

Release Notes

Current Version: 2.1

Notes:

- Version 1.0. Release notes:
 - o Initial release
 - o Ability to push client Reference Data (Client and Heating Appliance) into Pro+
- Version 1.1. Release notes:
 - o Ability to pull client Reference Data (Client and Heating Appliance) from Pro+
 - o Ability to pull certificate data from Pro+ and download the same.
- Version 1.2. Release notes
 - o Modified with new URL for staging environment.
- Version 1.3. Release notes
 - o Production API URL's added to document
- Version 1.4. Release notes
 - o Allow up to 50.000 calls per day
 - o Only allow a single call per client and heating appliance
 - o Returning with successful call the Client and heating appliance IDs
- Version 1.5. Release notes
 - o Ability to Create, Get and Delete work order
 - o Ability to Get Devices
 - o Ability to Create and Get technician
- Version 1.6. Release notes
 - o Minor Corrections
- Version 1.7 Release notes
 - o Spelling correction
- Version 1.8. Release notes:
 - o Support of Cooling Installation in APIs
- Version 1.9. Release notes:
 - o 3 new apis added
 - o Create device api added
 - o Link-unlink api added
 - o Pull client by other properties added
- Version 2.0. Release notes:
 - o Webhook Details Updated
- Version 2.1. Release notes:
 - o Work Order – Added Comments field.
 - o API to retrieve client data based on id, name.

1. Introduction

This document explains the structure of the API (application program interface) that can be used to push or pull Pro+ information such as clients and its associated heating and cooling appliances data, work orders, devices or technicians from your application to Pro+ Web Application or vice versa.

The data that is sent from your CRM to Pro+ can further be utilized in your technician mobile application to perform certifications and later you can fetch back the certificate from Pro+.

2. API Overview

The API would be a medium between your database data and Pro+ application. You can easily migrate your data in and out of application. The API is easy to integrate, and it has just 2 steps to be followed. First is the authentication and second is sending the data or receipt of data.

3. Authentication

Both Push and Pull APIs uses conventional token-based authentication of existing system. Customer can find his/her security key by logging into Pro+ web application and redirecting to security key menu item. If you are not able to see the security key generation then you should contact the administration/support team that would generate it. If generated, you will be able to see it on the security key page.

4. Rate limit

In order to control the access and manage all the request, the limit on call the API requests is set to 50.000 calls/day. Pro+ administrator is authorized to change it anytime. In case this is not enough, please connect with the support team.

5. API Structure and Documentation

API structure is provided at below link. It is important to follow correct structure else you are expected to have failed response from Pro+ server.

Application integrators will first integrate against the Staging environment to verify if it is working as expected or not. Once you have successfully integrated, please proceed to connect with Production/Live application. Both URLs are mentioned below.

- URL against **Staging** environment: <https://stagingapi.testocloud.be/api/documentation>
- URL against **Production** environment: <https://api.testocloud.be/api/documentation>

This document further provides details of each field in the later section.

6. Response Codes

For all requests made, Pro+ will provide a response which are likely to have following codes. The most important ones are listed below.

Status Code	Request Response	Description
200	200: Ok	Every successful request would return this response code
400	400: Bad Request	When an invalid request is made.
500	500: Internal Server Error	When any server error occurs.
401	401: Authentication failed	When user add wrong credentials

In case of 400 or 500, it is important to correct the request. However, if no success, connect with Pro+ support team for more information.

7. Send/Push Data

7.1. POST Push Client Data

7.1.1. Description

This API helps customer to migrate their client and heating/cooling appliance data to the Pro+ system. This API does both operation add and update.

Note : System will consider the request as **update** only in following case

- 1) Third Party Id is same
- 2) If not, Testo Id is same
- 3) if not, Name + Address combination is same.

This applies to both client and appliance level.

7.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/push-client>
- Production: <https://api.testocloud.be/expose/push-client>

7.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

7.1.4. Body

The body shall include client and heating application parameter which are explained in next section. The heating application parameter vary based on applicable region.

