# sunfounder-create-agent

Release 1.0

sunfounder

Aug 03, 2022

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SunFounder Create Agent is a simple application that helps connect SunFounder Online Tutorial to your Raspberry Pi!

The Agent opens a local websocket service, allows Online Tutorial to connect, and connects to the Raspberry Pi via SSH, so that you can establish a connection between Online Tutorial and the Raspberry Pi.

With the **Run** button of the Online Tutorial, you can run the commands and code directly.

#### CHAPTER

ONE

# DOWNLOAD AND INSTALL

In our tutorials you will see the word **Disconnected** in the top right corner, click on it to connect and run commands and code to the Raspberry Pi, but you need to download the SunFounder Create Agent first.

Docs » 1 Output » 1.1.1 Blinking LED



Here are the tutorials for installing on different systems:

- Windows
- Mac OS
- Raspberry Pi OS

### 1.1 Windows

1. Click on **Disconnected**, and select **Download the Agent** in the pop-up window. If you have already downloaded and installed it, please see *Quick User Guide*.



SunFounder Create Agent is a small application, let you run commands right on our online tutorials. Learning programing never been this easy and fun!

#### Learn more >>

To use it, you just need to download the SunFounder Create Agent, and run the application. Then enjoy the journey of learning.



4. The default installation path is shown in the figure. You can also choose another path by using the **Browse** button and click **Next**.

	Setup - SunFounder Create Agent version 1.0	-	
	Select Destination Location Where should SunFounder Create Agent be installed?		(Co)
	Setup will install SunFounder Create Agent into the following folder.		
	To continue, click Next. If you would like to select a different folder, click Browse.		
	C:\Users\123\AppData\Local\Programs\SunFounder-Create-Agent	Bro	wse
	At least 33.6 MB of free disk space is required.		
		<u>N</u> ext	Cancel
5. Sele	ct whether to create a desktop shortcut.		
	Setup - SunFounder Create Agent version 1.0	—	
	Select Additional Tasks Which additional tasks should be performed?		(I)
	Select the additional tasks you would like Setup to perform while installing SunFounder click Next.	Create Ager	nt, then
	Additional shortcuts:		
	Create a desktop shortcut		

Back Next Cancel

6. Click Install to continue with the installation, or click Back if you want to review or change any settings.

🔇 Setup - SunFounder Create Agent version 1.0 –		×
Ready to Install Setup is now ready to begin installing SunFounder Create Agent on your computer.		(II)
Click Install to continue with the installation, or click Back if you want to review or change any set	ings.	
Destination location: C:\Users\123\AppData\Local\Programs\SunFounder-Create-Agent Additional tasks: Additional shortcuts: Create a desktop shortcut		^
<	>	~
<u>B</u> ack Install	С	ancel

7. Wait a very short time and when the following pop-up window appears, the installation is successful. In this pop-up window, **Launch SunFounder Create Agent** is checked by default, click **Finish**, and this Agent will be run at this time.

💲 Setup - SunFounder Create Ag	gent version 1.0 — 🗆 🗙
	Completing the SunFounder Create Agent Setup Wizard
	Setup has finished installing SunFounder Create Agent on your computer. The application may be launched by selecting the installed shortcuts.
	Click Finish to exit Setup.
(10)	Launch SunFounder Create Agent
	Einish
Note	×
SunFounder	Create Agent running in the background.
	ОК

# 1.2 Mac OS

1. Click on **Disconnected**, and select **Download the Agent** in the pop-up window. If you have already downloaded and installed it, please see *Quick User Guide*.

# SunFounder Create Agent

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#### Learn more >>

To use it, you just need to download the SunFounder Create Agent, and run the application. Then enjoy the journey of learning.

