ProxerGate

Version ***1.0.0***

Procontrol Electronics Ltd**.**

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Chapter 1

ProxerGate API Description

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1.1 General information

This description is made for the ProxerGate gateway device. It shows how to control the software running on the entry gate via API.

API deployment

It is possible to communicate with the entrance gate using an API via HTTP POST messages

1.1.1 HTTP POST

Sending command
Accessing API is possible on <<http://ESZKOZIPCIME:80/rest_api>> address, where:
"ESZKOZIPCIME" is the IP address of the entry gate.

For example 192.168.0.210 - POST messages must be sent to this address; we can find the message content in the following (no 2) section.

Receiving Event
ProxerGate API sends out the events via HTTP POST messages.

The address os the recipient must be set in config file. It must be set in advance - Procontrol will set it for you.

1.2 API control commands

The API supports processing the following commands.

1.2.1 Opening gate for a person

Command message

For opening gate for a person the following JSON command must be sent:

```
{
    "data": {
        "message_type": "command",
        "device_type": "access_control_gate",
        "command_type": "gate_control",
        "command": "open_gate_for_one_person",
        "direction": "A",
        "mcpu_username": "",
        "mcpu_password": ""
    }
}
```

Description of parameters

Parameter name	Meaning	Required
message_type	Message type	yes
device_type	Device type	no
command_type	Command type	no
command	Command	yes
direction	Direction of gate rotation	yes
mcpu_username	Username for checking authorization of queries	no
mcpu_password	Password for checking authorization of queriess	no

Successful answer

If the submitted JSON meets the criteria, the API accepts the command to open the gate and replies with the response below.

```
{
    "answer": "OK"
}
```

Unsuccessful answer

If some parameter is not appropriate in the JSON, the command will not be executed. And the API replies with an error message. The error message looks like below.

```
{
    "answer": "Error"
}
```

answer	Meaning
Error	Unsuccessful command processing
Non-existent command	Non-existent command
Bad params	Incorrect parameters

1.2.2 Gate opening for continuous passage

Command message

For opening gate for continuous passage the following JSON command must be sent.

```
{
    "data": {
        "message_type": "command",
        "device_type": "access_control_gate",
        "command_type": "gate_control",
        "command": "open_gate_static",
        "direction": "A",
        "enable": 1,
        "mcpu_username": "",
        "mcpu_password": ""
    }
}
```

Description of parameters

Parameter name	Meaning	Required
message_type	Message type	yes
device_type	Device type	no
command_type	Command type	no
command	Command	yes
direction	Direction of gate rotation	yes
enable	Enable/disable continuous passage	yes
mcpu_username	Username to check authorization of queries	no
mcpu_password	Password to check authorization of queries	no

Successful answer

If the submitted JSON meets the criteria, the API accepts the command to open the gate and replies with the response below.

```
{
    "answer": "OK"
}
```

Unseccessful answer

If some parameter is incorrect in the JSON, the command will not be executed. And the API replies with an error message. The error message looks like below.

```
{
    "answer": "Error"
}
```

answer	Meaning
Error	Unsuccessful command processing
Non-existent command	Non-existent command
Bad params	Incorrect parameters

1.2.3 Switch fire mode

Command message

The following JSON message must be sent to switch the gate's fire mode.

```
{
    "data": {
        "message_type": "command",
        "device_type": "access_control_gate",
        "command_type": "gate_control",
        "command": "set_fire_mode",
        "enable": 1,
        "mcpu_username": "",
        "mcpu_password": ""
    }
}
```

Description of parameters

Parameter name	Meaning	Required
message_type	Parameter type	yes
device_type	Device type	no
command_type	Command type	no
command	Command	yes
enable	Enable/disable fire mode	yes
mcpu_username	Username for checking authorization of queries	no
mcpu_password	Password for checking authorization of queries	no

Successful answer

If the submitted JSON meets the conditions, the API accepts the fire mode command and replies with the response below

```
{
    "answer": "OK"
}
```

Unsuccessful answer

If some parameter is not appropriate in the JSON, the command will not be executed. And the API replies with an error message. The error message looks like below.

```
{
    "answer": "Error"
}
```

answer	Meaning
Error	Unsuccessful command processing
Non-existent command	Non-existent command
Bad params	Incorrect parameters

1.3 API event messages

The API sends the following event messages.