7.1.5. Sample Header and Body Structure

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \
--header 'X-expose-secret-key:'
--header 'Content-Type: application/json' \
--data-raw '{
  "client": [
    { "name": "", .....
      "heating_appliance": [
        { "name": " ", .....
          "flanders": {parameters that are applicable for this region}
          "wallonie": {parameters that are applicable for this region}
          "brussels": {parameters that are applicable for this region}
        } ],
      "cooling_appliance": [
        { "name": " ", .....
          "condensors": {parameters that are applicable for condensors}
          "compressors": {parameters that are applicable for compressors}
          "verdampers": {parameters that are applicable for verdampers}
```

}}}}

7.2. Field Description

7.2.1. Client Level Fields

Field Name	Region	Validation	Type	Details
Name	All	Required	String	Name of client
Region	All	Optional	String	Region in which client have heating appliance. Possible values: Brussel, Bruxelles Brüssel, Flamish, Flandre, Flandern, Vlaanderen, Wallonie, Wallonië, Wallonia, Wallonien
brussels_type_1	Brussel	Optional	String	Type of client. Available values Particulier, Medeëigendom, Onderneming, Copropriété, Entreprise
brussels_type_2	Brussel	Optional	String	Type 2 of client Available values Eigenaar, Aanvrager milieuvergunning, Propriétaire, Déclarant, Titulaire permis d'environnement
Address	All	Optional	String	Client's address
City	All	Optional	String	Client's city
postal_code	All	Optional	Integer	Client's postcode
contact_person	All	Optional	String	Client's contact person
Fax	All	Optional	Integer	Client's fax
Phone	All	Optional	Integer	Client's telephone
Email	All	Optional	String	Client's email address
region_type	Brussels	Optional	String	Type
region_preciser	Brussels	Optional	String	Preciser
region_enterprise_name	Brussels	Optional	String	Enterprise name
region_company_name	Brussels, Wallonie	Optional	String	Company name
house_no	All	Optional	String	House number
Post_bus	All	Optional	String	Post bus number
region_kbo	Brussels	Optional	String	KBO no
wallonia_client_type_othe r	Wallonia	Optional	String	Client Type. Available values Eigenaar, Huurder, Anders, Propriétaire, Locataire, Autre, Eigentümer, Mieter,Andere

7.2.2. General Heating Appliance Parameter

Field Name	Region	Validation	Type	Details
same_as_client	All	Optional	String	If heating appliance's address is same as client's. Available values true, false (String not Boolean).
allowMoveOfInstallation	All	Optional	boolean	Available values true, false
Name	All	Required	String	Name of Heating Appliance.
Region	All	Optional	String	Heating appliance's region. Available values 1,2,3. 1 = Brussel,2 = Flamish,3 = Wallonia
Address	All	Optional	String	Address of heating appliance where it is located.
City	All	Optional	String	City of heating appliance where it is located.
Telephone	All	Optional	Integer	Telephone of contact person specific to heating appliance
Email	All	Optional	String	Email of contact person specific to heating appliance
post_code	All	Optional	Integer	Postal Code of heating appliance where it is located.
house_no	All	Optional	String	House number
post_bus	All	Optional	String	Postbus number
thirdparty_street_id	Brussels	Optional	String	Add publicway id from brussels government api
thirdparty_address_id	Brussels	Optional	String	Add adpn id from brussels government api
thirdparty_unit_id	Brussels	Optional	String	Add unit id from brussels government api

7.2.3. Brussel Specific Heating Appliance Parameter

Field Name	Validation	Type	Details
brussels_reason_handling	Optional	String	Reason Handling Available values 0,1,2,3,4. 0= PeriodicChecks ,1= Replacement,2= Installation,3= Confirmity,4= Intervention,5= Relocating,6= Other
brussels_other_reason	Optional	String	
Floor	Optional	String	Installation Floor

building_name	Optional	String	Installation Building name
installation_contact_person	Optional	String	Installation Contact person
occupation_date	Optional	String	yyyy-MM-dd date
installation_email	Optional	String	Installation email
installation_tel	Optional	Integer	Installation telephone
installation_reference_epb_unit	Optional	String	Reference EPB unit
no_environmental_permit	Optional	Integer	No of Environment permit
heating_system_identification	Optional	String	Heating system identification
heating_system_type_one	Optional	String	Heating system type one Available values 0,1. 0 = Type1 ,1= Type2
heating_system_type_two	Optional	String	Heating system type two Available values 0,1,2,3. 0 = Individual ,1= Collective,2=IndividualHeatingApartmentEPB,3=IndividualHeatingEntireBuilding
heating_system_no_of_boilers	Optional	String	Numbers of boilers
heating_system_no_of_building	Optional	String	Numbers of building
heating_system_no_of_epb	Optional (Not applicable any more)	String	Numbers of epb
heating_system_permit_date	Optional	String	Permit date
appliance_type_one	Optional	String	Appliance type one Available values 0,1. 0 = WaterHeater,1 = Boiler
appliance_type_two	Optional	String	Appliance type two Available values 0,1,2. 0 = Heater,1 = ECS , 2= HeaterAndECS,3=UseOnlyInCaseFail
multiple_system_index	Optional	String	Available values 0,1. 0 = Yes,1 = No
appliance_condensing	Optional	String	Appliance condensing Available values 0,1. 0 = Yes,1 = No
appliance_connected_as	Optional	String	Appliance connected as Available values 0,1,2,3,4,5. 0 = TypeA,1 = TypeB1, 2= TypeBOverDruk,3= TypeB,4= TypeC,5= TypeCNonConc,
appliance_connected_as_a	Optional	String	Value if connected as a
appliance_connected_as_b	Optional	String	Value if connected as b

appliance_connected_as_c	Optional	String	Value if connected as c
appliance_fall_detector	Optional	String	Appliance fall detector Available values 0,1. 0 = Yes,1 = No
bicombustible_index	Optional	String	Available values 0,1. 0 = Yes,1 = No
appliance_fuel_type	Optional	String	Appliance fuel type Available values 0,1,2,3,4. 0 = NaturalGas,1 = Propane, 2 = FuelOil, 3 = FuelOil, 4 = FuelOil,
appliance_gas_type_one	Optional	String	Appliance gas type one Available values 0,1,2,3,,4,5. 0 = I2E+,1 = I2N, 2= I2E(S),3=I2E(R),4=Andere,5=Onbekend
appliance_other_gas	Optional	String	Value if other gas type
fuel_mal_function_index	Optional	String	Available values 0,1,2,3,4. 0 = NaturalGas,1 = Propane,2=GasBoiler
appliance_gas_type_two	Optional	String	Appliance gas type two Available values 0,1,2. 0 = NotPremix,1 = Premix,2=GasBoiler
appliance_solid_type	Optional	String	Appliance solid type Available values 0,1,2. 0 = WoodPellets,1 = Logs, 2= Other
appliance_other_solid	Optional	String	Value if other solid type
appliance_exhaust_channel	Optional	String	Appliance exhaust channel Available values 0,1,2. 0= Individual,1= Collective,2= Other
appliance_other_info	Optional	String	Appliance other information
device_name	Optional	String	Device Name
device_plate_present	Optional	String	Device plate present Available values 0,1. 0 = Yes,1 = No
device_make	Optional	String	Device make
device_type	Optional	String	Device type
device_manufacturing_no	Optional	Integer	Device manufacturing number
device_year	Optional	Integer	Device year (4 digit only)
device_nominal_power_min	Optional	Integer	Device nominal power min
device_nominal_power_max	Optional	Integer	Device nominal power max
device_flow_rate	Optional	Integer	Device flow rate
device_unit	Optional	String	Device unit

			Available values 0,1. 0 = Yes,1 = No
burner_power_modulation	Optional	String	Burner power modulation Available values 0,1,2. 0= Traps1,1= Traps2 ,2= Modulating
no_of_traps	Optional	String	no_of_traps
burner_plate_present	Optional	String	Available values 0,1. 0 = Yes,1 = No
burner_make	Optional	String	Burner make
burner_type	Optional	String	Burner type
burner_year	Optional	Integer	Burner year
burner_manufacturing_no	Optional	String	Burner manufacturing number
burner_flow_rate	Optional	String	Burner flow rate
burner_flow_rate_unit	Optional	String	Burner flow rate unit Available values 0,1,2,3. 0= kW ,1= kgh ,2= lh ,3= m3h
burner_flow_rate_max	Optional	String	Burner flow rate max
burner_flow_rate_unit_max	Optional	String	Available values 0,1,2,3. 0= kW ,1= kgh ,2= lh ,3= m3h

7.2.4. Flanders Specific Heating Appliance Parameter

Field Name	Validation	Type	Details
heating_device_type	Optional	String	Heating device type Available values Type B,Type C
type_b	Optional	String	Value if type b
type_c	Optional	String	Value if type c
Fuel	Optional	String	Fuel Available values Gas,Liquid,Fixed
gas_type	Optional	String	Gas type Available values Natural Gas, LPG, Other, Not Premix,Premix,Gas Boiler
solid_fuel	Optional	String	Solid fuel Available values Wood,Logs,Other fuel
other_gas_type	Optional	String	Other gas type
device_year	Optional	Integer	Device year
device_manufacturing_no	Optional	String	Device manufacturing number
device_nominal_power	Optional	Integer	Device nominal power
device_unit	Optional	String	Device unit

			Available values Ja,Nee,Oui,Non,Nein
burner_make	Optional	String	Burner make
burner_type	Optional	String	Burner type
burner_year	Optional	Integer	Burner year
brand_manufacturing_no	Optional	String	Brand manufacturing number
flow_gas	Optional	String	Flow gas
label_gaseous	Optional	String	Label gaseous Available values GasNo, GasWhite, GasHR, GasHRPlus, GasHRTop, GasEnergy
