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Introduction

Yep, you can use this NOT simple installation. Oops, does not work. Use the SageMathCell installer, because it is just easier :).

Portability

The SageMathCell installer tested on **Ubuntu Server 14.04 LTS**, **Ubuntu Desktop 14.04 LTS**, **Ubuntu Desktop 15.04** and **Debian 7.8**.

Installation

Install the sagecell from PyPI

```
$ sudo pip install sagecell
```

Install the sagecell from GitHub

```
$ sudo pip install git+git://github.com/korniichuk/sagecell#egg=sagecell
```

Upgrade the sagecell from PyPI

```
$ sudo pip install -U sagecell
```

or:

```
$ sudo pip install --upgrade sagecell
```

Uninstall the sagecell

```
$ sudo pip uninstall sagecell
```

Development installation

```
$ git clone git://github.com/korniichuk/sagecell.git
$ cd sagecell
$ sudo pip install .
```

Quickstart

First, install the SageMathCell:

```
$ sagecell install
```

Second, make sure that you can login to a localhost without entering password:

```
$ ssh localhost
```

> ### *Note*
>
> You can setup SSH for auto login to localhost without a password like this: `$ sagecell ssh`.

Third, start the SageMathCell:

```
$ sagecell start
```

> **Important**
>
> Do not close the current terminal.

Fourth, open a new terminal for the next command:

```
$ sagecell open
```

This command open browser with the SageMathCell.

Express

```
$ sagecell install
$ sagecell ssh
$ sagecell start

# In a new terminal
$ sagecell open
```

User guide

Help

The standard output for –help:

```
$ sagecell -h
```

or:

```
$ sagecell --help
```

For information on using subcommand "SUBCOMMAND", do:

```
$ sagecell SUBCOMMAND -h
```

or:

```
$ sagecell SUBCOMMAND --help
```

Example:

```
$ sagecell install -h
```

Version

The standard output for –version:

```
$ sagecell -v
```

or:

```
$ sagecell --version
```
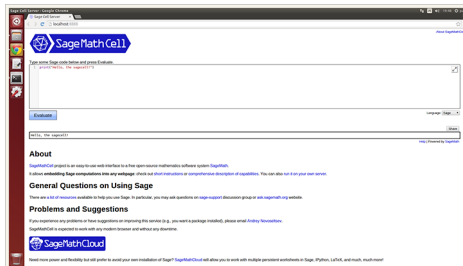
Install the SageMathCell

```
$ sagecell install
```

Start the SageMathCell

```
$ sagecell start
```

Open browser with the SageMathCell

```
$ sagecell open
```


Setup SSH for auto login to localhost without a password

```
$ sagecell ssh
```

If you are familiar with ssh-keygen, ssh-copy-id and ssh-add, this code also setup SSH for auto login to localhost without a password [1]:

```
$ ssh-keygen -t rsa -b 4096 -N '' -f ~/.ssh/id_rsa
$ ssh-copy-id localhost
$ eval "$(ssh-agent -s)"
$ ssh-add ~/.ssh/id_rsa
```

Start the SageMathCell automatically on boot

With the SageMathCell installer

```
$ sagecell auto
```

> **Note**
>
> The default port number is 8888.

For changing a port number. First, open the `/usr/local/bin/sagecellscript` file:

```
$ sudo nano /usr/local/bin/sagecellscript
```

or:

```
$ su -c "nano /usr/local/bin/sagecellscript"
```

Second, change the last line from:

```
../sage/sage web_server.py
```

to:

```
../sage/sage web_server.py -p PORT_NUMBER
```

Where:

- `PORT_NUMBER` -- a port number.

Example:

```
../sage/sage web_server.py -p 6363
```

Without the SageMathCell installer

First, install screen:

```
$ sudo apt-get install screen
```

or:

```
$ su -c "apt-get install screen"
```

Second, create the `/usr/local/sbin/sagecellscript` file:

```
#! /bin/sh

cd ~/sc_build/sagecell
../sage/sage web_server.py
```

or:

```
#! /bin/sh

cd ~/sc_build/sagecell
../sage/sage web_server.py -p PORT_NUMBER
```

Where:

- `PORT_NUMBER` -- a port number.

> **Note**
>
> The default port number is 8888.

Example:

```
#! /bin/sh

cd ~/sc_build/sagecell
../sage/sage web_server.py -p 6363
```

Third, make the `/usr/local/sbin/sagecellscript` file executable:

```
$ sudo chmod 755 /usr/local/sbin/sagecellscript
```

or:

```
$ su -c "chmod 755 /usr/local/sbin/sagecellscript"
```

Fourth, open the `/etc/rc.local` file:

```
$ sudo nano /etc/rc.local
```

or:

```
$ su -c "nano /etc/rc.local"
```

Add the next command below the comment, but leave the line `exit 0` at the end, then save the file and exit:

```
sudo -u USERNAME screen -dmS sagecell /usr/local/sbin/sagecellscript
```

or:

```
su USERNAME -c "screen -dmS sagecell /usr/local/sbin/sagecellscript"
```

Where:

- `USERNAME` -- a username.

Example:

```
sudo -u albert screen -dmS sagecell /usr/local/sbin/sagecellscript
```

or:

```
su albert -c "screen -dmS sagecell /usr/local/sbin/sagecellscript"
```

Transfer a short temporary links

Replace the `~/sc_build/sagecell/sqlite.db` file with a shortened temporary links:

```
$ scp SOURCE_FILE REMOTE_USERNAME@REMOTE_HOST:~/sc_build/sagecell/sqlite.db
```

Example:

```
$ scp ~/Downloads/sqlite4transfer.db \
albert@192.168.0.1:~/sc_build/sagecell/sqlite.db
```

Disable the terms of service requirement

For disabling the terms of service requirement. First, open the `~/sc_build/sagecell/config.py` file:

```
$ nano ~/sc_build/sagecell/config.py
```

Second, change the line of code from:

```
requires_tos = True
```

to:

```
requires_tos = False
```

Third, reboot a server from command line:

```
$ reboot
```

Footnotes

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1   https://help.github.com/articles/generating-ssh-keys/