GME's API Service

User Manual

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Introduction

GME makes available an API (Application Programming Interface) service to enable users to download the market results published on its website.

The use of the service requires credentials (username and password) that may be obtained from GME by filling in a dedicated form.

This document describes the procedure to request a user account for accessing the service, and examples of use of the service.

All the information concerning the API service is available on the dedicated page of GME's website at the following link:

https://www.mercatoelettrico.org/en-us/Home/APIServicePreview

Request of credentials

To request the credentials for accessing to GME's API service, the applicant must fill in the registration form available at the following address:

https://api.mercatoelettrico.org/users/RegistrationForm/RegistrationRequest

If the applicant represents a "persona giuridica" (e.g., company, organisation, etc.), he/she should select the corresponding option and complete the additional fields concerning the "Dichiarazione sostitutiva di certificazione" (Self-Certification) pursuant to Decree of the President of the Republic no. 445/00 (hereafter DPR 445/00), certifying his/her powers of representation.

N.B.: If the legal representative of the company/organisation is not an EU citizen, he/she should submit equivalent documents certifying his/her powers of representation (e.g. extract of report of registration of the company/organisation with the local Board of Trade or copy of notarised power of attorney).

After completing the form and entering the Captcha correctly, click on the "conferma" (confirm) button.

The system will display a .zip file containing one or two pdf documents ("TERMS OF USE" + possible Self-Certification pursuant to DPR 445/00) that must be digitally signed and sent by certified e-mail to GME's certified e-mail address: **gme@pec.mercatoelettrico.org**.

If the applicant has no digital signature certificate, he/she must sign the above-mentioned documents in handwritten form and submit them together with a copy of a valid identity document.

If the applicant has no certified e-mail address, he/she must submit the documents (signed digitally or in handwritten form together with a copy of a valid identity document) to GME's dedicated e-mail address: **posta.gme@mercatoelettrico.org**.

After receiving the documents and verifying their regularity, GME will send an e-mail to the user with the temporary access credentials.

Password change

The temporary password received from GME upon registration cannot be used for access to the API service. The user should change it by connecting to the portal at the following address: https://api.mercatoelettrico.org/users/

After the first access, the user may change his/her temporary password by specifying a new one (consisting of at least 12 characters and including at least one digit, one uppercase letter, one lowercase letter, and one special character).

The new password will be valid for 6 months, after which the user will have to change it gain by accessing the same portal.

If the user forgets his/her password for access to the API service, he/she may autonomously create a new one by accessing the portal https://api.mercatoelettrico.org/users/ and clicking on the "Recupero credenziali" (recovery of credentials) button.

The system will display a form where the user must enter the username provided by GME and the e-mail address specified upon registration.

By clicking on the "Conferma" (confirm) button, the user will receive a new e-mail with the link to create a new password.

Example of use of the API

This chapter provides an example of how to use the service directly via a Chrome browser through the TalendAPI plugin.

The endpoint made available for use of the service is: https://api.mercatoelettrico.org/request/api/v1/

A complete description of the data queries and formats to be submitted is given in the API Service Technical Guide available at this link.

As first step, log into the system with the /Auth method:
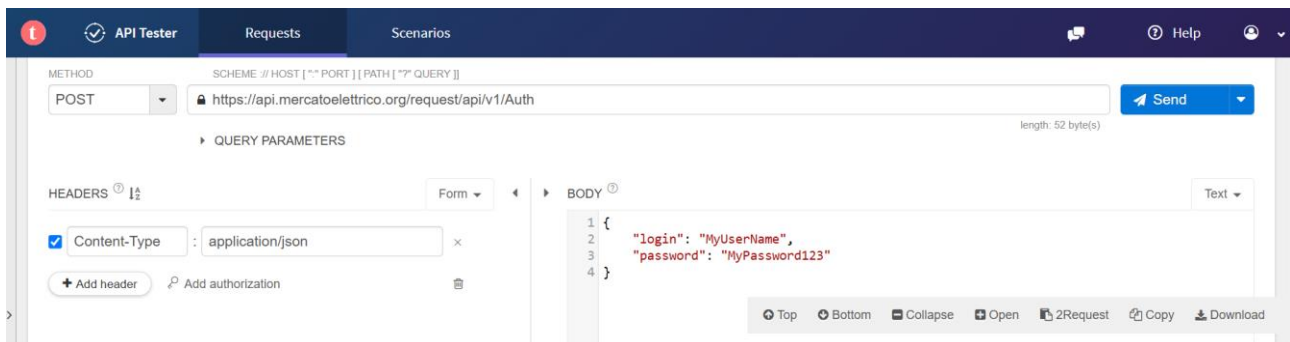
If the authentication is not successful, you will receive a negative response and the related reason:

If the authentication is successful, the response will contain the JWT token to be used in subsequent data requests:

After obtaining the authentication token, you may enter data requests with the RequestData method[1]:

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[1] Important: enter the token into the Authorization header with the "Bearer" value followed by a space and then the token value.

If the request is not successful, the resultRequest field will show the cause of the problem:

If the request is successful, you will receive a positive response with the requested data:

The data is contained in the value of the "contentResponse" field, which represents a .zip file in Base64 encoding.
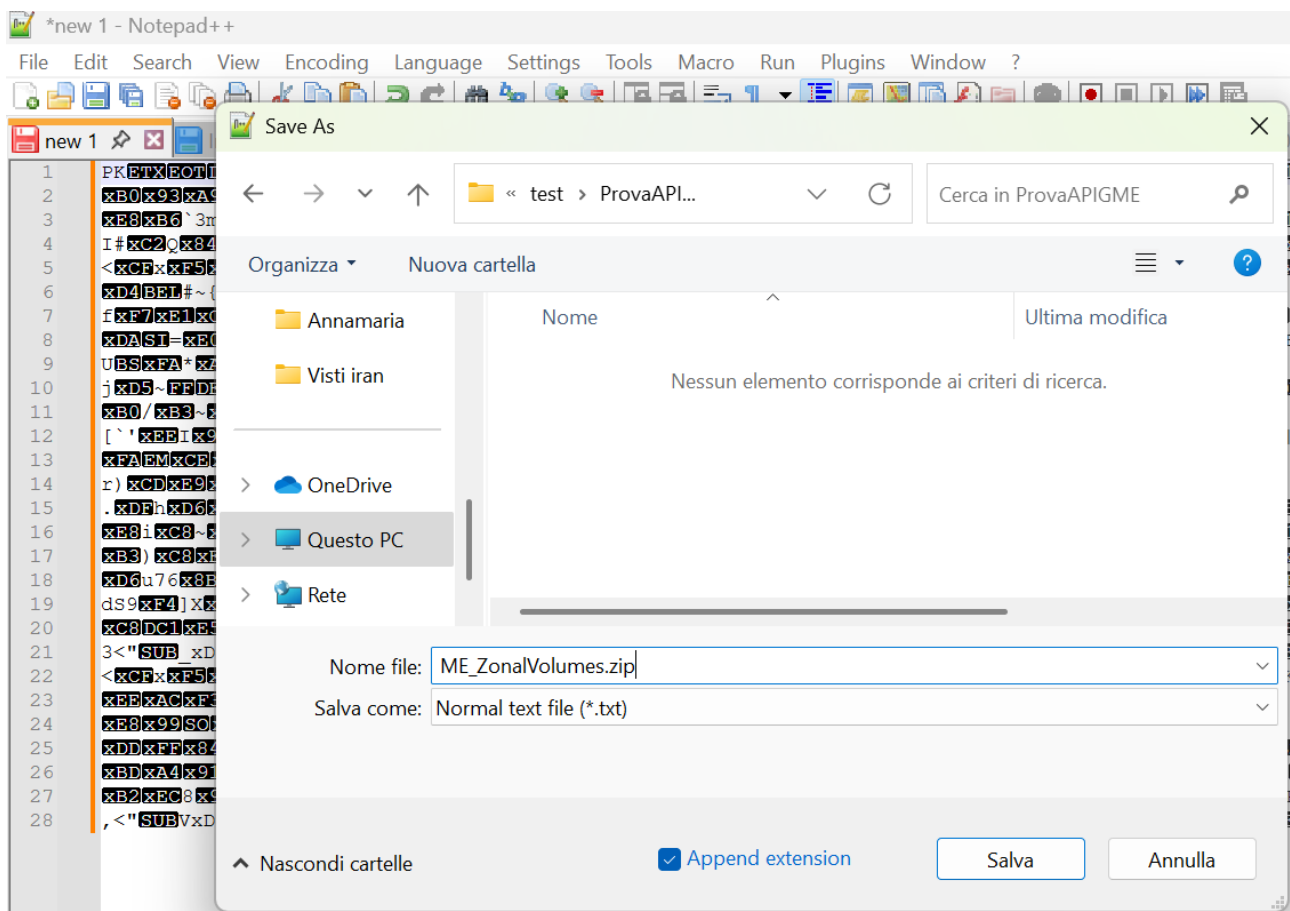
To convert the string into a file, you may use any decoding tool. The following example uses Notepad++.