label_liquid	Optional	String	Label liquid Available values LiquidNo, LiquidOptimiz, LiquidOptimizElite, LiquidEnergy
label_fixed	Optional	String	Label fixed Available values FixedNo, FixedEnergy
energy_level	Optional	String	Energy level
post_code	Optional	Integer	Post code
device_fall_detector	Optional	String	Device fall detector
other_solid_fuel	Optional	String	Other solid fuel
gas_type_premix	Optional	String	Gas type premix
device_type	Optional	String	Device type
flow_gas_unit	Optional	String	Flow gas unit

7.2.5. Wallonie Specific Heating Appliance Parameter

Field Name	Validation	Type	Details
device_fall_detector	Optional	String	Device fall detector
client_type	Optional	String	Client Type Available values Eigenaar, Huurder, Anders, Propriétaire, Locataire, Autre, Eigentümer, Mieter, Andere
company_name	Optional	String	Company name
Fax	Optional	Integer	Fax
Fuel	Optional	String	Fuel Available values Solide, Vloeistof, Gas, Solide, Liquide, Gazeux, Fest, Flüssig, Gasförmig
Different	Optional	String	Different
device_no_of_generator	Optional	Integer	Device Number of generator
device_connection	Optional	String	Device connection
device_condensation	Optional	String	Device condensation Available values true, false
device_nameplate	Optional	String	Device name plate Available values true,false
device_type	Optional	String	Device type
device_serial_no	Optional	String	Device serial number
device_nominal_power	Optional	Integer	Device nominal power
burner_select_type	Optional	String	Burner select type Available values 1 Allure, Plusieurs allures, Modulant, Verschillende vlamgangen, Modulerende, 1 Verbrennungsgang,mehrere Verbrennungsgänge (Anzahl:),Erdgas Modulierend
burner_as_gas	Optional	String	Burner as gas Available values Eenheid,Ventilatorbrander,Unit,Air pulsé (séparable),Gebläse (trennbar)
burner_as_single_gas_or_liquid	Optional	String	Burner as single gas or liquid Available values Premix,Non-Premix,Prémix,Non-prémix,Nicht-Premix
burner_make	Optional	String	Burner make
burner_type	Optional	String	Burner type
burner_year	Optional	Integer	Burner year
burner_serial_number	Optional	String	Burner serial number

solid_fuel_type	Optional	String	Solid fuel type Available values Houten pellets,Diesel brandstof,Nat G20-gas,Pellets bois,Gasoil,Gaz nat G20,Holzpellets,Heizöl extra,Erdgas G20,Houtblokken,Extra gasolie,Nat G25-gas,Bûches,Gasoil extra,Gaz nat G25,Holzscheite,Heizöl ultra,Erdgas G25,Houtpellets,Zware brandstof,Propaan,Plaquettes,Fuel lourd,Propane,Hackschnitzel,Schwerer Heizöl,Propan,Granen,Butaan,Céréales,Butane, Getreide,Butan,Steenkool,Charbon,Biogaz,Kohle,Biogas,Anders,Autre,Andere
liquid_fuel_type	Optional	String	Liquid fuel type Available values Houten pellets,Diesel brandstof,Nat G20-gas,Pellets bois,Gasoil,Gaz nat G20,Holzpellets,Heizöl extra,Erdgas G20
gaseous_fuel_type	Optional	String	Gaseous fuel type
device_identification	Optional	String	Device identification
device_connection_type	Optional	String	Device connection type Available values B,connectiontext,C
device_make	Optional	String	Device make
device_year	Optional	Integer	Device year
burner_no_of_type	Optional	String	Burner number of type
central_heating_coolant	Optional	String	Central heating coolant
central_heating_production	Optional	String	Central heating production

7.2.6. Cooling Appliance Parameter

Field Name	Validation	Type	Details
same_as_client	Optional	String	If cooling appliance's address is same as client's. Available values true, false (String not Boolean).
Name	Required	String	Name of Cooling Appliance.
address	Optional	String	Address of cooling appliance where it is located.
City	Optional	String	City of cooling appliance where it is located.
telephone	Optional	Integer	Telephone of contact person specific to cooling appliance
Email	Optional	String	Email of contact person specific to cooling appliance

post_code	Optional	Integer	Postal Code of cooling appliance where it is located.
house_no	Optional	String	House number
commissioning_date	Optional	date	commissioning_date of Cooling Appliance.
brand	Optional	String	Brand of Cooling Appliance.
type	Optional	String	Type of Cooling Appliance.
kind	Optional	String	Kind of Cooling Appliance.
vrw	Optional	Integer	Vrv of Cooling Appliance. Available values : 0,1 0 => yes, 1 => no
refrigerant	Optional	Integer	Refrigerant of Cooling Appliance. Note : GWP will be selected from refrigerant and co2 will be calculated based upon.
kg_precharge	Optional	decimal	Precharge of Cooling Appliance.
kg_startup	Optional	Integer	kg_startup of Cooling Appliance.
hermatically_sealed_sys	Optional	Integer	hermatically_sealed_sys of Cooling Appliance. Available values : 0,1 0 => yes, 1 => no
inspection_frequency	Optional	Integer	inspection_frequency of Cooling Appliance. Available values : 0,3,6,12,24
leak_detection_system	Optional	Integer	leak_detection_system of Cooling Appliance. Available values : 0,1 0 => yes, 1 => no
leak_detection_type	Optional	String	leak_detection_type of Cooling Appliance.
operation	Optional	Integer	Operation value of Cooling Appliance. Available values : 0,1 0 => yes, 1 => no
hd	Optional	String	Hd of Cooling Appliance.
ld	Optional	String	LD of Cooling Appliance.
electrical_connection	Optional	Integer	electrical_connection of Cooling Appliance. Available values : 0,1,2 0 => 230 V - 1 PH - 50 Hz , 1 => 230 V - 3 PH - 50 Hz , 2 => 400 V - 3 PH+N - 50 Hz

7.2.6.1. Condenser Parameter

Field Name	Validation	Type	Details
brand	Required	String	Brand value for condensor
Type	Optional	String	Brand value for condensor
serial_number	Optional	String	Brand value for condensor
Kind	Optional	String	Kind value for condensor Available values : 0,1,2,3 0 => lucht , 1 => water , 2 => verdampingscondensor , 3 => andere
others	Optional	String	Others value for condensor
number_of_fans	Optional	Integer	Number of fans value for condensor

7.2.6.2 Verdamper Parameter

Field Name	Validation	Type	Details
Brand	Required	String	Brand value for Verdamper
Type	Optional	String	Type value for Verdamper
performance	Optional	Number	Performance value for Verdamper Available values : 0,1 0 => luchtkoeler , 1 => waterkoeler
serial_number	Optional	String	Serial Number value for Verdamper
Glycol	Optional	Number	Glycol value for Verdamper Available values :0,1,2 0 => yes, 1 => no, 2 => n/a
cold_room_temperature	Optional	decimal	cold_room_temperature value.
relative_humidity	Optional	decimal	relative_humidity value for Verdamper
number_of_fans	Optional	Integer	number_of_fans value for Verdamper
expansion_valve_brand	Optional	String	expansion_valve_brand value for Verdamper
expansion_valve_type	Optional	String	expansion_valve_type value for Verdamper
expansion_valve_outlet	Optional	String	expansion_valve_outlet value for Verdamper

7.2.6.3 Compressor Parameter

Field Name	Validation	Type	Details
Brand	Optional	String	Brand value for Verdamper
Type	Optional	String	Type value for Verdamper

motor_capacity_control	Optional	Number	Motor apacity control value for Verdamper Available values : 0,1 0 => yes, 1 => no
hd_pressure_switch	Optional	String	Hd pressure switch value for Verdamper
ld_pressure_switch	Optional	String	Ld pressure switch value for Verdamper
oil_pressure_switch_point	Optional	String	Oil pressure switch point value for Verdamper
visual_oil_level_present	Optional	Number	Visual oil level present value for Verdamper Available values : 0,1 0 => yes, 1 => no
crankcase_resistance_current	Optional	String	Crankcase resistance current value for Verdamper
serial_number	Optional	String	Serial number value for Verdamper

7.3. Push Examples

7.3.1. Push Client Data for Brussels Region Heating Appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \
--header 'X-expose-secret-key:
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVkJGZGEwfreferte
3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json' \
--data-raw '{
  "client": [
    {
      "id": null,
      "name": "baertss",
      "region": "Brussel",
      "brussels_type_1": "Eigenaar",
      "brussels_type_2": "Particulier",
      "street": null,
      "city": "harelbeke",
      "postal_code": "8530",
      "contact_person": null,
      "fax": null,
      "phone": "9797",
      "email": "jwjs@jwk.com",
      "region_type": null,
      "region_preciser": null,
      "region_enterprise_name": "bzb",
      "region_company_name": null,
```

```

"house_no": "173",

"region_kbo": "",

"status": "1",

"address": "ommegangstraat 13",

"wallonia_client_type_other": null,

"heating_appliance": [

{

"same_as_client": "1",

"id": null,

"name": "new br ",

"region": "Brussels",

"address": "ommegangstraat 13",

"city": "harelbeke",

"telephone": "9797",

"email": "jwjs@jwk.com",

"post_code": "8530",

"house_no": "173",

"post_bus": "95",

"flanders": null,

"wallonie": null,

"brussels": {

"brussels_reason_handling": "2",

"brussels_other_reason": "",

"company_name": null,

"enterprise_number": null,

"client_type": null,

"client_type2": null,

"floor": "1",

"building_name": "1",

"installation_contact_person": "baert",

"installation_email": "jwjs",

"installation_tel": "9797",

"installation_reference_epb_unit": "1",

"no_environmental_permit": "new br ",

"heating_system_identification": "1",

"heating_system_type_one": "0",

"heating_system_type_two": "0",

"heating_system_no_of_boilers": "",

"heating_system_no_of_building": "",

"heating_system_no_of_epb": "",

"post_bus": "95",

