

Communicate with NetEco through an openAPI user



Huawei Technologies Co. Ltd.

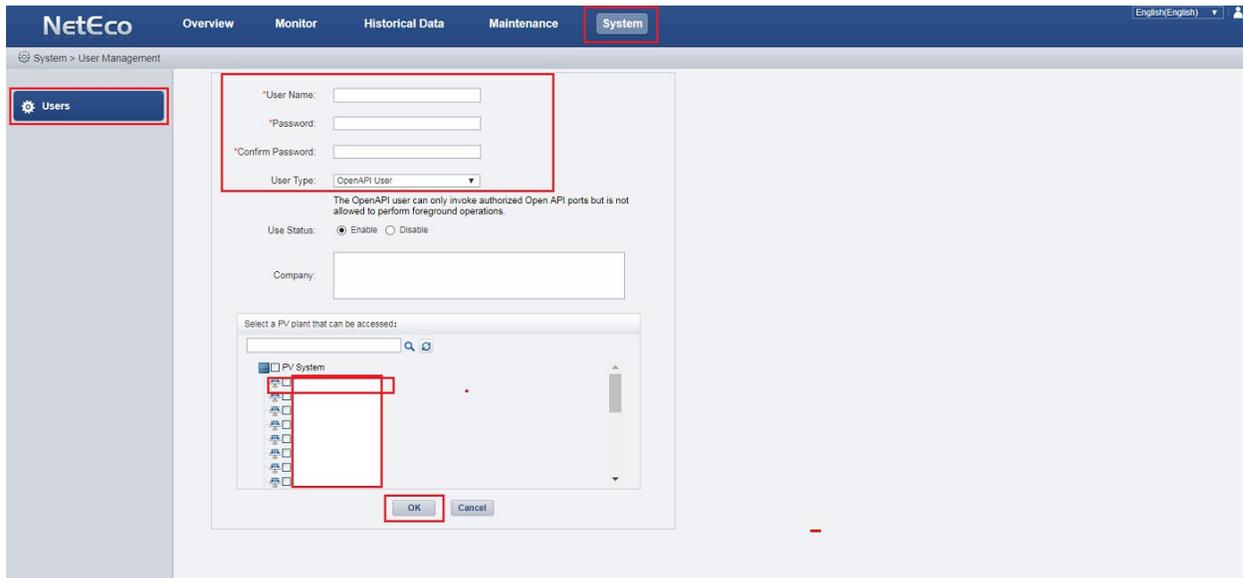
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01	Huawei e84081311	21.03.2019	openAPI

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This document describes the procedure about how to test the communication with NetEco through an openAPI user.

1. Create an OpenAPI User

Login as installer on Neteco and create an openAPI account:
 Choose settings menu → users → fill the requested details → choose OpenAPI User → select the PV plant → ok

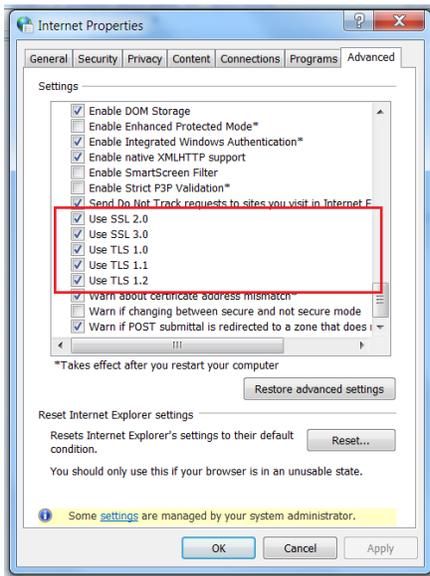


2. Check the communication protocol

Dashboard Web Server query data from NetEco through HTTPS protocol, Dashboard Web Server is Client, NetEco is Server.