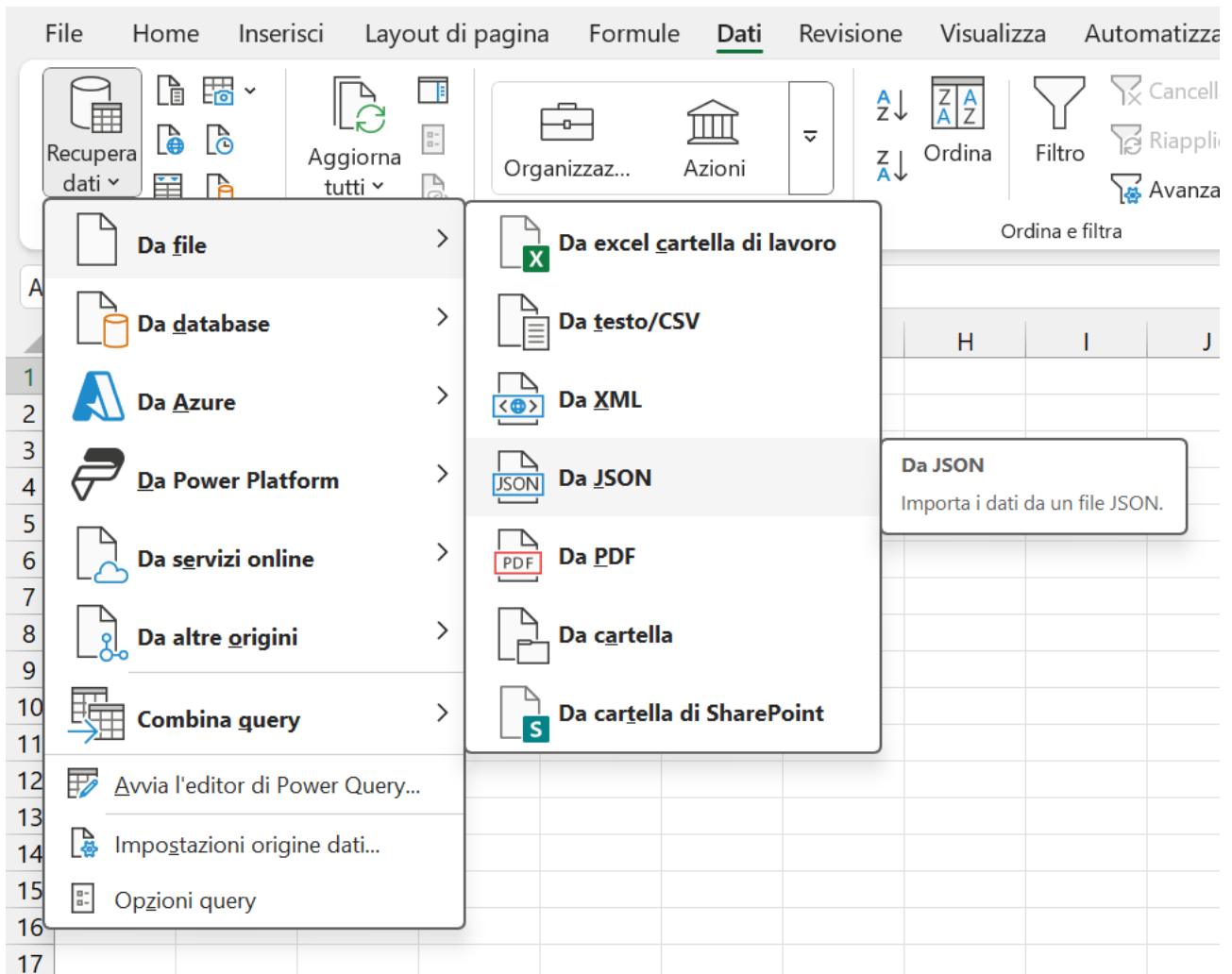Open the editor and paste the contentResponse value to a new file.