```



```
"heating_system_permit_date": "03/03/2020",
"appliance_type_one": "1",
"appliance_type_two": "0",
"appliance_condensing": "0",
"appliance_connected_as": "1",
"appliance_connected_as_a": null,
"appliance_connected_as_b": "1",
"appliance_connected_as_c": null,
"appliance_fall_detector": "-1",
"appliance_fuel_type": "1",
"appliance_gas_type_one": "-1",
"appliance_other_gas": null,
"appliance_gas_type_two": "-1",
"appliance_solid_type": "-1",
"appliance_other_solid": "",
"appliance_exhaust_channel": "0",
"appliance_other_info": null,
"device_name": "1",
"device_plate_present": "0",
"device_make": "1",
"device_type": "1",
"device_manufacturing_no": "1",
"device_year": "2000",
"device_nominal_power_min": "1",
"device_nominal_power_max": "1",
"device_flow_rate": "1",
"device_unit": "1",
"burner_power_modulation": "-1",
"burner_plate_present": "0",
"burner_make": "1",
"burner_type": "1",
"burner_year": "2000",
"burner_manufacturing_no": "1",
"burner_flow_rate": "1",
"burner_flow_rate_unit": "0"
}
}
]
}
]
}'
```

7.3.2. Push Client Data for Flanders Region Heating Appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENZn2RGZz09liwibWFjIjojNjVkJkZGEwfreferte  
3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json' \
```

```
--data-raw '{
```

```
  "client": {
```

```
    {
```

```
      "id": null,
```

```
      "name": "abasdkml",
```

```
      "region": "Flamish",
```

```
      "brussels_type_1": 0,
```

```
      "brussels_type_2": 0,
```

```
      "wallonia_type": null,
```

```
      "street": null,
```

```
      "city": "kwlqeqm",
```

```
      "postal_code": "1231",
```

```
      "contact_person": null,
```

```
      "fax": null,
```

```
      "phone": "2342342223",
```

```
      "email": "",
```

```
      "house_no": "173",
```

```
      "post_bus": "95",
```

```
      "region_type": null,
```

```
      "region_preciser": null,
```

```
      "region_enterprise_name": null,
```

```
      "region_company_name": null,
```

```
      "region_kbo": null,
```

```
      "status": "1",
```

```
      "logo": null,
```

```
      "address": "wwekrwe",
```

```
      "wallonia_client_type_other": null,
```

```
      "heating_appliance": [
```

```
        {
```

```
          "same_as_client": "1",
```

```
          "id": null,
```

```
          "name": "bgh",
```

```
          "region": "2",
```

```
          "address": "wwekrwe",
```

```
"city": "kwlqeqm",
"telephone": "2342342223",
"email": "",
"post_code": "1231",
"house_no": "173",
"post_bus": "95",
"flanders": {
  "heating_device_type": "1",
  "type_b": null,
  "type_c": "123",
  "fuel": "1",
  "gas_type": null,
  "solid_fuel": null,
  "other_gas_type": null,
  "device_make": "qwei",
  "device_year": "2000",
  "device_manufacturing_no": "qwqw",
  "device_nominal_power": "12",
  "device_unit": 0,
  "burner_make": null,
  "burner_type": null,
  "burner_year": null,
  "brand_manufacturing_no": null,
  "flow_gas": null,
  "label_gaseous": null,
  "label_liquid": "1",
  "label_fixed": null,
  "energy_level": null,
  "post_code": null,
  "device_fall_detector": 0,
  "other_solid_fuel": null,
  "gas_type_premix": null,
  "device_type": "wepro",
  "flow_gas_unit": null
},
"wallonie": null,
"brussels": null
}
]
}
]
```

}

7.3.3. Push Client Data for Wallonie Region Heating Appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwfreferte  
3t33545OTE1ZTNhODE0MjYyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json' \
```

```
--data-raw '{
```

```
  "client": [
```

```
    {
```

```
      "id": null,
```

```
      "name": "qewq",
```

```
      "region": "Wallonia",
```

```
      "brussels_type_1": 0,
```

```
      "brussels_type_2": 0,
```

```
      "wallonia_type": "0",
```

```
      "street": null,
```

```
      "city": "ewfwe",
```

```
      "postal_code": "1312",
```

```
      "contact_person": null,
```

```
      "fax": "17",
```

```
      "phone": "2131212",
```

```
      "email": "wqeqw@eew.wee",
```

```
      "region_type": null,
```

```
        "house_no": "173",
```

```
        "post_bus": "95",
```

```
      "region_preciser": "",
```

```
      "region_enterprise_name": "qweq",
```

```
      "region_company_name": null,
```

```
      "region_kbo": null,
```

```
      "status": "1",
```

```
      "logo": null,
```

```
      "address": "ewqedwq",
```

```
      "wallonia_client_type_other": null,
```

```
      "heating_appliance": [
```

```
        {
```

```
          "same_as_client": "1",
```

```
          "id": null,
```

```
"name": "dfgf",
"region": "3",
"address": "ewqedwq",
"city": "ewfwe",
"telephone": null,
"email": null,
"post_code": "1312",
"house_no": "173",
"post_bus": "95",
"flanders": null,
"wallonie": {
  "device_fall_detector": "-1",
  "client_type": null,
  "company_name": null,
  "fax": null,
  "fuel": "1",
  "different": null,
  "device_no_of_generator": "2342",
  "device_connection": "12",
  "device_condensation": 0,
  "device_nameplate": 0,
  "device_type": "grgr",
  "device_serial_no": "12",
  "device_nominal_power": "54",
  "burner_select_type": "0",
  "burner_as_gas": "1",
  "burner_as_single_gas_or_liquid": null,
  "burner_make": "mx",
  "burner_type": "of",
  "burner_year": "2000",
  "burner_serial_number": "201",
  "solid_fuel_type": null,
  "liquid_fuel_type": "1",
  "gaseous_fuel_type": null,
  "device_identification": "wewr",
  "device_connection_type": "0",
  "device_make": "qwe",
  "device_year": "2000",
  "burner_no_of_type": "",
  "central_heating_coolant": 0,
  "central_heating_production": 0
```

```

    },
    "brussels": null
  }
]
}
]
}

```

7.3.4. Push Client Data for Cooling Appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVkJGZGEwfreferte3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json' \
```