I have opened the Agent

Download the Agent

2. Click on the downloaded SunFounder-Create-Agent-darwin-xx.x.dmg file, which is usually in the Downloads/ folder.

< > Downloads		∷ □ …		🤊 🗸 🤇 Search
Name	Size	Kind	Date Added ~	
> dist(1)		Folder	Jul 22, 2021 at 6:01 PM	
SunfounderController.apk	3 MB	Document	Jul 22, 2021 at 5:53 PM	
SunFounder-Create-Agent-darwin-v1.0.0.dmg	18.2 MB	Disk Image	Jul 22, 2021 at 4:15 PM	
PiSloth Ezblock OMG.zip	14.7 MB	ZIP archive	Jul 16, 2021 at 11:10 AM	
QQ_6.7.5.dmg	90.1 MB	Disk Image	Jul 16, 2021 at 10:17 AM	· Frankling (
gradle-6.9-docs (1).zip	38.7 MB	ZIP archive	Jul 14, 2021 at 11:00 AM	
gradle-6.9-docs.zip	38.7 MB	ZIP archive	Jul 14, 2021 at 11:00 AM	
sunfounder 1.0.3.apk	3 MB	Document	May 14, 2021 at 3:21 PM	
> 🚞 hh		Folder	May 14, 2021 at 3:18 PM	
ezblock-studio-macos-64bit-v0.4.2.dmg	166.8 MB	Disk Image	Feb 19, 2021 at 10:53 AM	
I www.zip	35 KB	ZIP archive	Jan 22, 2021 at 4:51 PM	
> 🚞 www (1)		Folder	Jan 22, 2021 at 4:51 PM	
🔹 webble.js	7 KB	JavaScript script	Jan 22, 2021 at 4:51 PM	
VNC-Viewer-6.20.817-MacOSX-x86_64.dmg	3.3 MB	Disk Image	Jan 22, 2021 at 4:51 PM	
virtualhandle.rar	7.7 MB	rar	Jan 22, 2021 at 4:51 PM	SunFounder-Create-Agent-
> 🚞 virtualhandle		Folder	Jan 22, 2021 at 4:51 PM	darwin-v1.0.0.dmg
🔹 utils.js	190 bytes	JavaScript script	Jan 22, 2021 at 4:51 PM	Disk Image - 18.2 MB
> 🚞 untitled folder		Folder	Jan 22, 2021 at 4:51 PM	Information
unnamed.png	100 KB	PNG image	Jan 22, 2021 at 4:51 PM	Created July 22, 2021 at 4:15 PM
unnamed.jpg	30 KB	JPEG image	Jan 22, 2021 at 4:51 PM	Modified July 22, 2021 at 4:15 PM
> 🛅 Thehands		Folder	Jan 22, 2021 at 4:51 PM	Last opened July 22, 2021 at 4:15 PM
> 📩 test7		Folder	Jan 22, 2021 at 4:51 PM	
SwitchyOmega.zip	948 KB	ZIP archive	Jan 22, 2021 at 4:51 PM	Tags
SunFounder_Controller.mobileprovision	8 KB	DevelopProfile	Jan 22, 2021 at 4:51 PM	Add Tags

3. Drag the SunFounder-Create-Agent-darwin-xx.x..dmg to the Applications folder to install it.

•••	🚫 SunFounde	er-Create-Agent	
	SunFounde	r Create Agent	
		Ă	
	SunFounder-Create-Agent	Applications	
	To install SunFou Just drag the file to	nder Create Agent, Applications folder.	

# 1.3 Raspberry Pi OS

1. Click on **Disconnected**, and select **Download the Agent** in the pop-up window. If you have already downloaded and installed it, please see *Quick User Guide*.

# SunFounder Create Agent

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our online tutorials. Learning programing never been this easy and fun!

#### Learn more >>

To use it, you just need to download the SunFounder Create Agent, and run the application. Then enjoy the journey of learning.

I have opened the Agent

Download the Agent

2. Click on the downloaded SunFounder-Create-Agent-linux-xx.x.deb file, which is usually in the Downloads/ folderthen select Install.



3. Enter the username and password, click OK.

Authenticati	on	~ ^ X
Authentication is required to	install untrusted so	oftware
Identity: pi		-
Password:		
	<u>C</u> ancel	<u>0</u> K

4. Wait for a very short time, when the pop-up window disappears, the installation is successful.

		~ ^ X
Installing packages	_	
	Cancel	<u>C</u> lose

If the installation is not successful, please refer to the FAQ.