After selecting it, choose the Plugins -> MIME Tools -> Base64 Decode menu.
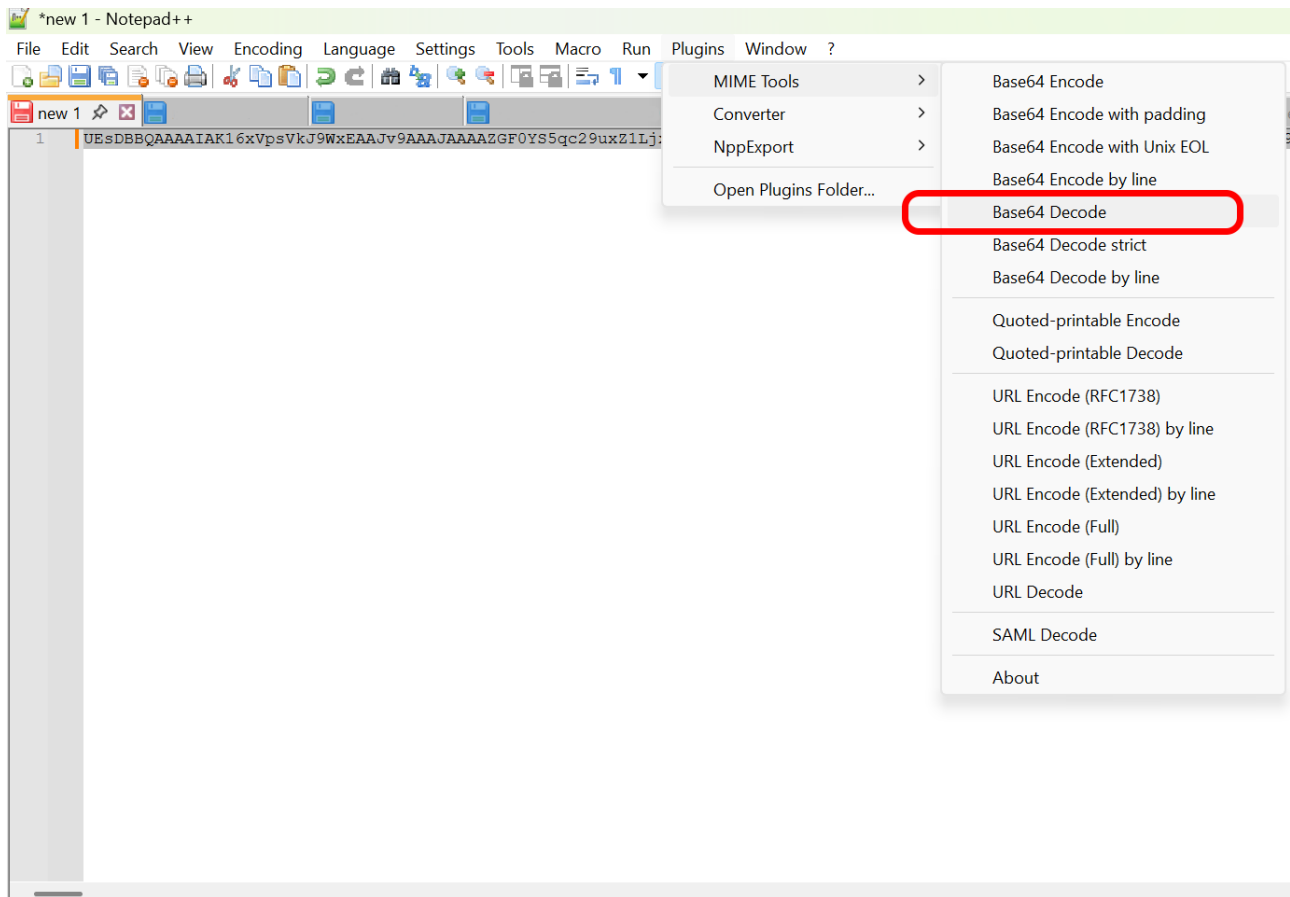