```
--data-raw '{
```

```
  {"client":{
```

```
{
```

```
    "id": null,
```

```
    "name": "4th dec test",
```

```
    "region": "Brussel",
```

```
    "brussels_type_1": "",
```

```
    "brussels_type_2": "",
```

```
    "wallonia_type": "",
```

```
    "street": "",
```

```
    "city": "123",
```

```
    "postal_code": "123",
```

```
      "house_no": "173",
```

```
      "post_bus": "95",
```

```
    "contact_person": "",
```

```
    "fax": "",
```

```
    "phone": "123",
```

```
    "email": "oldapiexpose@wqe.qwe",
```

```
    "region_type": "",
```

```
    "region_preciser": "",
```

```
    "region_enterprise_name": "",
```

```
    "region_company_name": "",
```

```
    "region_kbo": "",
```

```
    "status": 1,
```

```
    "logo": "",
```

```
    "address": "123",
```

```
"cooling_appliance":[
  {
    "id":null,
    "same_as_client": "1",
    "name": "new cool 1"
    "address": "123",
    "city": "123",
    "telephone": null,
    "email": null,
    "post_code": "123",
    "house_no": "173",
    "commissioning_date": "2021-09-24",
    "brand": "12",
    "type": "12",
    "kind": "12",
    "vrv": "1",
    "refrigerant": 2,
    "kg_precharge": "12.00",
    "gwp": "8590.00",
    "co2": "103.0800",
    "kg_startup": "12",
    "hermatically_sealed_sys": "1",
    "inspection_frequency": 6,
    "leak_detection_system": "1",
    "leak_detection_type": null,
    "operation": "0",
    "hd": "2",
    "ld": "1",
    "electrical_connection": 0,
    "condensors": [{
      "id":null,
      "brand": "condensor brand",
      "type": "test",
      "serial_number": "123",
      "kind": "0",
      "others": null,
      "number_of_fans": "123"
    }],
    "verdampers": [{
```

```

        "id": null,
        "brand": "verdamper Brand",
        "type": "test",
        "performance": "0",
        "serial_number": "123",
        "glycol": "0",
        "cold_room_temperature": "3",
        "relative_humidity": "2",
        "number_of_fans": "5",
        "expansion_valve_brand": "test",
        "expansion_valve_type": "test",
        "expansion_valve_outlet": "test"
    }],
    "compressors": [{
        "id": null,
        "brand": "compressor brand",
        "type": "test",
        "motor_capacity_control": "0",
        "hd_pressure_switch": "10",
        "ld_pressure_switch": "10",
        "oil_pressure_switch_point": "test",
        "visual_oil_level_present": "0",
        "crankcase_resistance_current": null,
        "serial_number": "125344"
    }]
}
]
}}}
,

```

7.3.5. Response of Push Client Data

```

{
    "success": true,
    "data": {
        "processed_ids": {
            "client_id": 165358,
            "heating_appliance_id": 138805
        }
    },
    "message": "Success"
}

```



```
}
```

These are some Error Code 400 example responses:

```
{  
  "success": false,  
  "message": "msg.The client field is required."  
}
```

Error Code 500 examle response:

```
{  
  "success": false,  
  "message": "Something went wrong. Please contact Pro+ team."  
}
```

8. Pull Client and Appliance Data

8.1. Get Pull Client Data

8.1.1. Description

This API helps customer to pull their client and appliance data from the Pro+ system. This API filter date ranges and return data created or updated within given date ranges, Date range is limited to 15 days. It also converts some fields in given language.

8.1.2. URL

There are different URLs for Staging and Production:

- tagging: <https://stagingapi.testocloud.be/expose/pull-client> S
- roduction: <https://api.testocloud.be/expose/pull-client> P

8.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

8.1.4. Body

The body shall include following parameter.

Field Name	Valdiation	Type	Details
from_date	Required, Valid Date	Date	Example: 01-04-2020
to_date	Required, Valid Date	Date	Example: 15-04-2020
language	Required	String	nl (Available: nl,fr,de)

8.2. Get Client and Heating Appliance Examples

8.2.1. Request of Get Client and Appliance

```
curl --location --request GET 'https://stagingapi.testocloud.be/expose/pull-client?from_date=2020-04-1&to_date=2020-04-15&language=fr' \
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwZGwreferte3t335450TE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json'
```

8.2.2. Response of Pull Client and Heating Appliance Request

```
{
  "success": true,
  "data": [
    {
      "id": 11875,
      "name": "VJ",
      "region": "Flandre,Bruxelles,Wallonie",
      "brussels_type_1": "0",
```

```
"brussels_type_2": "1",
"street": null,
"city": "C",
"postal_code": "1212",
"contact_person": null,
"fax": null,
"phone": "123123123",
"email": "v@v.com",
"region_type": null,
"region_preciser": null,
"region_enterprise_name": "11",
"region_company_name": null,
  "house_no": "173",
  "post_bus": "95",

"region_kbo": null,
"status": 1,
"address": "A",
"wallonia_type": null,
"created_at": "2020-04-09 02:48:22",
"updated_at": "2020-04-22 11:38:17",
"heating_appliance": [
  {
    "id": 11906,
    "client_id": 11875,
    "same_as_client": "0",
    "name": "TEST",
    "region": "2",
    "address": "A",
    "city": "C",
    "telephone": null,
    "email": null,
    "post_code": "1212",
    "house_no": "173",
    "post_bus": "95",

    "created_at": null,
    "updated_at": null,
    "brussels": null,
    "flanders": {
      "id": 11871,
      "heating_appliance_id": 11906,
      "heating_device_type": "0",
      "type_b": "B",
      "type_c": null,
      "fuel": "1",
      "gas_type": null,
```

```

    "solid_fuel": null,
    "other_gas_type": null,
    "device_type": "T",
    "device_make": "M",
    "device_year": "2000",
    "device_manufacturing_no": "123121",
    "device_nominal_power": "123",
    "device_unit": "1",
    "burner_make": "m",
    "burner_type": "t",
    "burner_year": "2000",
    "brand_manufacturing_no": "11",
    "flow_gas": "12",
    "label_gaseous": null,
    "label_liquid": null,
    "label_fixed": null,
    "energy_level": null,
    "post_code": null,
    "device_fall_detector": "-1",
    "other_solid_fuel": null,
    "gas_type_premix": null,
    "flow_gas_unit": "3"
  },
  "wallonie": null
},
{
  "id": 11907,
  "client_id": 11875,
  "same_as_client": "0",
  "name": "Test2",
  "region": "2",
  "address": "A",
  "city": "C",
  "telephone": null,
  "email": null,
  "post_code": "1212",
  "house_no": "173",
  "post_bus": "95",
  "created_at": null,
  "updated_at": null,
  "brussels": null,
  "flanders": {
    "id": 11870,
    "heating_appliance_id": 11907,
    "heating_device_type": "1",
    "type_b": null,
    "type_c": "C",
    "fuel": "1",

```

