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| #!/usr/bin/python  # Copyright (c) 2014 Adafruit Industries  # Author: Tony DiCola  # Permission is hereby granted, free of charge, to any person obtaining a copy  # of this software and associated documentation files (the "Software"), to deal  # in the Software without restriction, including without limitation the rights  # to use, copy, modify, merge, publish, distribute, sublicense, and/or sell  # copies of the Software, and to permit persons to whom the Software is  # furnished to do so, subject to the following conditions:  # The above copyright notice and this permission notice shall be included in all  # copies or substantial portions of the Software.  # THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  # IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  # FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  # AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  # LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  # OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE  # SOFTWARE.  import sys  import time  import Adafruit\_DHT  import httplib as http  import json  import urllib  # Parse command line parameters.  sensor\_args = { '11': Adafruit\_DHT.DHT11,  '22': Adafruit\_DHT.DHT22,  '2302': Adafruit\_DHT.AM2302 }  deviceId = "Dv4yQ90f"  deviceKey = "HoKDCWWrZL3qqqF3"  if len(sys.argv) == 3 and sys.argv[1] in sensor\_args:  sensor = sensor\_args[sys.argv[1]]  pin = sys.argv[2]  else:  print('Usage: sudo ./Adafruit\_DHT.py [11|22|2302] <GPIO pin number>')  print('Example: sudo ./Adafruit\_DHT.py 2302 4 - Read from an AM2302 connected to GPIO pin #4')  sys.exit(1)  # Try to grab a sensor reading. Use the read\_retry method which will retry up  # to 15 times to get a sensor reading (waiting 2 seconds between each retry).  humidity, temperature = Adafruit\_DHT.read\_retry(sensor, pin)  # Un-comment the line below to convert the temperature to Fahrenheit.  # temperature = temperature \* 9/5.0 + 32  def post\_to\_mcs(payload):  headers = {"Content-type": "application/json", "deviceKey": deviceKey}  not\_connected = 1  while (not\_connected):  try:  conn = http.HTTPConnection("api.mediatek.com:80")  conn.connect()  not\_connected = 0  except (http.HTTPException, socket.error) as ex:  print ("Error: %s" % ex)  time.sleep(10)  # sleep 10 seconds  conn.request("POST", "/mcs/v2/devices/" + deviceId + "/datapoints", json.dumps(payload), headers)  response = conn.getresponse()  print( response.status, response.reason, json.dumps(payload), time.strftime("%c"))  data = response.read()  conn.close()  while True:  h0, t0= Adafruit\_DHT.read\_retry(sensor, pin)  if h0 is not None and t0 is not None:  print('Temp={0:0.1f}\* Humidity={1:0.1f}%'.format(t0, h0))  payload = {"datapoints":[{"dataChnId":"Humidity","values":{"value":h0}},  {"dataChnId":"Temperature","values":{"value":t0}}]}  post\_to\_mcs(payload)  time.sleep(10)  else:  print('Failed to get reading. Try again!')  sys.exit(1) |
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