#### CHAPTER

TWO

# **RUN OR QUIT**

You will need to run this Agent manually every time your computer restarts. The usual method is to find the Sun-Founder Create Agent you installed, and then open it to let it run in the background.

- Windows
- Mac OS
- Raspberry Pi OS

# 2.1 Windows

#### Run

You will need to run this Agent manually every time your computer restarts. If you created a desktop shortcut, then you can find the following icon and double-click it to run.



If you have not created a shortcut, you can search for: Sunfounder Create Agent in the search box in the lower left corner, click it to run.



#### Quit

Generally, it only runs in the background and does not affect other processes. If you want to quit it, after finding it in the taskbar, right click and select **Quit**.



### 2.2 Mac OS

#### Run

You will need to run this Agent manually every time your computer restarts. Find it in the Applications folder, click and select **Open** to make it run in the background.

< > Applications			→ Q Search
Name	∧ Date Modified	Size Kind	
Mission Control	Jan 1, 2020 at 4:00 PM	296 KB Application	
D Music	Jan 1, 2020 at 4:00 PM	112.1 MB Application	
- Notes	Jan 1, 2020 at 4:00 PM	23.5 MB Application	
😰 Photo Booth	Jan 1, 2020 at 4:00 PM	3.8 MB Application	
🐵 Photos	Jan 1, 2020 at 4:00 PM	62 MB Application	
Podcasts	Jan 1, 2020 at 4:00 PM	48.3 MB Application	
🚐 Preview	Jan 1, 2020 at 4:00 PM	10.8 MB Application	
🖲 QQ	Apr 8, 2021 at 10:50 PM	221 MB Application	
🔕 QuickTime Player	Jan 1, 2020 at 4:00 PM	7.3 MB Application	
RAR Extractor and Expander	Sep 1, 2020 at 5:16 PM	11.1 MB Application	
Reminders	Jan 1, 2020 at 4:00 PM	14.3 MB Application	
🧕 Safari	Jan 1, 2020 at 4:00 PM	25.6 MB Application	
🔕 Siri	Jan 1, 2020 at 4:00 PM	2.3 MB Application	
Stickies	Jan 1, 2020 at 4:00 PM	1.5 MB Application	
Stocks	Jan 1, 2020 at 4:00 PM	4 MB Application	SunFounder-Create-Agent
SunFounder-Create-Agent	Jul 22, 2021 at 4:06 PM	35.6 MB Application	Application - 35.6 MB
System Preferences	Jan 1, 2020 at 4:00 PM	2.7 MB Application	Information
/ TextEdit	Jan 1, 2020 at 4:00 PM	2.6 MB Application	Created July 22, 2021 at 4:06 PM
Time Machine	Jan 1, 2020 at 4:00 PM	1.2 MB Application	Modified July 22, 2021 at 4:06 PM
▲ Transporter	May 14, 2021 at 4:37 PM	165 MB Application	Last opened Jul 22, 2021 at 4:06 PM
🔄 Utilities	Jan 1, 2020 at 4:00 PM	Folder	
w Videos	Jan 1, 2020 at 4:00 PM	80.6 MB Application	version 0.0.0
Visual Studio Code	Jul 1, 2021 at 9:47 AM	290.4 MB Application	Tags
V2 VNC Viewer	Aug 11, 2020 at 10:05 PM	7.2 MB Application	Add Tags
Voice Memos	Jan 1, 2020 at 4:00 PM	8.1 MB Application	

#### Quit

Generally, it only runs in the background and does not affect other processes. If you want to quit it, after finding it in the taskbar, right click and select **Quit**.



# 2.3 Raspberry Pi OS

Run

You will need to run this Agent manually every time your computer restarts. Click on the Raspberry Pi menu icon in the upper right corner and select **Accessories** -> **Sunfounder Create Agent**.

