12333 W Olympic Blvd, Los Angeles,
CA 90064
Phone: (424) 231-1111

PYTHON API CALL AND INFUSTRUCTURE

INF.1

Table of Contents

Table of Figures

No table of figures entries found.

Overview

Python allows you to **call** external **APIs** by making HTTP or **REST calls.** The following headers outline what is required in order to request information, receive a response and to generate examples of reports, billing, or queries.

1 Applications

1.1 Management System (MS)

For example: CGI PragmaLine

1.2 Supervisory Control and Data Acquisition System (SCADA)

For example: OSI International Monarch

1.3 Geographic Information System (GIS)

For example: ESRI ArcInfo and ArcFM

1.4 Time Series Data Library (TSDL)

For example: OSISoft PiHistorian

1.5 Advanced Infrastructure (AI)

For example: IQ

Complete System Project

1.6 Example Data

Note: Not complete representation of all material needed for development.

This is example data that is relevant to the example generated for this test. The Complete System Project scope of work is to ensure that all aspects of system integration and end-to-end solutions are

Complete system integration work includes:

- Infrastructure and Cybersecurity Design
    - To identify the requirements of hardware, software and cybersecurity infrastructure to support the implementation of the Enterprise Service Bus (ESB) system and interfaces.
- System Integration and Data Integration
    - To identify proper ESB and Interfaces, the requirements of each interface and data points.
    - To implement and deploy ESB and Interfaces/Adaptors.

The Complete System project will ensure all the deployed systems and applications are integrated as planned and that the entire system is operational from end-to-end. All necessary adaptors and

Report Summary

Summarize report data is listed in this area.

2 APIs

2.1 Representational State Transfer (REST)

2.2 Rest Call in Python (RCP)

Application programming interfaces (APIs) are a way for one program to interact with another. API calls are the medium by which they interact. An API call, or API request, is **a message sent to a server asking an API to provide a service or information**.

To call an web API in Python, start with an environment configured. C**reate a new Python file called do_get_account.py and open it in your text editor**. Start this program off by importing libraries for working with JSON and HTTP requests. These import statements load Python code that allow us to work with the JSON data format and the HTTP protocol.

2.2.1 Create a call - an API in Python

Make your API call, see example provided.

```
1. def get_data(self, api):
2. response = requests.get(f"{api}")
3. if response.status_code == 200:
4. print("sucessfully fetched the data")
5. self.formatted_print(response.json())
6. else:
7. print(f"Hello person, there's a {response.status_code} error with your request")
```

2.2.1.1 Syntax Example

Code: Call

See the example print screen for the keyword parameter description:

- Find _champion

Use the screen captures to illustrate the concept, principle, for request, response and perform in a text editor to generate the amount of APIs called and determine the amount seconds it took to retrieve the APIs. For further definitions and data, see the Appendix.

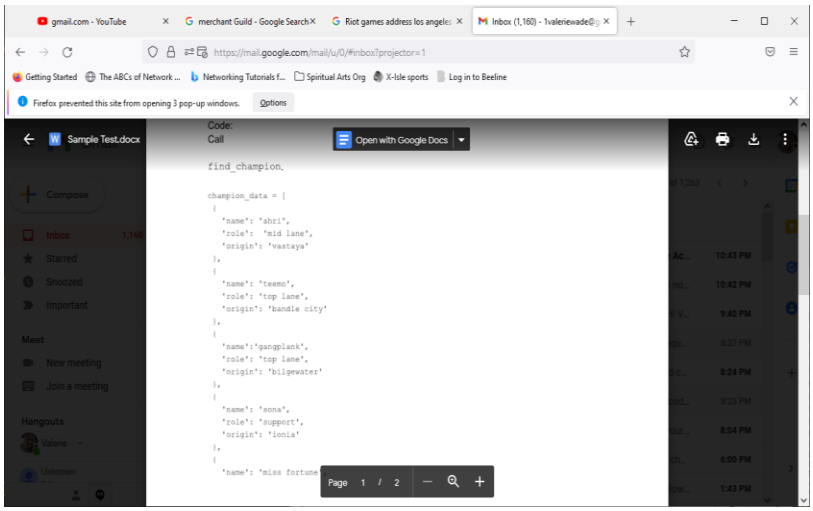

Figure 1.1 Syntax Example – part 1

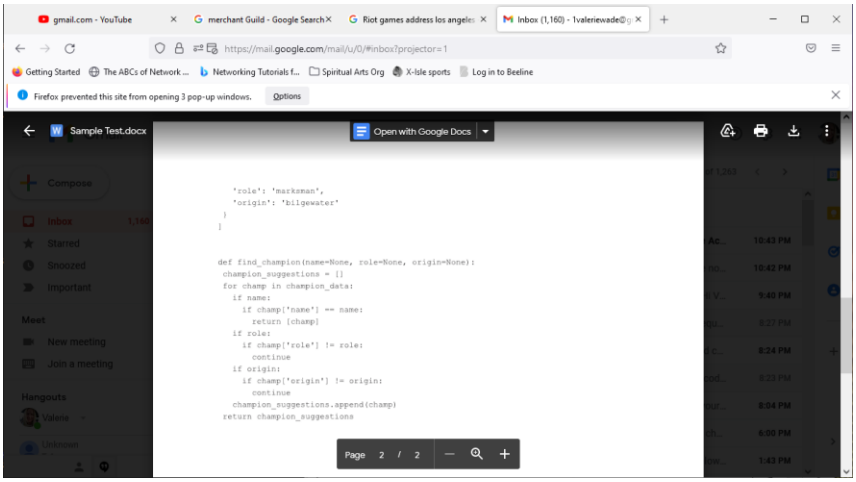

Figure 1.2 Syntax Example – part

2.3 Simple Object Access Protocol (SOAP)

3 Appendix

4 Python Syntax with Examples

5 Glossary of Terms