```

    "gas_type": null,
    "solid_fuel": null,
    "other_gas_type": null,
    "device_type": "t",
    "device_make": "m",
    "device_year": "2000",
    "device_manufacturing_no": "11",
    "device_nominal_power": "11",
    "device_unit": "0",
    "burner_make": null,
    "burner_type": null,
    "burner_year": null,
    "brand_manufacturing_no": null,
    "flow_gas": null,
    "label_gaseous": null,
    "label_liquid": null,
    "label_fixed": null,
    "energy_level": null,
    "post_code": null,
    "device_fall_detector": "0",
    "other_solid_fuel": null,
    "gas_type_premix": null,
    "flow_gas_unit": "0"
  },
  "wallonie": null
},
{
  "id": 11909,
  "client_id": 11875,
  "same_as_client": "0",
  "name": "1111",
  "region": "1",
  "address": "A",
  "city": "C",
  "telephone": null,
  "email": null,
  "post_code": "1212",
  "house_no": "173",
  "post_bus": "95",
  "created_at": null,
  "updated_at": null,
  "brassels": {
    "id": 89,
    "heating_appliance_id": 11909,
    "company_name": null,
    "company": null,
    "enterprise_number": null,
    "client_type": null,

```

"client_type2": null,
"floor": "2",
"building_name": "1",
"installation_contact_person": "1",
"installation_email": null,
"installation_tel": null,
"installation_reference_epb_unit": "3",
"no_environmental_permit": null,
"heating_system_identification": null,
"brussels_reason_handling": "2",
"brussels_other_reason": null,
"heating_system_type_one": "0",
"heating_system_type_two": "1",
"heating_system_no_of_boilers": null,
"heating_system_no_of_building": null,
"heating_system_no_of_epb": null,
"heating_system_permit_date": "01/01/1900",
"appliance_type_one": "0",
"appliance_type_two": null,
"appliance_condensing": "-1",
"appliance_connected_as": "0",
"appliance_connected_as_a": "1",
"appliance_connected_as_b": null,
"appliance_connected_as_c": null,
"appliance_fall_detector": "-1",
"appliance_fuel_type": "0",
"appliance_gas_type_one": "0",
"appliance_other_gas": null,
"appliance_gas_type_two": "0",
"appliance_solid_type": "-1",
"appliance_other_solid": null,
"appliance_exhaust_channel": "0",
"appliance_other_info": null,
"device_name": "1",
"device_plate_present": "0",
"device_make": "1",
"device_type": "2",
"device_manufacturing_no": "2000",
"device_year": "2001",
"device_nominal_power_min": "11",
"device_nominal_power_max": "12",
"device_flow_rate": "13",
"device_unit": "0",
"burner_power_modulation": "0",
"burner_plate_present": "0",
"burner_make": null,
"burner_type": null,
"burner_year": "2000",

```
        "burner_manufacturing_no": "2001",
        "burner_flow_rate": null,
        "burner_flow_rate_unit": "0"
    },
    "flanders": null,
    "wallonie": null
},
{
    "id": 11911,
    "client_id": 11875,
    "same_as_client": "0",
    "name": "WALL",
    "region": "3",
    "address": "A",
    "city": "C",
    "telephone": null,
    "email": null,
    "post_code": "1212",
    "house_no": "173",
    "post_bus": "95",
    "created_at": null,
    "updated_at": null,
    "brussels": null,
    "flanders": null,
    "wallonie": {
        "id": 48,
        "heating_appliance_id": 11911,
        "client_type": null,
        "company_name": null,
        "company": null,
        "fax": null,
        "sub_fuel_type": null,
        "fuel": "0",
        "different": null,
        "device_no_of_generator": "1",
        "device_connection": "abc",
        "device_identification": null,
        "device_condensation": "1",
        "device_nameplate": "1",
        "device_make": "m",
        "device_type": "t",
        "device_year": "2000",
        "device_serial_no": "20",
        "device_nominal_power": "11",
        "burner_select_type": "0",
        "burner_flame_course": null,
        "burner_as_gas": null,
        "burner_as_single_gas_or_liquid": null,
```

```

        "burner_make": null,
        "burner_type": null,
        "burner_year": null,
        "burner_serial_number": null,
        "solid_fuel_type": "0",
        "liquid_fuel_type": null,
        "gaseous_fuel_type": null,
        "device_connection_type": "0",
        "burner_no_of_type": null,
        "central_heating_coolant": "0",
        "central_heating_production": "0",
        "device_fall_detector": "-1"
    }
},
{
    "id": 11916,
    "client_id": 11875,
    "same_as_client": "1",
    "name": "sbs",
    "region": "1",
    "address": "A",
    "city": "C",
    "telephone": "123123123",
    "email": "v@v.com",
    "post_code": "1212",
    "house_no": "173",
    "post_bus": "95",
    "created_at": null,
    "updated_at": null,
    "brussels": {
        "id": 94,
        "heating_appliance_id": 11916,
        "company_name": null,
        "company": null,
        "enterprise_number": null,
        "client_type": null,
        "client_type2": null,
        "floor": "bsbs",
        "building_name": "ab",
        "installation_contact_person": "VJ",
        "installation_email": "v@v.com",
        "installation_tel": "123123123",
        "installation_reference_epb_unit": "nan",
        "no_environmental_permit": "bs",
        "heating_system_identification": "bssb",
        "brussels_reason_handling": "2",
        "brussels_other_reason": null,
        "heating_system_type_one": "0",

```



```

    "heating_system_type_two": "0",
    "heating_system_no_of_boilers": null,
    "heating_system_no_of_building": null,
    "heating_system_no_of_epb": null,
    "heating_system_permit_date": "16/04/2020",
    "appliance_type_one": "1",
    "appliance_type_two": "0",
    "appliance_condensing": "0",
    "appliance_connected_as": "1",
    "appliance_connected_as_a": null,
    "appliance_connected_as_b": "text bbbb",
    "appliance_connected_as_c": null,
    "appliance_fall_detector": "-1",
    "appliance_fuel_type": "1",
    "appliance_gas_type_one": "-1",
    "appliance_other_gas": null,
    "appliance_gas_type_two": "-1",
    "appliance_solid_type": "-1",
    "appliance_other_solid": null,
    "appliance_exhaust_channel": "0",
    "appliance_other_info": null,
    "device_name": "nj",
    "device_plate_present": "0",
    "device_make": "n",
    "device_type": "n",
    "device_manufacturing_no": "n",
    "device_year": "2000",
    "device_nominal_power_min": "6",
    "device_nominal_power_max": "7",
    "device_flow_rate": "7",
    "device_unit": "1",
    "burner_power_modulation": "0",
    "burner_plate_present": "0",
    "burner_make": "merk",
    "burner_type": "rjrjf",
    "burner_year": "2000",
    "burner_manufacturing_no": "rbrbr",
    "burner_flow_rate": "1000",
    "burner_flow_rate_unit": "1"
  },
  "flanders": null,
  "wallonie": null
}
]
}
],
"message": "Success"
}

```

8.3. Get Client and Cooling Appliance Examples

8.2.1. Request of Get Client and Cooling Appliance

```
curl --location --request GET 'https://stagingapi.testocloud.be/expose/pull-client?from_date=2020-04-1&to_date=2020-04-15&language=fr' \
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwfreferte3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json'
```

8.2.2. Response of Pull Client and Cooling Appliance Request

```
{
  "success": true,
  "data": [
    {
      "id": 954,
      "name": "new cool expose",
      "region": "",
      "brussels_type_1": null,
      "brussels_type_2": null,
      "street": null,
      "city": "123",
      "postal_code": "123",
      "contact_person": null,
      "house_no": "173",
      "post_bus": "95",
      "fax": null,
      "phone": "123",
      "email": "qwe@wqe.qwe",
      "region_type": null,
      "region_preciser": null,
      "region_enterprise_name": null,
      "region_company_name": null,
      "region_kbo": null,
      "status": 1,
      "address": "123",
      "wallonia_type": null,
      "created_at": "2021-11-30 12:51:36",
      "updated_at": "2021-09-24 14:12:54",
      "heating_appliance": [],
      "cooling_appliance": [
        {
          "id": 24,
          "mobile_cooling_appliance_id": null,
          "mobile_cooling_appliance_page4_id": null,

```

