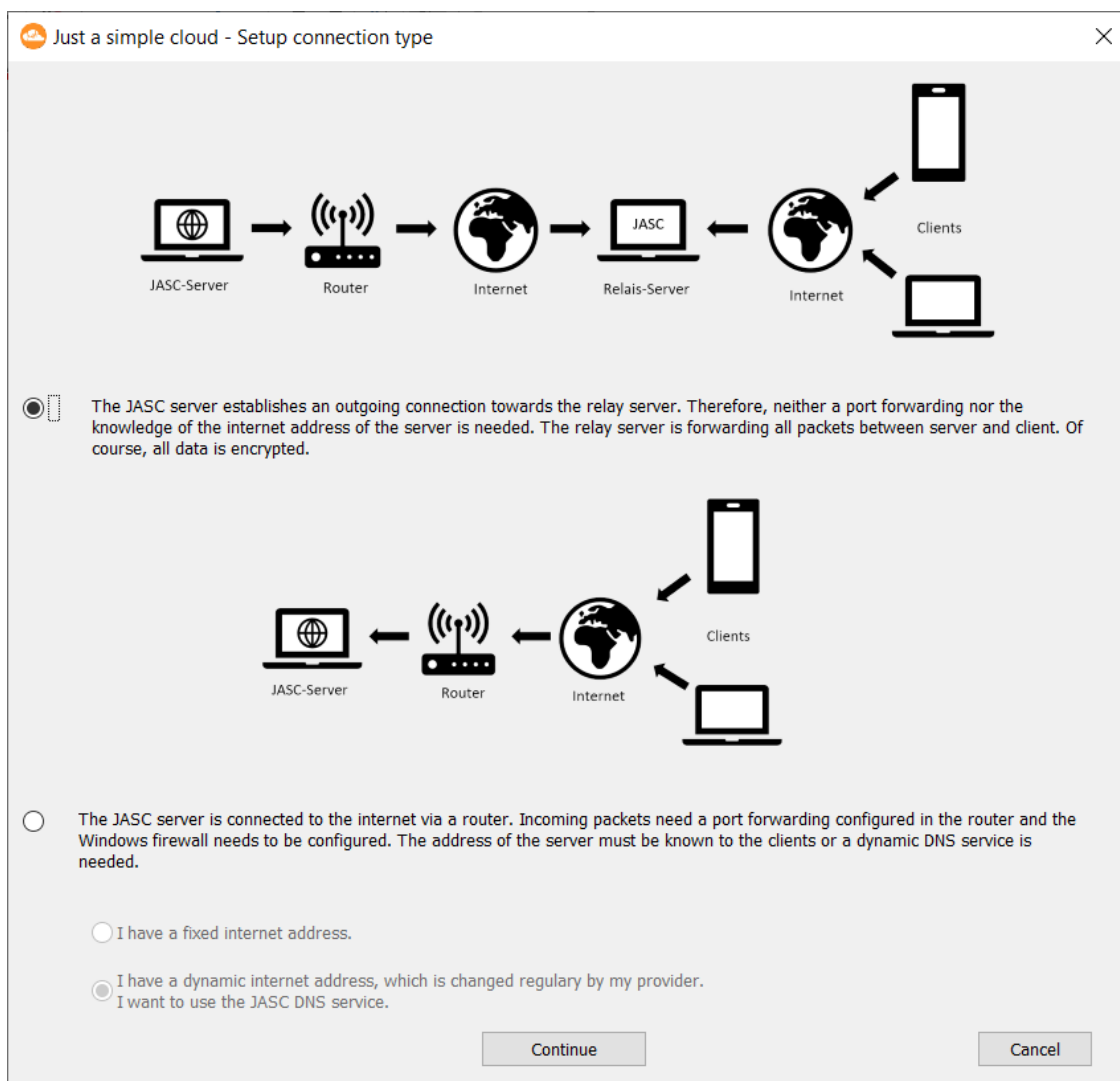
If you are using a private internet connection, most likely you will use a router. A router contains a firewall, which blocks incoming connections. To handle with this, you need to set up a “port forwarding” in your router configuration. Additionally your internet connection will change its external 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.



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	<input type="text" value="hello"/>	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.
	<input type="button" value="Generate"/>	
Remote password	<input type="text"/>	Password for remote access to the server
Server listen port	<input type="text" value="50000"/>	This is the port on which the server is listening for incoming connections. Enter a free port on this machine, e.g. 50000
	<input type="button" value="Help Listen Port"/>	
DNS	<input type="checkbox"/> Use dynamic DNS	If you don't have a static IP address, use our service for dynamic resolving your address.
Relay service	<input checked="" type="checkbox"/> 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	<input type="text" value="Testproject"/>	Enter a name of the project. The project name on the server and all clients must be identical.
User name	<input type="text" value="Username"/>	Enter a name of the first user. The user name on the server and all clients must be identical.
User password	<input type="text"/>	Enter the password of the first user. Use plain text, it will be encrypted automatically.
User groups	<input type="text" value="Standard"/>	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	<input type="text" value="My Full Name"/>	Enter the real name of the first user here. Optional, can be left empty.
User email	<input type="text" value="MyName@MyDomain.com"/>	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 and you have chosen it on the page before, it will be selected automatically.

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.

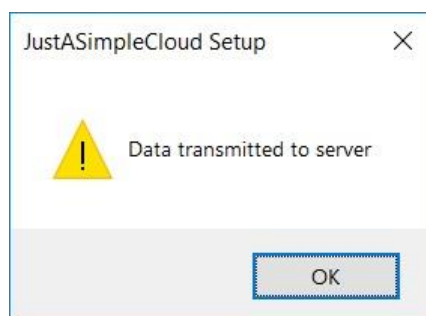
The **Remote password** will be used by the server remote tool, which helps you to update the configuration or download log files. You should also create a complicated password.