Source Device	Source IP Address	Source Port	Destination Device	Destination IP Address	Destination Port	Protocol	Port Description	Authentication Mode	Encryption Mode
Client	IP address of the client	Random port	NetEco server	IP address of the NetEco server	27200	HTTPS	Port for logging in to the NetEco server open interface in TLS encryption mode.	Username/password	TLS1.1&1.2

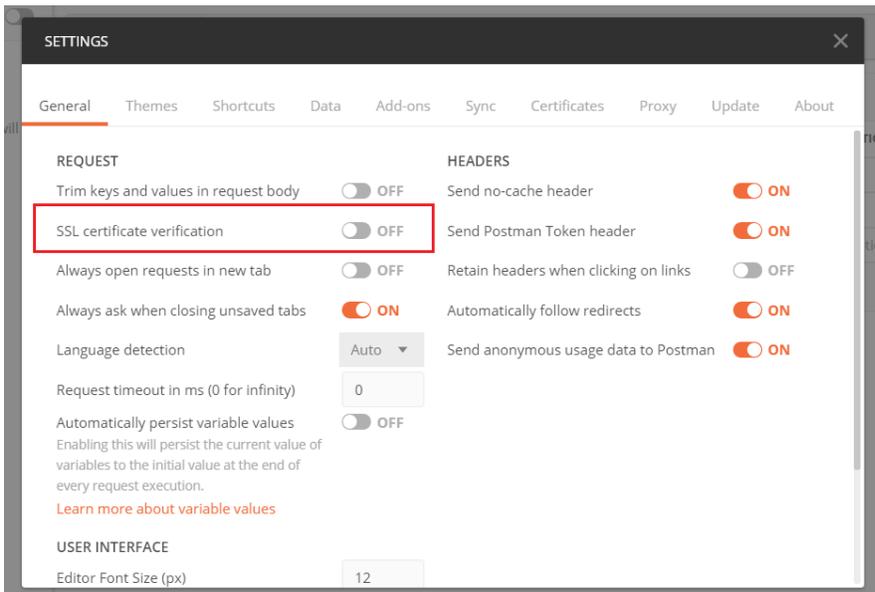
Check if the port 27200 is enable and if you have active on your computer the TLS1.1&1.2 and SSL.



3. Install Postman on your computer



Download and install Postman and before start to interrogate Neteco with your openAPI user disable the SSL certificate verification form the Postman settings:



4. Login on Postman with openAPI user

Use your server IP to login and interrogate Neteco with your openAPI user.

Example: if the Neteco IP is 52.58.159.100 use the next link to login:

<https://52.58.159.100:27200/openAPI/login>

URL: <https://ip:port/openApi/login>

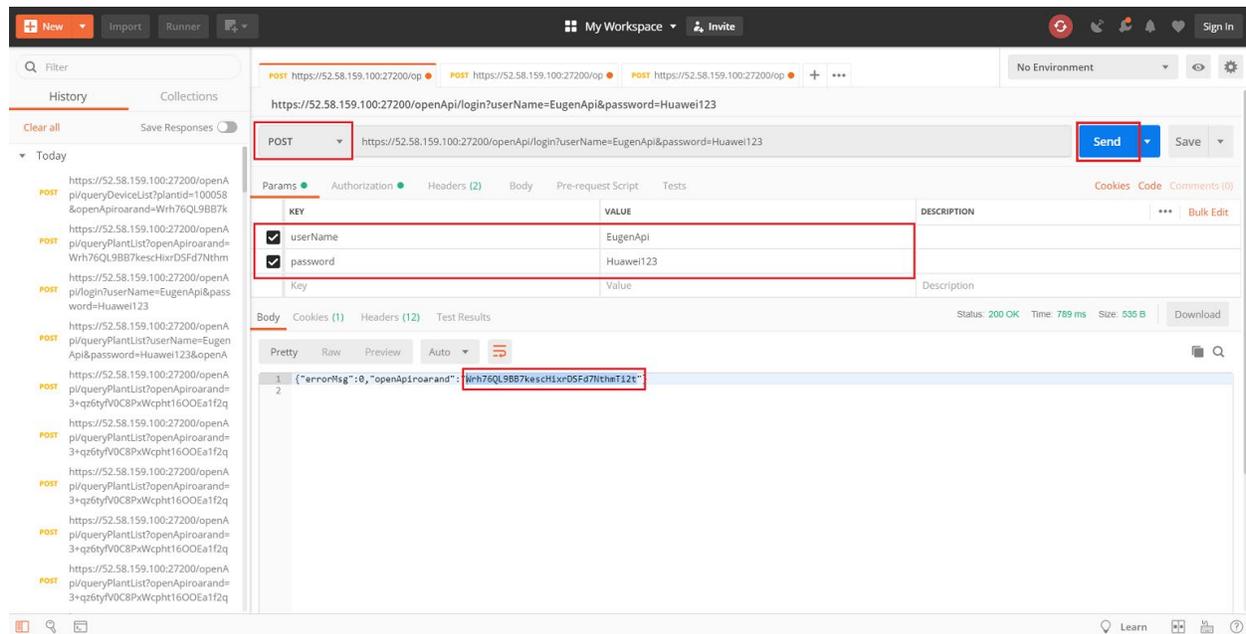
Request:

Method: POST

Parameter: username, password

Response: {"errorMsg":0,"openApiroarand":"e21bfb25-5637-49d3-8ec2-d6106cc0fc97"}

The key note with red will help you to interrogate the other parameters.



The screenshot shows the Postman interface for a POST request to the openAPI login endpoint. The URL is `https://52.58.159.100:27200/openAPI/login?userName=EugenApi&password=Huawei123`. The request parameters are `userName` (EugenApi) and `password` (Huawei123). The response status is 200 OK, and the response body is `{"errorMsg":0,"openApiroarand":"Wh76QL98B7kesch1xrd5Fd7Nthm12t:"}`. The response body is highlighted with a red box.

5. Query Plant List

URL: <https://ip:port/openApi/queryPlantList>

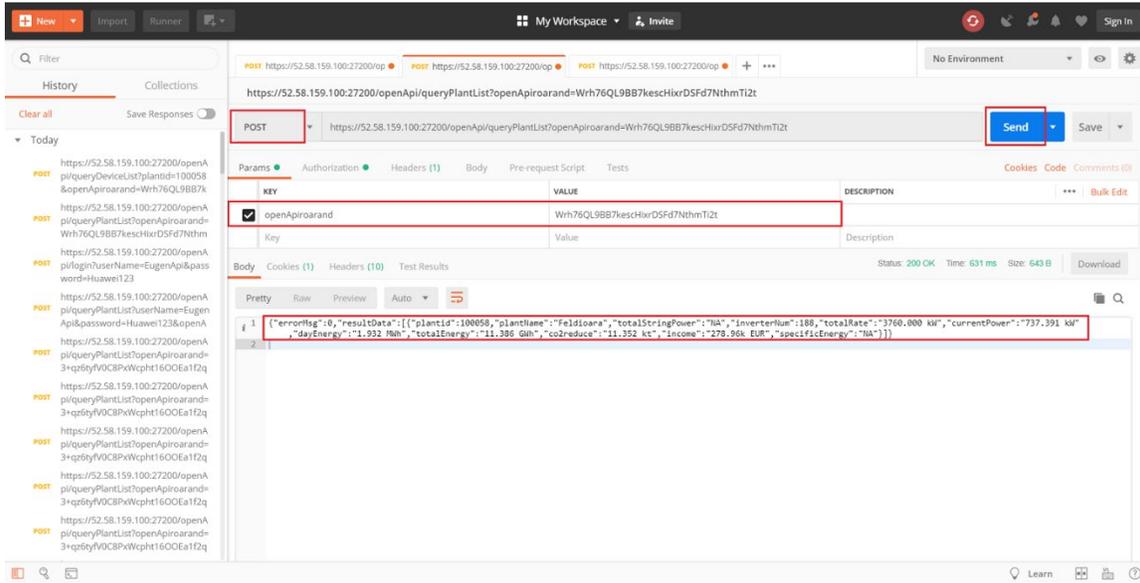
Request:

Method: POST

Parameter: openApiroarand

Response:

Example:



6. Query Device List

URL: `https://ip:port/openApi/queryDeviceList`

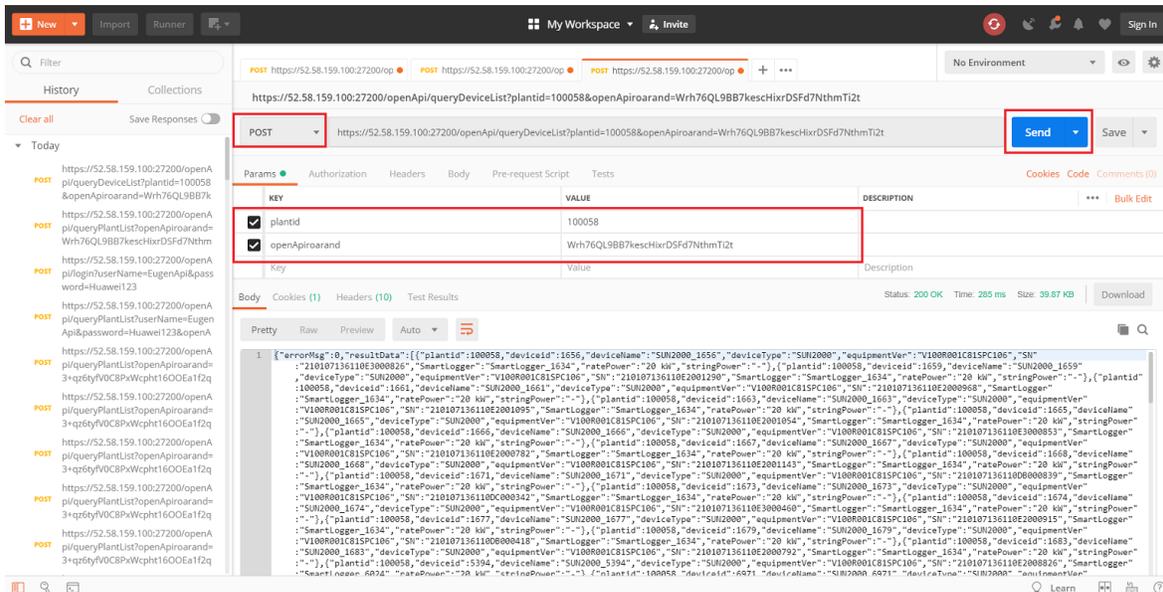
Request:

Method: POST

Parameter: plantid, openApiroarand

Response:

Example:



7. Query Plant Real Time Data

URL: <https://ip:port/openApi/queryPlantdetail>

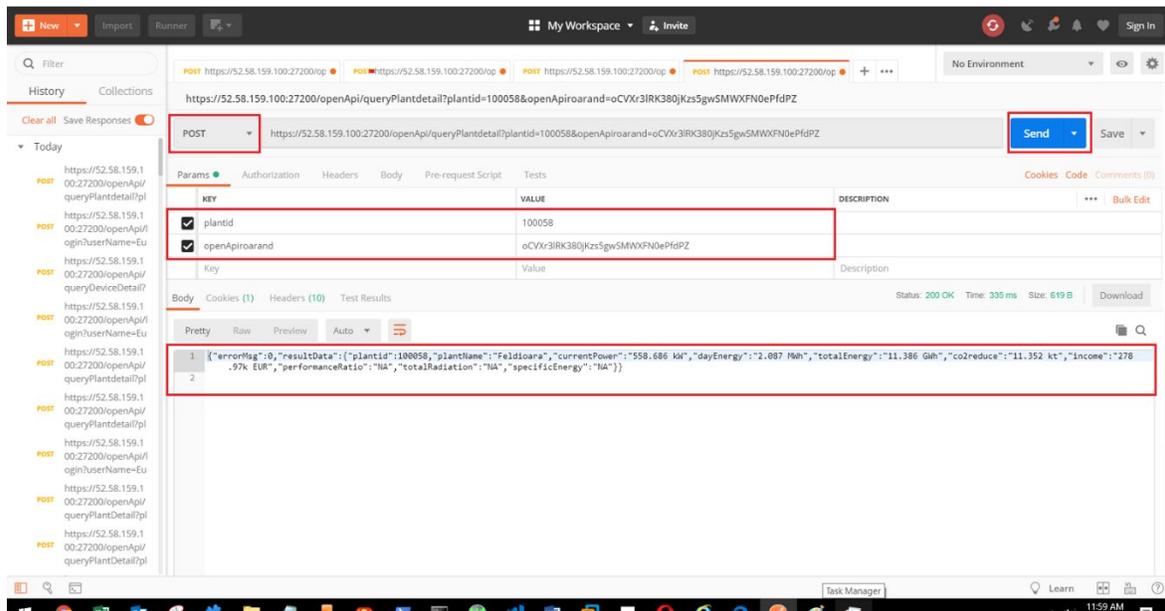
Request:

Method: POST

Parameter: plantid, openApiroarand

Response:

Example:



The screenshot shows a REST client interface with a POST request and its response. The request URL is `https://52.58.159.100:27200/openApi/queryPlantdetail?plantid=100058&openApiroarand=oCVx3iRk380jKz5gw5MwXFN0ePfdPZ`. The parameters are:

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> plantid	100058	
<input checked="" type="checkbox"/> openApiroarand	oCVx3iRk380jKz5gw5MwXFN0ePfdPZ	
Key	Value	Description

The response is a JSON object:

```
1 [{"errorMsg":0,"resultData":{"plantid":100058,"plantName":"FaIdIoara","currentPower":558.686,"dayEnergy":2.087,"totalEnergy":11.386,"co2reduce":11.352,"income":278.97kEUR","performanceRatio":NA,"totalRadiation":NA,"specificEnergy":NA"}]}
2
```

8. Query Device Real Time data

URL: <https://ip:port/openApi/queryDeviceDetail>

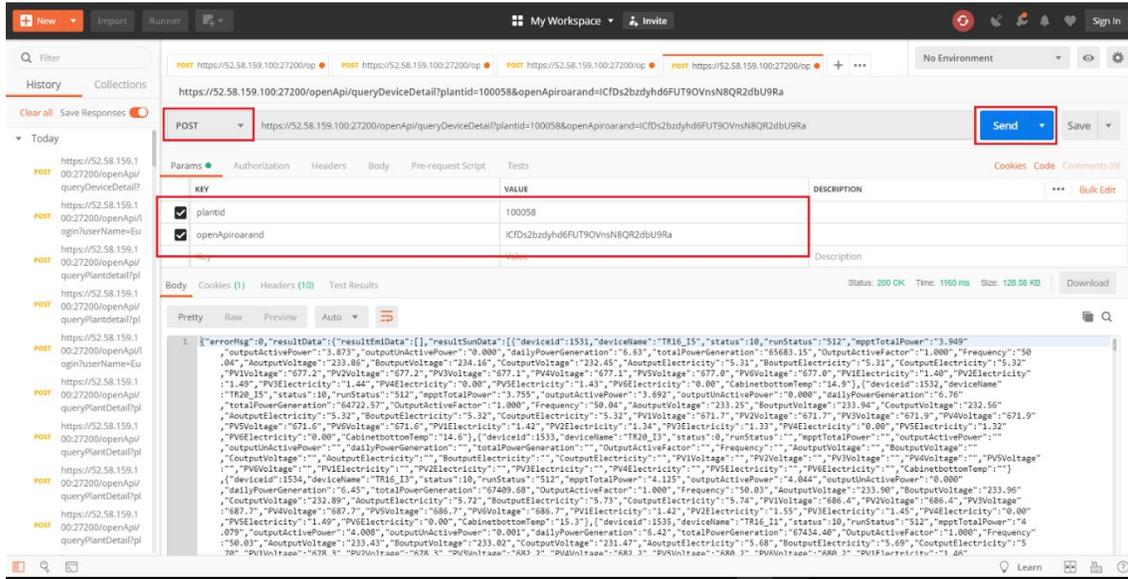
Request:

Method: POST

Parameter: plantid, openApiroarand

Response:

Example:



9. Query Plant Day History Data

URL: <https://ip:port/openApi/queryPlantDayData>

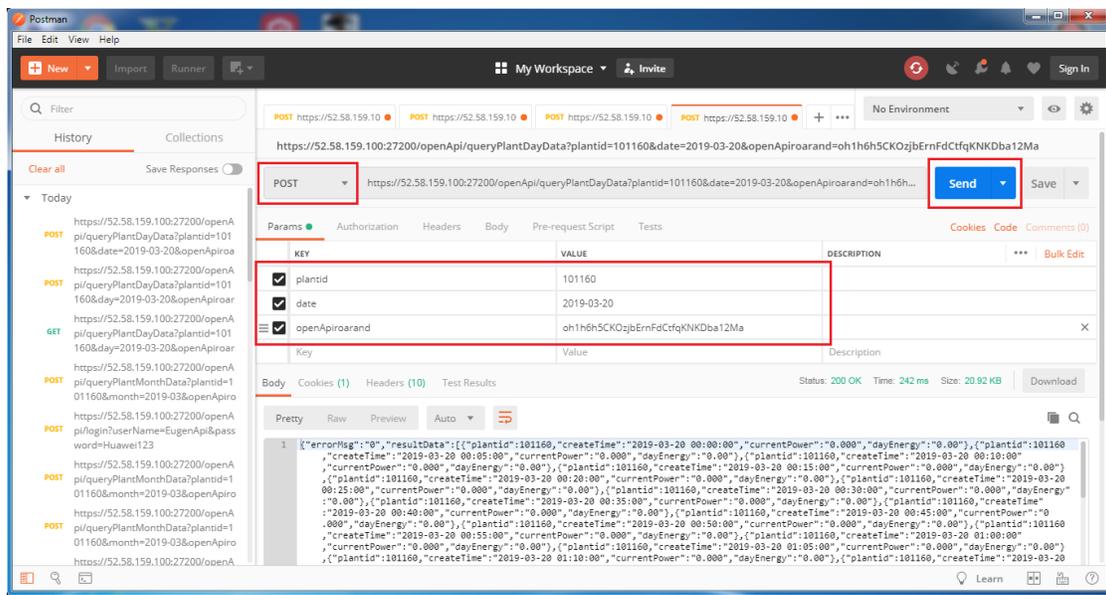
Request:

Method: POST

Parameter: plantid, date(XXXX-XX-XX), openApiroand

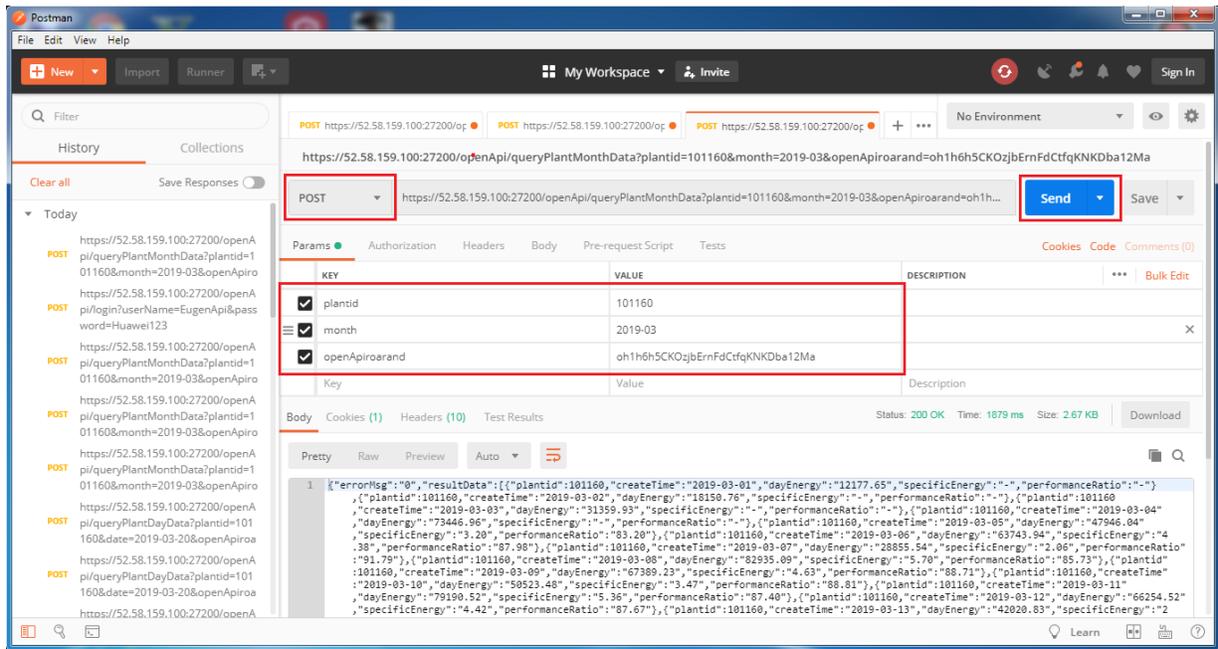
Response:

Example:



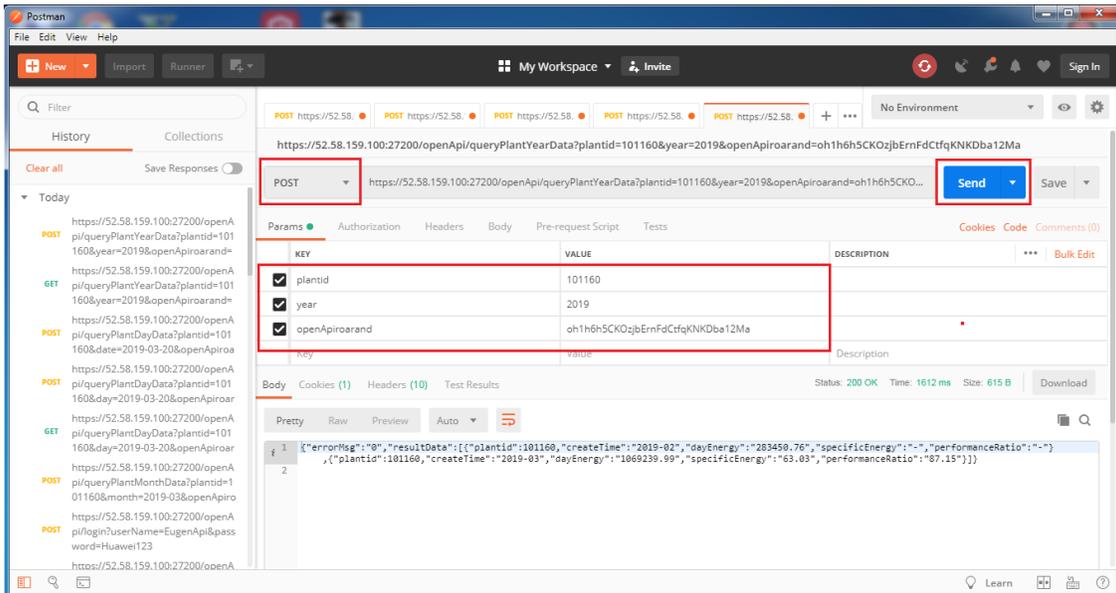
10. Query Plant Month History Data

URL: <https://ip:port/openApi/queryPlantMonthData>
Request:
Method: POST
Parameter: plantid, month(XXXX-XX), openApiroarand
Response:
Example:



11. Query Plant Year History Data

URL: <https://ip:port/openApi/queryPlantYearData>
Request:
Method: POST
Parameter: plantid, year(XXXX-XX), openApiroarand
Response:
Example:



12. Query Plant Total History Data

URL: `https://ip:port/openApi/queryPlantTotalData`

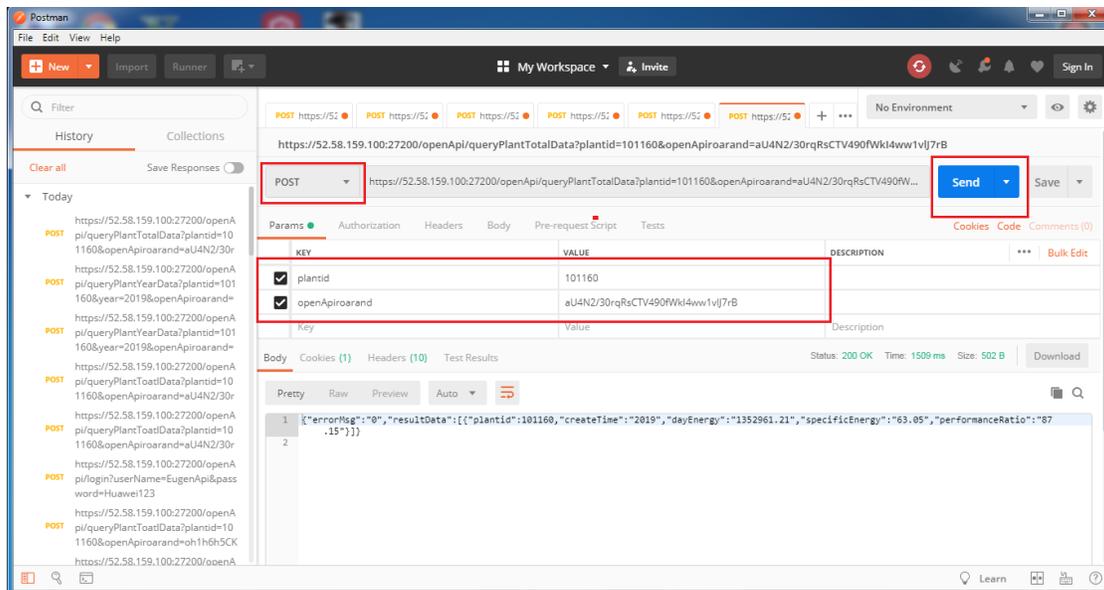
Request:

Method: POST

Parameter: plantid, openApiroarand

Response:

Example:



13. Logout

URL: `https://ip:port/ openApi/logout`

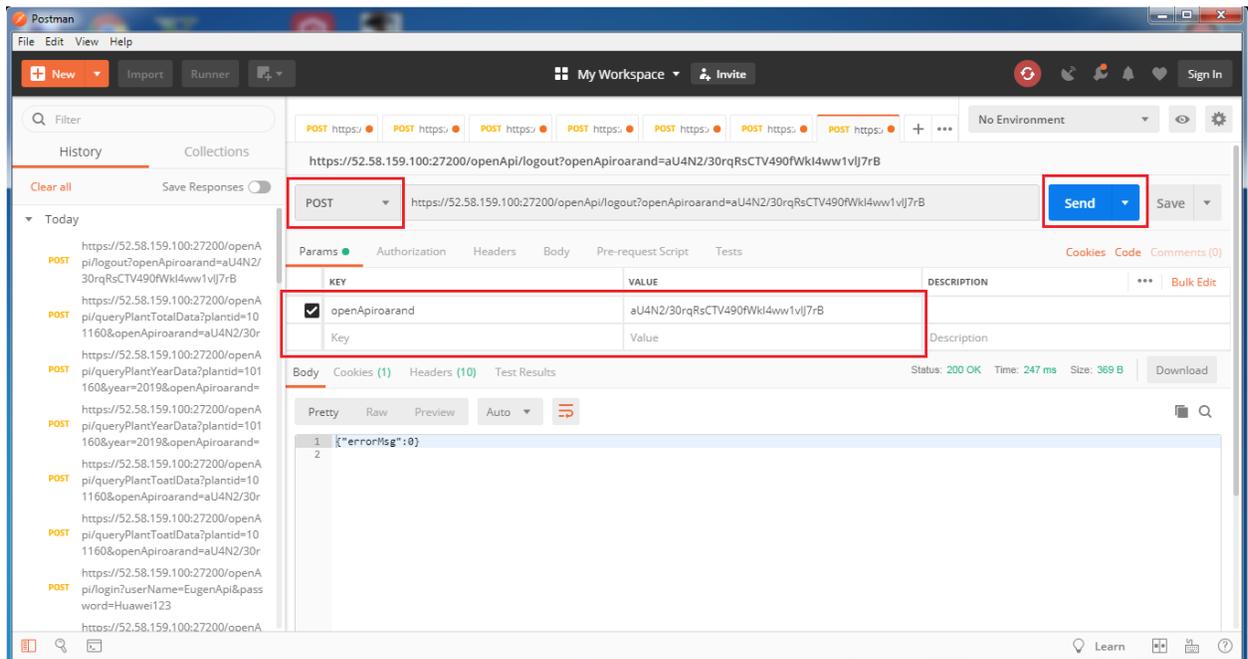
Request:

Method: POST

Parameter: openApiroarand

Response:

Example: `{"errorMsg":0}`



The screenshot shows the Postman interface for a POST request. The URL is `https://52.58.159.100:27200/openApi/logout?openApiroarand=aU4N2/30rqRsCTV490fWki4ww1vj7rB`. The request method is POST. The parameter `openApiroarand` is set to `aU4N2/30rqRsCTV490fWki4ww1vj7rB`. The response status is 200 OK, with a time of 247 ms and a size of 369 B. The response body is `["errorMsg":0]`.

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> openApiroarand	aU4N2/30rqRsCTV490fWki4ww1vj7rB	
Key	Value	Description

```
1 ["errorMsg":0]
2
```