**Command & Script(S) Only Sheet**

*(All commands will be entered into* ***Terminal****. Each bullet point is one step. Press* ***Enter*** *after each bulleted command. Refer to each section of the tutorial for more info. )*

**Set up RPI (Raspberry Pi)**

Open a **Terminal** window

* sudo apt-get update
* sudo apt-get upgrade
* sudo reboot

**Turning on the GPIO Header Pins**

* sudo raspi-config

**Commands for DHT22 Functionality**

* sudo apt-get update

press **Enter**

* sudo pip install Adafruit\_DHT press **Enter**
* sudo pip install ISStreamer

press **Enter**

To create the python file named tempsensor.py, enter the following command:

* sudo touch tempsensor.py
* press **Enter**

Access the file by entering the following command:

* sudo nano tempsensor.py

press **Enter**

import Adafruit\_DHT

from ISStreamer.Streamer import Streamer

import time

# --------- User Settings ---------

SENSOR\_LOCATION\_NAME = "Office"

BUCKET\_NAME = ":partly\_sunny: Room Temperatures"

BUCKET\_KEY = "rt0129"

ACCESS\_KEY = "PLACE YOUR INITIAL STATE ACCESS KEY HERE"

MINUTES\_BETWEEN\_READS = 10

METRIC\_UNITS = False

# ---------------------------------

streamer = Streamer(bucket\_name=BUCKET\_NAME, bucket\_key=BUCKET\_KEY, access\_key=ACCESS\_KEY)

while True:

humidity, temp\_c = Adafruit\_DHT.read\_retry(Adafruit\_DHT.DHT22, 4)

if METRIC\_UNITS:

streamer.log(SENSOR\_LOCATION\_NAME + " Temperature(C)", temp\_c)

else:

temp\_f = format(temp\_c \* 9.0 / 5.0 + 32.0, ".2f")

streamer.log(SENSOR\_LOCATION\_NAME + " Temperature(F)", temp\_f)

humidity = format(humidity,".2f")

streamer.log(SENSOR\_LOCATION\_NAME + " Humidity(%)", humidity)

streamer.flush()

time.sleep(60\*MINUTES\_BETWEEN\_READS)

For information on Bucket Names, Bucket Keys, Access Keys, visit the following links:

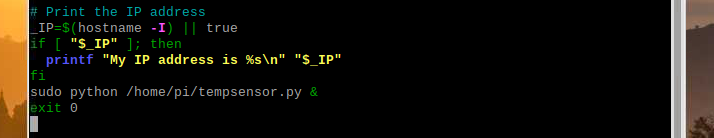
* <https://support.initialstate.com/hc/en-us/articles/360002911551-Renaming-a-Data-Bucket>
* <https://support.initialstate.com/hc/en-us/articles/360002911831-Finding-a-Bucket-Key>
* <https://support.initialstate.com/hc/en-us/articles/360002898512-Streamer-Concepts-Streaming-Access-Key>

**Running the Python™ script**

* sudo python tempsensor.py

press **Enter**

**Running the Python™ script on Startup**



* cd /etc/

press **Enter** (*This will place your commands inside of the* etc *directory*.)

* sudo nano rc.local

press **Enter** (*This will place you inside of the* rc.local *file where you will add a command to a specific area to autorun this program*.)

* sudo python /home/pi/tempsensor.py &

When you have entered the command simply press CRTL X / Y / Enter, to save the edited file.

**Setting up MotionEye™**

Open a **Terminal** window

* sudo apt-get install ffmpeg libmariadb3 libpq5 libmicrohttpd12

press **Enter**

* sudo wget https://github.com/Motion-Project/motion/releases/download/release-4.2.2/pi\_buster\_motion\_4.2.2-1\_armhf.deb

press **Enter**

* sudo dpkg -i pi\_buster\_motion\_4.2.2-1\_armhf.deb

press **Enter**

* sudo apt-get install python-pip python-dev libssl-dev libcurl4-openssl-dev libjpeg-dev libz-dev

press **Enter**

* sudo pip install motioneye

press **Enter**

* sudo apt-get install python-pillow

press **Enter**

* sudo mkdir -p /etc/motioneye

press **Enter**

* sudo cp /usr/local/share/motioneye/extra/motioneye.conf.sample /etc/motioneye/motioneye.conf

press **Enter**

* sudo mkdir –p /var/lib/motioneye

press **Enter**

* sudo cp /usr/local/share/motioneye/extra/motioneye.systemd-unit-local /etc/systemd/system/motioneye.service

press **Enter**

* sudo systemctl daemon-reload

press **Enter**

* sudo systemctl enable motioneye

press **Enter**

* sudo systemctl start motioneye

press **Enter**

* sudo pip install motioneye --upgrade

press **Enter**

* sudo systemctl restart motioneye

press **Enter**

* sudo reboot

press **Enter**

The next step will be to access the camera through Motioneye and configure the camera module’s settings. To do so follow the steps below.

* Obtain the IP Address of the RPI and document it for reference.
* Open a browser window, preferably Google Chrome.
* Enter the following URL:

<http://yourRPIipaddress:8765> (*replace “yourRPIipaddress” with the actual IP Address of the RPI.*)

press **Enter**

* You will be pointed to the login page for MotionEye™
* Your initial login will be the username **admin**, no password required. It can be set up at a later time.