**README: MarineTraffic Historical Data Python Script**

**Overview**

This Python script template is designed to help customers access and utilize historical data from the MarineTraffic (MT) API. It demonstrates how to authenticate and connect to the API, request historical data, process and handle the data, and store it in CSV files. This script is customizable and intended to facilitate fast integration of MT historical data into your business cases when you acquire a historical API subscription.

**Prerequisites**

* Python 3.x
* Requests library (pip install requests)
* Valid API keys for the MarineTraffic API

**Installation**

1. **Ensure Python is installed**: Check the installation by running:

***python --version***

1. **Install the Requests library**:

***pip install requests***

1. **Download the script**: Save the provided Python script to your local machine.

**Usage**

**Customizing the Script**

1. Open the script in your preferred text editor.
2. Locate the **Editable Parameters** section and replace the placeholder values with your specific parameters:
   * FROMDATE: The start date for the data range you want to retrieve (format: YYYY-MM-DD).
   * TODATE: The end date for the data range you want to retrieve (format: YYYY-MM-DD).
   * PERIOD: The period for the data (e.g., 'hourly', 'daily', or leave blank).
   * MSGTYPE: The message type (e.g., 'simple', 'extended', or leave blank).
   * OUTPUT\_DIR: The directory where you want to save the output CSV files.
   * API\_KEYS: List of your MarineTraffic API keys.

**Running the Script**

Execute the script by running:

***python script\_name.py***

The script will prompt you to enter the fromdate, todate, period, msgtype, and output directory. If you provide blank inputs, it will use the default values specified in the script.

**Script Workflow**

1. **Date Input**: The script prompts for fromdate and todate and validates them.
2. **Period and Msgtype**: If msgtype is 'extended' and period is not provided, the script sets period to 'hourly'.
3. **Date Range Handling**: The script ensures that todate is within 7 days of fromdate.
4. **Data Retrieval**: The script iterates through each day in the date range, constructs the API request URL, and processes the data.
5. **CSV Output**: Data is written to a temporary CSV file and saved with a timestamped file name in the specified output directory.
6. **Rate Limiting**: Includes waiting time between API calls if necessary to respect the API call frequency limit.

**Example**

**A computer screen with white text

Description automatically generated**

**Output**

The script will save CSV files in the specified output directory with names like:

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**Error Handling**

The script includes error handling for:

* HTTP errors and response content issues.
* Invalid date formats and date ranges.
* API call frequency limits.

Informative error messages will help you troubleshoot issues.

**Additional Notes**

* API Keys: Ensure your API keys are valid and have the necessary permissions.
* Date Formats: Use the correct date formats as specified (YYYY-MM-DD for input and YYYY-MM-DD HH:MM:SS for internal processing).
* Output Directory: Ensure the output directory exists and you have write permissions.

**Contact and Support**

If you encounter any issues or have questions, please contact our support team.

With this script, you can efficiently access and utilize historical data from the MarineTraffic API, integrating it seamlessly into your business cases.