After a while a pop-up will show that it is already running in the background.

👅 🛑 🌑	0 1.1.1 Blinking LED — Downloads
Programming	> 1.1.1 Plipking LED = 9
Internet	View Sort Go Tools
Sound & Video	$>$   $\mathbb{R}$ $\mathbb$
🐈 Graphics	> older
Accessories	> Archiver
Help	, at Calculator
Proferences	File Manager
	PDF Viewer
Run	👹 Raspberry Pi Diagnostics
Shutdown	SD Card Copier
Libra	SunFounder Create Agent
GPIC	🚺 🚧 Task Manager
□ 1 Ou	Terminal
⊟ 1.1	Text Editor
	Dudalia

#### Quit

Generally, it only runs in the background and does not affect other processes. If you want to quit it, after finding it in the taskbar, right click and select **Quit**.



#### CHAPTER

THREE

### **QUICK USER GUIDE**

O Disconnected

### 3.1 Connect to Raspberry Pi

- 1. You will need to run this Agent manually every time your computer restarts. The usual method is to find the SunFounder Create Agent you installed, and then open it to let it run in the background.
  - Windows
  - Mac OS
  - Raspberry Pi OS
- 2. Click Disconnected.

Docs » 1 Output » 1.1.1 Blinking LED



# 🔇 SunFounder Create Agent

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#### Learn more >>

To use it, you just need to download the SunFounder Create Agent, and run the application. Then enjoy the journey of learning.

I have opened the Agent

Download the Agent

4. Click OK.



5. Enter the Raspberry Pi IP, username and password, and click **Connect**.

**Note:** If you are reading the tutorial on Raspberry Pi and want to connect with itself, you can use local ip address 127.0.0.1 or local network name localhost

Connect to Raspberry Pi	
192.168.18.177	
pi	
•••••	
Connect	

6. The connection is successful and you can now run the code directly from your browser.

# **Connection successful**

### 3.2 Run the Command and Code

1. After successful connection, the Raspberry Pi IP will be displayed in the upper right corner. And Terminal will appear on the right side.

» 1 Output » 1.1.1 Blinking LED	Last login: Tue Jul 27 09:44:10 2021 SSH is enabled and the default password for the 'pi' user has not bee eed.
1.1.1 Blinking LED	This is a security risk - please login as the 'pi' user and type 'pas o set a new password.
Introduction	pi@raspberrypi:~ \$
In this lesson, we will learn how to make a blinking LED by programming. Through your settings, your LED can produce a series of interesting phenomena. Now, go for it.	
Components	

2. On the page, you will see some command lines and codes with boxes as shown below, which means you can **Reset/Copy/Run/Stop** them directly.

Shell           1         cd /home/pi/raphael-kit/c/1.1.5/	Reset	Сору	Run	Stop	SSH is enabled and the default password for the 'pi' use changed. This is a security risk - please login as the 'pi' user d' to set a new password.
Step 3: Compile the code.					<pre>pi@raspberrypi:~ \$ cd /home/pi/raphael-kit/c/1.1.5/ pi@raspberrypi:~/raphael-kit/c/1.1.5 \$ cd /home/pi/rapha pi@raspberrypi:~/raphael-kit/c/1.1.5 \$ cc 1.1.5_4-Digit pi@raspberrypi:~/raphael-kit/c/1.1.5 \$ sudo ./a.out</pre>
Shell           1         gcc 1.1.5_4-Digit.c -lwiringPi	Reset	Сору	Run	Stop	1 2 3 4 5 6
Step 4: Run the executable file.		_	_	_	/ 9 2
Shell           1         sudo ./a.out	Reset	Сору	Run	Stop	<i>"</i>

- **Reset**: Reset to initial state.
- **Copy**: Copy the complete command or code to the clipboard. This function is generally used when you have modified the code and there is no problem with debugging. You can copy the complete code and paste it into the source .py file.
- Run: To run the command or code, you need to stop the previous run before you click Run next time.
- Stop: Equivalent to Ctrl+C, used to stop a command or code.
- 3. The Terminal on the right side is also editablebut you need to click on the right area first before you can start entering commands.

pi@raspberrypi:~/raphael-kit/c/1.1.5 \$ nano 1.1.5\_4-Digit.c
pi@raspberrypi:~/raphael-kit/c/1.1.5 \$

4. You can disconnect the Raspberry Pi by clicking ip -> Disconnected in the top right corner.



#### CHAPTER

#### FOUR

### FAQ

# 4.1 What kind of operating systems does Agent support?

Currently Agent supports Win10, macOS Big Sur 11.5, Raspberry Pi OS Buster and above.

