

Anaplan API and Python

A guide to import external data into your Anaplan ecosystem using Python





Christophe Keomanivong

Senior Solution Expert, OEG



Objective

- This session covers all you need to know to get started with Python integrations
- This is the **stepping stone** for using Python to import data into Anaplan

Disclaimer and Prerequisites

- Not a tutorial about Python
- Code might not be suitable for production use
- Prerequisite
 - [Rest APIs](#)
 - [Python 3 with Anaplan](#)
 - [Anaplan API 2.0 Python Library](#)

Demo

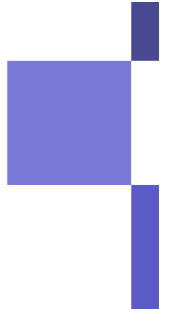
Import financial data from an external website and load them into Anaplan

4 steps

1. Getting data from an **external API**
2. Create the Python objects to **call the remote resource**
3. Create the Python objects to **call Anaplan Actions**
4. Finalize by writing the actual main function that will **do the binding**

DEMO

Frame of the main Python class



The main method will call different functions for each of those tasks inside of the same class:

- Authenticate; Outcome: tokenString
- Get the list of models and choose the relevant IDs; Outcome: model ID and workspace ID
- Get the list of imports and choose the relevant IDs; outcome: import ID & datasource ID
- Send the data to Anaplan to update datasource; Outcome: status code
- Trigger the import; Outcome: task ID
- Get the status of the import; outcome: Json

Final Aspect of the code

```
1 import base64
2 import requests
3 import json
4
5 class anaplanImport(object):
6     @classmethod
7     def executeImport(cls, email, password, importName):...
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22     @classmethod
23     def _authenticate(cls, email, password):...
24
25
26
27
28
29
30
31
32
33
34     @classmethod
35     def _getWsModelIds(cls, token, modelName):...
36
37     #
38
39     @classmethod
40     def _getImportInfo(cls, token, wsId, modelId, importName):...
41
42     #
43
44     @classmethod
45     def _sendData(cls):...
46
47     #
48
49     @classmethod
50     def _importTrigger(cls):...
51
52     #
53
54     @classmethod
55     def _checkImportStatus(cls):...
```

```
1 import requests
2 import anaplanAPI as ana
3
4 def main():
5     try:
6         ## Get data from remote source
7         data_content = requests.get("https://www.quandl.com/api/v3/"
8                                     "datasets/MX/BAXG2020.csv?"
9                                     "start_date=2020-02-12&end_date=2020-02-14"
10                                     "&api_key=d1afi4VU6S2u4dQzZSDk").content
11         print(data_content)
12         anaplanImp = ana.anaplanImport()
13         executeImport = anaplanImp.executeImport("keochris@gmail.com", "AnaplanCPX2020",
14                                                  "Import Securities Price", "Equides SA")
15     except:
16         print("An error occurred.")
17
18 if __name__ == '__main__':
19     main()
```


Key takeaways

Call Anaplan's APIs to perform a full import into Anaplan using Python

- Authentication (both Basic and Certificate)
- Get the data from remote sources using Requests library
- Find different IDs for Anaplan objects
- Trigger necessary objects

Next steps

Open a vast range of possibilities

- Create advanced webservices for adhoc calls (like the Symfonic hub)
- Imagine other integrations based on other programming languages
 - Kotlin
 - C#
 - JS
 - or even proprietary technologies like SAS® Base or SAP® ABAP

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Thank you!

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The Anaplan logo, featuring a stylized green arrow pointing upwards and to the right.

Anaplan