1.3.1 Barcode reading, authorization check

Event message

The following JSON message is sent by the entry gate if a barcode has been read.


```
{
    "data": {
        "message_type": "event",
        "device_family": "id_reader",
        "device_type": "ds457",
        "card_type": "barcode",
        "device_id": 2,
        "device_name": "ProxerGate",
        "device_install_place": "room1",
        "event_type": "tag_arrived",
        "event_id": 11,
        "event_date": "2021.09.20 14:00:00",
        "tag_id": 54761256,
        "tag_id_64bit": 8765471324,
        "reader_id": 1,
        "wait_for_response": 0,
        "mcpu_username": "",
        "mcpu_password": "",
        "program_version": "5.63.363"
    }
}
```


Explanation of parameters

Parameter name	Meaning
message_type	Message type
device_family	Device family name
device_type	Device type
card_type	Card type
device_id	Device ID
device_name	Device name
device_install_place	Place of installing device
event_type	Event type
event_id	Event ID
event_date	Event date
tag_id	Card number / identification number 32 bit
tag_id_64bit	Card number / identification number 64 bit
reader_id	Event time
wait_for_response	Is it waiting for a response to the event?
mcpu_username	Username for checking authorization of queries
mcpu_password	Password for checking authorization of queries
program_version	Program version

Authorized answer

The following JSON response must be sent in the case of an authorized barcode. Upon an authorized response, the device opens the gate lock.

```
{
    "data": {
        "message_type": "event_answer",
        "protocol_version": "1.0.0",
        "event_answer_type": "grant_answer",
        "grant_answer_result_code": 1,
            "grant_answer_reason_string": "OK authorized, by bar code"
    }
}
```

Parameter name	Meaning	Required
message_type	Type of message	yes
protocol_version	Protokol version	no
event_answer_type	Event response type	yes
grant_answer_result_code	Response result code	yes
grant_answer_reason_string	Description of answer result	no

Unauthorized answer

The following JSON response must be sent in case of an unauthorized barcode. The device does not performany further operations for an unauthorized response.

```
{
    "data": {
        "message_type": "event_answer",
        "protocol_version": "1.0.0",
        "event_answer_type": "grant_answer",
        "grant_answer_result_code": 0,
        "grant_answer_reason_string": "Ebben az idoszakban nem jogosult"
    }
}
```

Parameter name	Meaning	Required
message_type	Messsage type	yes
protocol_version	Protokol version	no
event_answer_type	Event response type	yes
grant_answer_result_code	Response result code	yes
grant_answer_reason_string	Description of answer result	no

1.3.2 Pass result

Event message

The following JSON message is sent by the entrance gate about the result of the opening.

```
{
    "data": {
        "message_type": "event",
        "device_family": "gate",
        "device_type": "ProxerGate",
        "event_type": "gate_status"
        "event_code": 1,
        "event_string": "gate_open_started",
        "person_pass_through_detected": 1,
        "event_id": 23,
        "event_date": "2021.10.08. 13:04:00",
        "wait_for_response": 0,
        "mcpu_username": "",
        "mcpu_password": ""
    }
}
```

Explanation of parameters

Parameter name	Meaning
message_type	Message type
device_family	Device family name
device_type	Device type
event_type	Event type
event_code	Event code
event_string	Event description
person_pass_trough_detected	Person passed through the gate yes/no (only if the arm is turned over successfully)
event_id	Event ID
event_date	Event time
wait_for_response	Is it waiting for a response to the event?
mcpu_username	Username for checking authorization of queries
mcpu_password	Password for checking authorization of queries

Explanation of event codes

Event code	Event description	Meaning
1	gate_open_started	Gate opening started
2	gate_pass_through_success	Passing through the gate is successful
3	gate_pass_through_timeout_failure	Passing through the gate was unsuccessful, a timeout occurred