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.

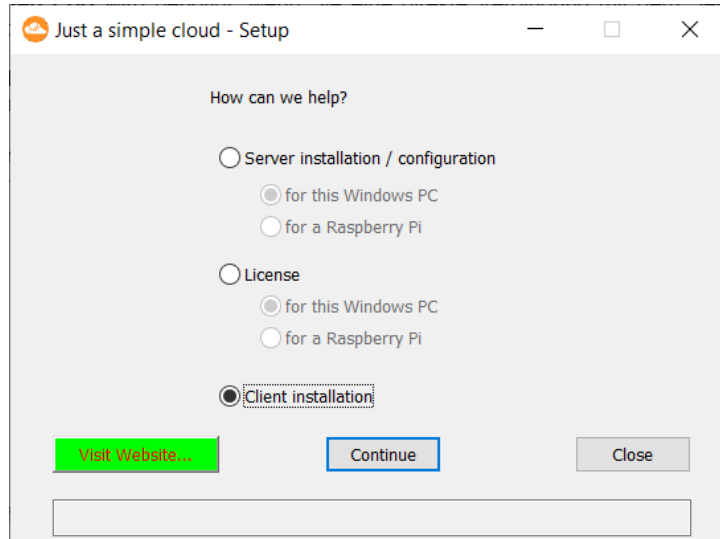
**The server is now completely configured
and you can continue with the client installation.**

7. Clients

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

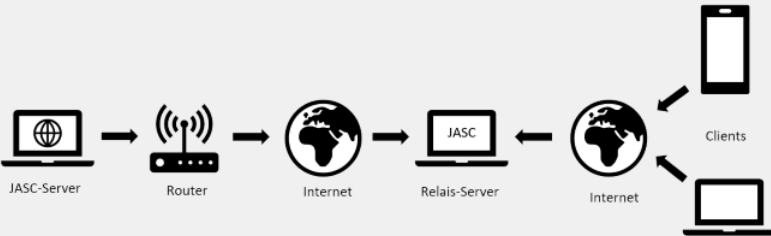
<https://www.just-a-simple-cloud.com/cloud/>

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

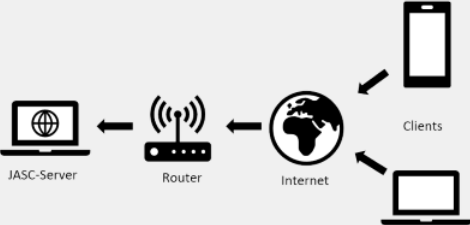


As the first step, you will be asked, how to connect to your RasPi JASC-server. Choose the same option as for the server.

Just a simple cloud - Setup connection type



The JASC server establishes an outgoing connection towards the relay server. Therefore, neither a port forwarding nor the knowledge of the internet address of the server is needed. The relay server is forwarding all packets between server and client. Of course, all data is encrypted.



The JASC server is connected to the internet via a router. Incoming packets need a port forwarding configured in the router and the Windows firewall needs to be configured. The address of the server must be known to the clients or a dynamic DNS service is needed.

The server has a fixed internet address.

The server has a dynamic internet address, which is changed regularly by my provider.

I want to use the JASC DNS service.

Server

Maschine Identifier

Server listen port

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 settings will be saved in the folder as shown in the dialog. You can access this folder by the Windows Explorer:

%localappdata%\JASC_Client

We suggest not to install the client in a "Program" folder.

Just a simple cloud - Setup a client

General

Install folder: C:\Users\Stefan\AppData\Local\JASC_Client

Client name Enter a short description of this client, which is needed to identify the client on the server.

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

Maschine Identifier In case of using the relay service, the connection will be made by the machine identifier.

Server listen port The port number is not needed for relay service.

Global key Ask the server admin for this, must be identical to the one used on the server!

Your first project

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

Projekt root folder This is the folder where you want to store your data. Add the Rootpath here.

User name Enter your user name. The user name on the server and all clients must be identical.

User password Enter your user password. Use plain text, it will be encrypted automatically.

Set a link on the desktop

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”.

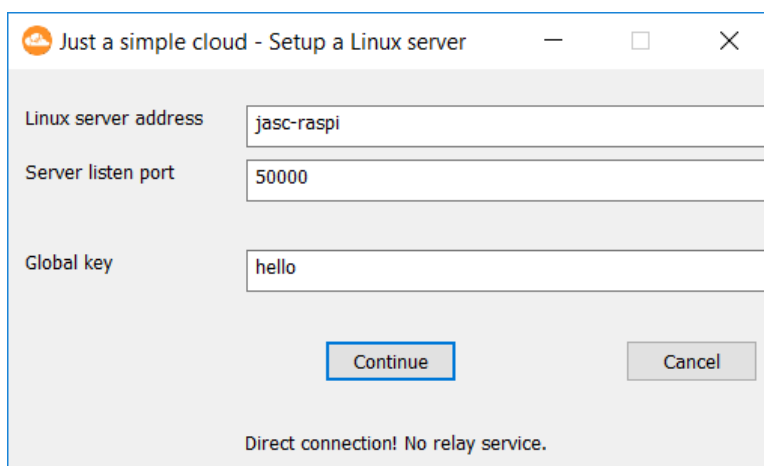
The current version can be found here:

<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 a Raspberry Pi

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 be 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).