AirMapSDK

version 1.0A

Airmap

September 22, 2016

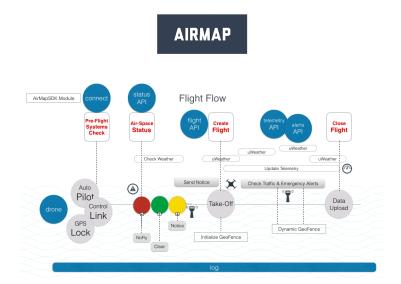
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Welcome to AirMap's documentation!

Airmap -- Airspace Management For Drones.

AirMapSDK is a Python library for interfacing with the Airmap API.



Pre-Requistes:

Airmap develop account

X-API-Key from your account

GPS data (fake gps included)

OAuth token

Access Flow

(connect) airmap.connect.set_Timeout(16) - Set cloud access timeout in seconds

(connect) airmap.connect.set_XAPIKey(xapikey) - Set your X-API-Key from your Airmap account

(connect) airmap.connect.get_CIDID() - Retrieve CID information

(connect) airmap.connect.connect() - Check internet connection and endpoint status Returns: True if ready

(statusAPI) airmap.statusAPI.get_status(lat,lon,Weather.on) - Given position retreive airspace data

(statusAPI) Parse status information including weather, advisories, and maximum flight bounds (see statusAPI documentation)

(connect) airmap.connect.get_SecureToken() - get security token

(flightAPI) airmap.flightAPI.create_FlightPoint (flight time,lat,lon,publicflight?,sendnotifications?) - Setup the flight and flight time Returns flightID

(flightAPI) airmap.flightAPI.get_PilotID() - Returns pilotID for this account

(flightAPI) airmap.flightAPI.end_Flight(flightID) - End the flight specified by flight ID

(flightAPI) airmap.flightAPI.delete_Flight(flightID) - Delete flight described by flightID

(flightAPI) airmap.flightAPI.get_FlightList(pilotID) - Get all flights for pilotID

(flightAPI) airmap.flightAPI.cmd_KillFlights(pilotID) - Delete all flights under specified pilotID

Documentation can be found at https://developer.airmap.io

Source code can be found at https://github.com/...

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Contents:

AirMap Package

airdefs Module

```
class airmap.airdefs. Advisories (distance, last_updated, name, city, color, country, longitude,
properties, state, latitude, type, id)
 Adivosry group list
class airmap.airdefs.Advisory
  Advisoy information (Pre-Flight, In-Flight)
  class Color
    Flight status color code
    Colors
      Color code
          Parameters:
                           • gray -- Disbabled
                           • green -- Go
                           • yellow -- Advise
                           • red -- NoFly
      alias of Enum
    enum (*sequential, **named)
class airmap.airdefs.Globals
  Global settings
 AirConnected = False
 dbgPrint (data)
    Debug send to console
        Parameters:
                      data -- Debug or information to send to console
           Returns:
                      None
 httpsAddr = 'api.airmap.io'
 httpsPort = 443
 keyAddr = 'sso.airmap.io'
 myFlightID = None
 myToken = None
 pilotIDValid = False
 pilot_id = None
  strPrint (data)
    Information send to console
        Parameters:
                      data -- information to send to console
           Returns:
                      None
  thisCID = None
```

```
timeOut = 18
 xapikey = None
class airmap.airdefs.Notify
  Enable notifications
      Parameters:
                        • on -- Enable notifications
                        • off -- Disable notifications
  off = False
 on = True
class airmap.airdefs.Properties (prop_name, prop_value)
 Name to Value Keypairs
class airmap.airdefs.Public
 Make flight public
      Parameters:
                        • on -- Public flight
                        • off -- Private flight
 off = False
 on = True
class airmap.airdefs.Requirement
 Notification requirments contact key pair list
  State
    alias of Enum
 enum (*sequential, **named)
class airmap.airdefs.Startup
 Startup configuration
  class Drone
    Drone information (ID, Location, Status)
    State
      alias of Enum
    enum (*sequential, **named)
class airmap.airdefs.Weather
 Weather control parameters
      Parameters:
                        • on -- Enable weather data
                        • off -- Disable weather data
  off = 'false'
 on = 'true'
```

connect Module

```
class airmap.connect.Connect
  connect ()
  connection = None
  get_CIDID ()
  get_SecureToken ()
  headers = None
  levelDown (data)
  localAdvisories = []
  localLevelDown = []
  localProperties = []
  os = <module 'os' from '/usr/lib/python2.7/os.pyc'>
  set_Timeout (time_out)
  set_XAPIKey (xapikey)
  status_json = None
  thisGlobals = <airmap.airdefs.Globals instance at 0x2b8bea9b1488>
```

statusAPI Module

```
class airmap.statusAPI.Status
  cmd_ProcessAdvisories ()
  connection = None
  get_Advisories ()
  get_Advisory (id)
  get_Condition ()
  get_Humidity ()
  get_MaxDistance ()
  get_Precipitation ()
  get_StatusCode ()
  get_StatusColor ()
  get_Temperature ()
  get_Visibility ()
  get_WindGusting ()
```

```
get_WindHeading ()
get_WindSpeed ()
get_status (gps_lat, gps_lon, weather)
headers = None
levelDown (data)
localAdvisories = []
localLevelDown = []
localProperties = []
os = <module 'os' from '/usr/lib/python2.7/os.pyc'>
status_json = None
thisGlobals = <airmap.airdefs.Globals instance at 0x2b8beaff4c68>
```

flightAPI Module

```
class airmap.flightAPI.Flight
  cmd_KillFlights (pilotID)
  connection = None
  create_FlightPoint (time, lat, lon, public, notify)
  delete_Flight (flightID)
  end_Flight (flightID)
  get_FlightList (pilotID)
  get_PilotID ()
  headers = None
  localAdvisories = []
  localLevelDown = []
  localProperties = []
  os = <module 'os' from '/usr/lib/python2.7/os.pyc'>
  status_json = None
  thisGlobals = <airmap.airdefs.Globals instance at 0x2b8beaff4d88>
```

drone Module

class airmap.drone.drone

log Module

class airmap.log.log

telemetryAPI Module

class airmap.telemetryAPI.telemetryAPI

alertsAPI Module

class airmap.alertsAPI.alertsAPI

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