```
"client_id": 954,
"same_as_client": "1",
"name": "new cool 1",
"region": null,
"address": "123",
"city": "123",
"telephone": null,
"email": null,
"post_code": "123",
"house_no": "173",
"certification_date": null,
"next_certification_date": null,
"created_at": "2021-11-30 12:51:36",
"updated_at": "2021-09-24 14:12:54",
"commissioning_date": "2021-09-24",
"brand": "12",
"type": "12",
"kind": "12",
"vrv": "1",
"refrigerant": 2,
"kg_precharge": "12.00",
"gwp": "8590.00",
"co2": "103.0800",
"kg_startup": "12",
"hermatically_sealed_sys": "1",
"inspection_frequency": 6,
"leak_detection_system": "1",
"leak_detection_type": null,
"operation": "0",
"hd": "2",
"id": "1",
"electrical_connection": 0,
"condensors": {
  "id": 62,
  "mobile_condensor_id": null,
  "cooling_appliance_id": 24,
  "brand": null,
  "type": null,
  "serial_number": null,
  "kind": null,
  "others": null,
  "number_of_fans": null,
  "created_at": "2021-11-30 12:51:36",
  "updated_at": "2021-11-30 12:51:36"
},
"verdampers": {
  "id": 36,
  "mobile_verdamper_id": null,
```

```
    "cooling_appliance_id": 24,
    "brand": null,
    "type": null,
    "performance": null,
    "serial_number": null,
    "glycol": null,
    "cold_room_temperature": null,
    "relative_humidity": null,
    "number_of_fans": null,
    "expansion_valve_brand": null,
    "expansion_valve_type": null,
    "expansion_valve_outlet": null,
    "created_at": "2021-11-30 12:51:36",
    "updated_at": "2021-11-30 12:51:36"
  },
  "compressors": {
    "id": 33,
    "mobile_compressor_id": null,
    "cooling_appliance_id": 24,
    "brand": null,
    "type": null,
    "motor_capacity_control": null,
    "hd_pressure_switch": null,
    "ld_pressure_switch": null,
    "oil_pressure_switch_point": null,
    "visual_oil_level_present": null,
    "crankcase_resistance_current": null,
    "created_at": "2021-11-30 12:51:36",
    "updated_at": "2021-11-30 12:51:36",
    "serial_number": null
  }
}
]
}
],
"message": "Success"
}"
```

9. Pull Certificate Documents

9.1. Get Pull Client Data

9.1.1. Description

This API helps customer to pull their appliance's certificate data from the Pro+ system. This API returns ids of certificate files documents and its images. This Ids were used to download them from download api.

9.1.2. URL

There are different URLs for Staging and Production:

- S
taging: <https://stagingapi.testocloud.be/expose/pull-certificates>
- P
roduction: <https://api.testocloud.be/expose/pull-certificates>

9.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

9.1.4. Body

The body shall include following parameter.

Field Name	Valdiation	Type	Details
from_date	Required, Valid Date	Date	Example: 01-04-2020
to_date	Required, Valid Date	Date	Example: 15-04-2020

9.2. Get Certificate Examples

9.2.1. Request of Pull Certificate

```
curl --location --request GET 'https://stagingapi.testocloud.be/expose/pull-certificates?from_date=2020-04-2&to_date=2020-04-16' \  
--header 'X-expose-secret-key: eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIslnZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwfreferte3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \  
--header 'Content-Type: application/json'
```

9.2.2. Response of Pull Certificate Request

```
{  
  "success": true,  
  "data": [  
    {  
      "id": 90,  
      "client_id": 11875,  
      "client_heating_appliance_id": 11911,  
      "type": "periodic",  
      "status": 1,  
      "certification_date": "22-04-2020",  
    }  
  ]  
}
```

```
"next_certification_date": "22-04-2021",
"client_name": "VJ",
"heating_appliance_name": "WALL",
"certificate_files": [
  {
    "id": 272,
    "doc": "1587555506.json"
  },
  {
    "id": 273,
    "doc": "22042020_1708_0_VJ_Périodiquement_FR.pdf"
  }
],
"certificate_images": [
  {
    "id": 23,
    "image": "22042020.jpg"
  }
]
},
"message": "Success"
}
```

10. Download Certificate Documents

10.1. Get Pull Client Data

10.1.1. Description

This API helps customer to download their appliance certificate docs and its images from the Pro+ system. Customer just need to pass document id got from pull certificate api and its doc type.

10.1.2. URL

There are different URLs for Staging and Production:

- tagging: <https://stagingapi.testocloud.be/expose/download-certificates> S
- roduction: <https://api.testocloud.be/expose/download-certificates> P

10.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

10.1.4. Body

The body shall include following parameter.

Field Name	Valdiation	Type	Details
document_id	Required	Number	Example: 123
Type	Required	String	doc (Available values: doc, image)

10.2. Get Certificate Examples

10.2.1. Request of Download Certificate

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-client' \  
--header 'X-expose-secret-key: eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjoIbjVkbGEwZGwreferte3t33545OTE1ZTNhODE0MjYyYjYjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "document_id":123,  
  "type":"doc"  
}'
```

10.2.2. Response of Download Certificate

A file blob will be return with proper header.

10.2.3. Need example of add / update i.e. first without ID and same example with I'd to show update of data

```
curl -X POST \  
http://%7B%7Btesto-expose%7D%7Dpush-client \  
-H 'cache-control: no-cache' \  
-H 'content-type: application/json' \  
-H 'postman-token: e3f7cc2b-8525-6a59-2746-efef2aa17039' \  

```

```
-H 'x-expose-secret-key: {{expose_token}}' \
-d '{
  "client": [
    {
      "id": "123"
      "name": "test cust name 22",
      "region": "Wallonie",
      "brussels_type_1": null,
      "brussels_type_2": null,
      "street": null,
      "city": "test cust city",
      "postal_code": 2610,
      "contact_person": null,
      "fax": null,
      "phone": 612380000,
      "email": "a@a.net",
      "region_type": null,
      "region_preciser": null,
      "region_enterprise_name": null,
      "region_company_name": null,
      "region_kbo": null,
      "status": "1",
      "address": "test cust addr",
      "wallonia_client_type_other": null,
      "heating_appliance": [
        {
          "same_as_client": "false",
          "id": null,
          "name": "0303 235",
          "region": "3",
          "address": "test adr3 235",
          "city": "test city3",
          "telephone": 612380000,
          "email": "y@y.net",
          "post_code": 1234,
          "flanders": null,
          "wallonie": {
            "device_fall_detector": null,
            "client_type": null,
            "company_name": "test 3 manu",
            "fax": null,
```



```
"fuel": null,
"different": null,
"device_no_of_generator": null,
"device_connection": null,
"device_condensation": null,
"device_nameplate": "test3 desc",
"device_type": "test3 type desc",
"device_serial_no": "0202",
"device_nominal_power": null,
"burner_select_type": null,
"burner_as_gas": null,
"burner_as_single_gas_or_liquid": null,
"burner_make": null,
"burner_type": null,
"burner_year": null,
"burner_serial_number": null,
"solid_fuel_type": null,
"liquid_fuel_type": null,
"gaseous_fuel_type": null,
"device_identification": "test3 type",
"device_connection_type": null,
"device_make": null,
"device_year": null,
"burner_no_of_type": null,
"central_heating_coolant": null,
"central_heating_production": null
},
"brussels": null
}
]
}
]
}'
```

11. Create Work order API

11.1. Create work order

11.1.1. Description

This API helps customer to create work order into Pro+ system. Customer just need to pass all the details related to work order.