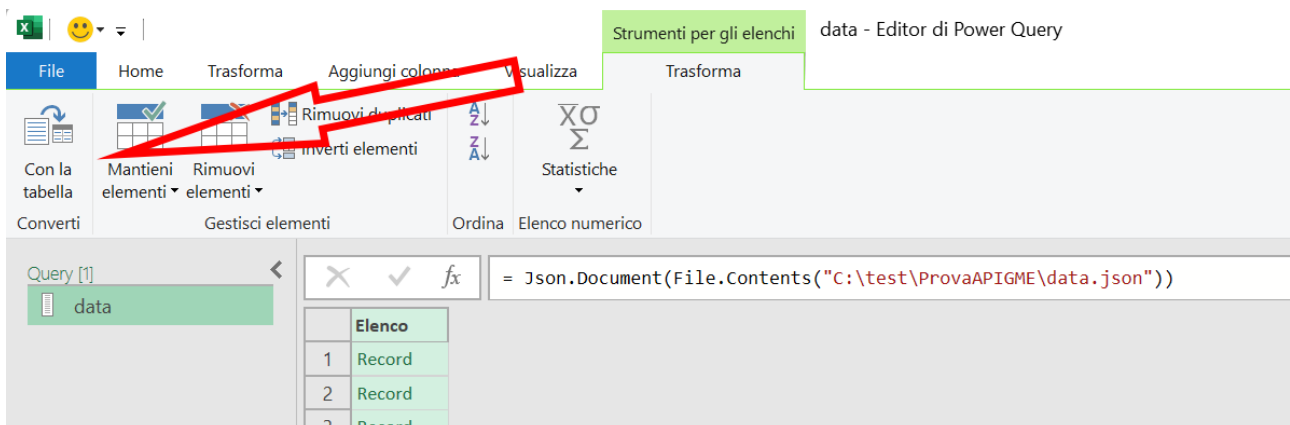
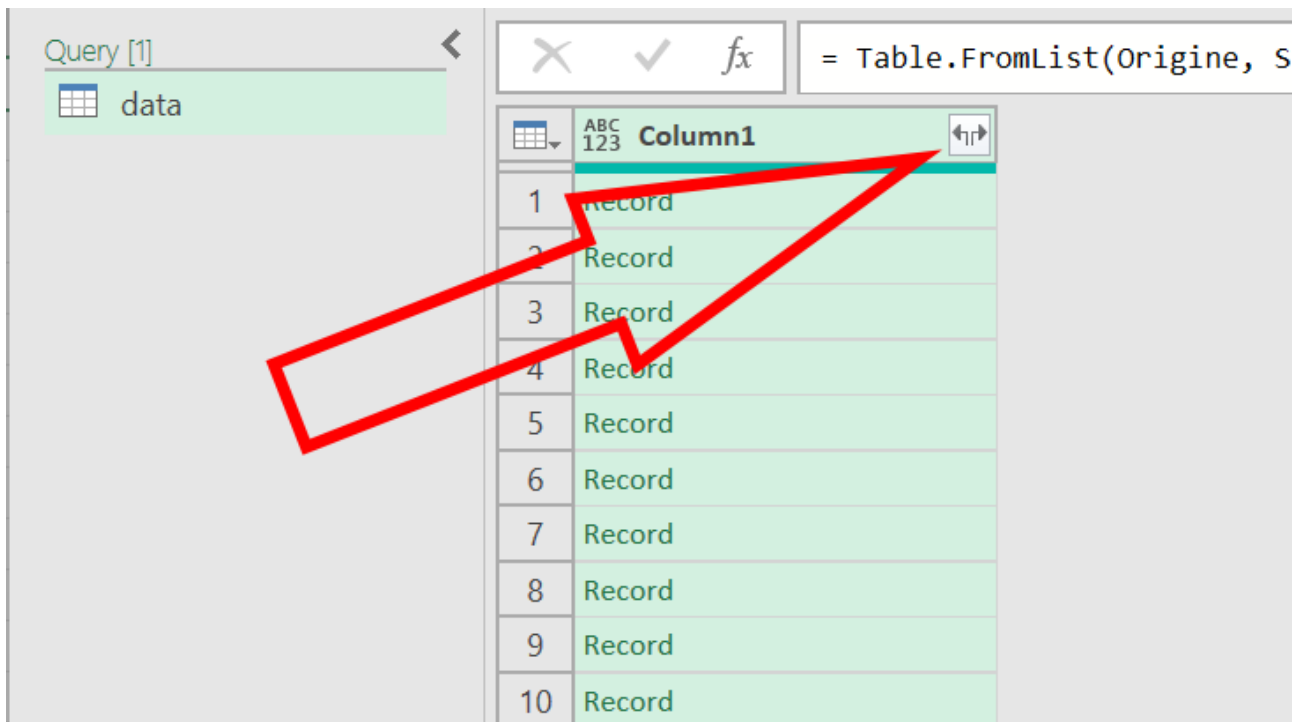After decoding the file, you may save it with a .zip extension:

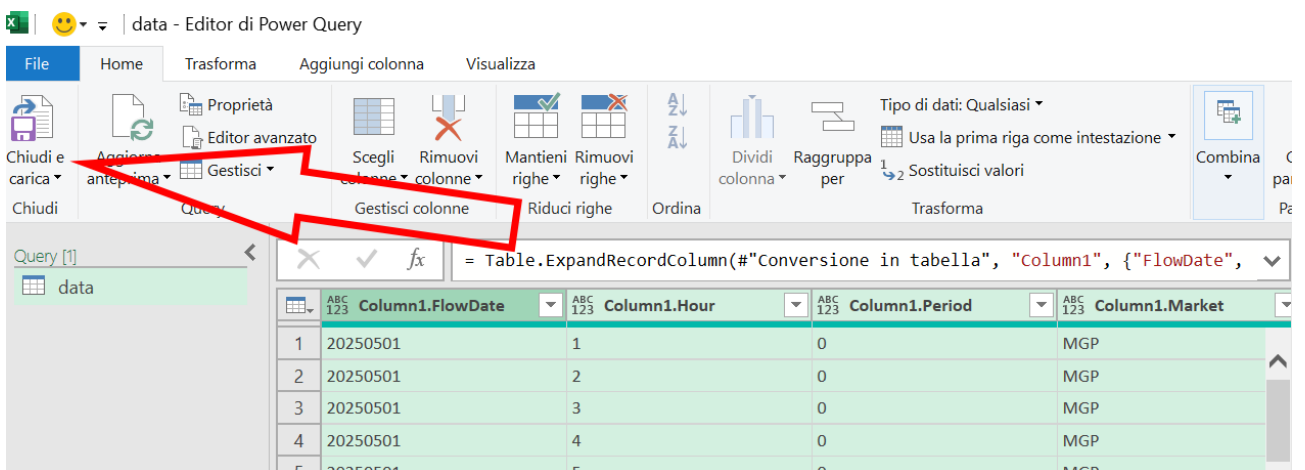The .zip file contains a data.json file that you may view via Excel:

The system will display a window, where you have to press the "Con la tabella" (with the table) button,

and then expand the columns:

Finally, click on "Chiudi e carica" (close and load) button.

User quotas

GME's API service manages queries through a quota system. Each user is limited to a certain number of connections per minute and per hour, as well as a maximum number of data items that can be downloaded within those timeframes. Once the maximum values are reached, the user must wait until the end of the current minute or hour before submitting a new query.

The consumed quotas and the maximum available limits can be viewed using the /GetMyQuotas method.

To ensure a constantly efficient service, GME reserves the right to modify quota limits at any time and without prior notice.