# 4.2 Agent installation failed?

The Agent may fail to install in Raspberry Pi OS, in which case you need to update via sudo apt update.



After the update is successfully installed, double-click SunFounder-Create-Agent-linux-xx.x.deb again to install.

pi@raspberrypi: ~	~ ^ X
File Edit Tabs Help	
<pre>pi@raspberrypi:~ \$ sudo apt update Get:1 http://archive.raspberrypi.org/debian buster InRelea Get:2 http://archive.raspberrypi.org/raspbian buster/main ar Get:3 http://raspbian.raspberrypi.org/raspbian buster/main MB] Get:5 http://raspbian.raspberrypi.org/raspbian buster/cont .7 kB] Fetched 13.5 MB in 17s (788 kB/s) Reading package lists Done Building dependency tree Reading state information Done 172 packages can be upgraded. Run 'apt listupgradable' pi@raspberrypi:~ \$</pre>	se [32.6 kB] mhf Packages [376 kB] lease [15.0 kB] armhf Packages [13.0 rib armhf Packages [58

# 4.3 Recognizes as a "virus"?

If during the process of installing the Agent, some security protection software recognizes it as a "virus", please trust this software. If possible, please give us a screenshot, and we will actively communicate with them.

• Email: cs@sunfounder.com

# 4.4 Agent connection failed?

If you run the code without opening SunFounder Create Agent, Agent connection failed will pop up. Reopen Sun-Founder Create Agent, click "Try again" to reconnect.



# 4.5 Run button doesn't work?

When you click Run, the command or code doesn't run, there are 2 reasons.

- Raspberry Pi is disconnected, you need to disconnect by clicking ip -> Disconnected in the top right corner and then reconnect again.
- There is a program running, you need to stop it first when you click Run next time.

# 4.6 Unable to edit in Terminal?

- You need to click on the right area first before you can start entering commands on the Terminal.
- Or if the Raspberry Pi has been disconnected, you need to reconnect by clicking on the ip -> Disconnected in the top right corner.

# 4.7 No module named 'xxxxx'



Because some codes need to manually install the module, you need to run the command on the page to install the module.

Or run under a specific path, because some libraries are not provided by the Raspberry Pi, but provided by SunFounder. Generally, these modules will be placed under the xxxx/python/ path, so you need to enter this path before running the code.

# 4.8 Can only run Python code, but not C?

Pyth	on Reset Copy Run Stop	•
1	#!/usr/bin/env python3	
2	import RPi.GPIO as GPIO	
3	import time	
4	LedPin = 17	
5 -	<pre>def setup():</pre>	
6	# Set the GPIO modes to BCM Numbering	
7	GPIO.setmode(GPIO.BCM)	
8	<pre># Set LedPin's mode to output, and initial level to High(3.3v)</pre>	
9	GPIO.setup(LedPin, GPIO.OUT, initial=GPIO.HIGH)	
10	# Define a main function for main process	
11 -	<pre>def main():</pre>	-
12 -	4	

Because Run button is basicly copy commands and hit enters for you, it only works if everything in the editor can run in terminal. And for Python, it also adds a python command ahead to run it under python. You can run Python code directly with Python command, but you cannot do it with C. You can still run commands to compile C into an excutable and run it.

# 4.9 What browsers are supported?

1. SunFounder Create Agent currently supports **Chrome** and **Firefox** browsers, and does not support **Safari** and **Internet Explorer** browsers.