11.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/push-wo>
- Production: <https://api.testocloud.be/expose/push-wo>

11.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

11.1.4. Body

The body shall include following parameter.

Field Name	Valdiation	Type	Details
external_id	Required	Number	Your system's Work Order id Example: 123
external_name	Required	String	Your system's Work Order name Example: abc
execution_date	Required	Date	Date on Execution Example: 2021-02-12
heating_appliance_id	Required	Number	Pro+'s Heating Appliance Id Example: 1 Note : set heating appliance id as "0" for creating work order for cooling appliance
certification_type	Required	String	Certification Type Example: new,periodic
certification_language	Required	String	Certification Language specific to region Example: nl,fr,de
contracting_company	Required	Number	Pro+'s Contracting Company id if applicable. Else send 0 Example: 1
start_time	Optional	Time	WO's Start Time Example: 11:11
technician_id	Optional	Number	Pro+'s Technician Id Example: 1
appliance_group	Optional	Number	1 => heating, 2=> cooling Example: 1

cooling_appliance_id	Optional	Number	Cooling appliance id, Example : 1
Comments	Optional	String	Comment text

11.2. push Work-order Examples

11.2.1. Request of push work order for heating appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-wo' \
--header 'X-expose-secret-key:
eyJpdil6lIFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGZGwreferte
3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json' \
--data-raw {
  "external_id": "123",
  "external_name": "abc",
  "execution_date": "2021-02-12",
  "heating_appliance_id": 1,
  "certification_type": "new",
  "certification_language": "nl",
  "contracting_company": 1,
  "start_time": "11:12",
  "technician_id": 1
  "comments": "new workorder"
}
```

11.2.2. Request of push work order for cooling appliance

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/push-wo' \
--header 'X-expose-secret-key:
eyJpdil6lIFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGZGwreferte
3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json' \
--data-raw {
  "external_id": "123",
  "external_name": "abc",
  "execution_date": "2021-02-12",
  "heating_appliance_id": 0,
  "certification_type": "maintenance",
  "certification_language": "nl",
  "contracting_company": 1,
  "start_time": "11:12",
  "technician_id": 1,
  "appliance_group": "2",
  "cooling_appliance_id": "6"
  "comments": "new workorder"
}
```

11.2.2. Response of push wo

```
{
  "success": true,
  "data": {
    "id": 13,
    "wo_number": "tjk",
    "external_id": "15",
    "client_id": 1,
    "heating_appliance_id": 11,
    "assigned_to": 5,
    "status": 1,
    "certification_date": null,
    "certification_type": "new",
    "certification_language": "nl",
    "certification_region": "2",
    "contracting_company": 0,
    "execution_date": "2021-02-12",
    "comments": null,
    "created_at": "2021-04-01 06:33:07",
    "updated_at": "2021-05-12 09:01:51",
    "customer_id": 1,
    "start_time": "11:12"
  },
  "message": "Success"
}
```

12. Get Work order API

12.1. Get work order

12.1.1. Description

This API helps customer to get work order details from Pro+ system. Customer just need to pass request related to work order.

12.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/get-wo>

- Production: <https://api.testocloud.be/expose/get-wo>

12.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

12.1.4. Body

The body shall include on if the following parameter.

Field Name	Valdiation	Type	Details
Id	Required	Number	Example: 1
external_id	Optional	Number	Example: 1
external_name	Optional	String	Example:abc

12.2. Get Work-order Examples

12.2.1. Request of get work order

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/get-wo' \
--header 'X-expose-secret-key:
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjoiNjVhZGEwfreferte
3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json' \
--data-raw {
  "id": "1",
  "external_id": "1"
}
```

12.2.2. Response of get wo

```
{
  "success": true,
  "data": {
    "id": 13,
    "wo_number": "tjk",
    "external_id": "15",
    "client_id": 1,
    "appliance_group": "1",
    "heating_appliance_id": 11,
    "assigned_to": 5,
    "status": 1,
    "certification_date": null,
    "certification_type": "new",
```

```

    "certification_language": "nl",
    "certification_region": "2",
    "contracting_company": 0,
    "execution_date": "2021-02-12",
    "comments": null,
    "created_at": "2021-04-01 06:33:07",
    "updated_at": "2021-05-12 09:01:51",
    "customer_id": 1,
    "start_time": "11:12"
  },
  "message": "Work order retrieved successfully."
}

```

13. Delete Work order API

13.1. Delete work order

13.1.1. Description

This API helps customer to delete work order from Pro+ system. Customer just need to pass request related to work order.

13.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/delete-wo>
- Production: <https://api.testocloud.be/expose/delete-wo>

13.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

13.1.4. Body

The body shall include on of the following parameter.

Field Name	Valdiation	Type	Details
id	Required	Number	Pro+'s WO Id Example: 1
external_id	Optional	Number	Your system's WO id Example: 1
external_name	Optional	String	Your system's WO name Example: abc

13.2. Delete Work-order Examples

13.2.1. Request of delete work order

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/delete-wo' \
--header 'X-expose-secret-key:
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjljoiNjVkZGEwfreferte
3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json' \
--data-raw {
  "id": "1",
  "external_id": "1",
  "external_name": "abc"
}
```

13.2.2. Response of delete wo

```
{
  "success": true,
  "data": [],
  "message": "msg.Work order deleted."
}
```

14. Get Devices API

14.1. Get Devices

14.1.1. Description

This API helps customer to get devices information from Pro+ system. Customer just need to request to url.

14.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/get-devices>
- Production: <https://api.testocloud.be/expose/get-devices>

14.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

14.1.4. Body

Nothing to be passed in request

14.2. Get devices Examples

14.2.1. Request of get work order

```
curl --location --request GET 'https://stagingapi.testocloud.be/expose/get-devices' \  
--header 'X-expose-secret-key: eyJpdil6IIIFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbnVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjoiNjVhZGEwfreferte3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \  
--header 'Content-Type: application/json' \  

```

14.2.2. Response of get devices

```
{  
  "success": true,  
  "data": [  
    {  
      "id": 1,  
      "customer_id": 1,  
      "type": "1",  
      "device_group": 2,  
      "serial_number": "111",  
      "purchase_date": "2021-01-04",  
      "mfg_date": "2020-01-09",  
      "status": 1,  

```



```
"created_at": "2021-01-04 09:59:24",
"updated_at": "2021-01-04 09:59:24",
"assigned_technicians": [
  {
    "id": 3,
    "device_id": 1,
    "technician_id": 5,
    "associated_on": "2021-03-23 01:00:43",
    "removed_on": null,
    "created_at": "2021-03-23 13:00:43",
    "updated_at": "2021-03-23 13:00:43"
  }
],
{
  "id": 9,
  "customer_id": 5,
  "type": "2",
  "device_group": 2,
  "serial_number": "2584",
  "purchase_date": "2021-04-18",
  "mfg_date": "2021-04-09",
  "status": 1,
  "created_at": "2021-04-19 11:45:33",
  "updated_at": "2021-04-19 11:45:33",
  "assigned_technicians": []
},
{
  "id": 10,
  "customer_id": 5,
  "type": "2",
  "device_group": 2,
  "serial_number": "1653",
  "purchase_date": "2021-04-09",
  "mfg_date": "2021-04-21",
```

```
"status": 1,  
  "created_at": "2021-04-19 11:45:44",  
  "updated_at": "2021-04-19 11:45:44",  
  "assigned_technicians": []  
},  
  
"message": "msg.Devices retrieved successfully."  
}
```

15. Create Technician API

15.1. Create Technician

15.1.1. Description

This API helps customer to create technician in Pro+ system. Customer can pass relevant information using this api.

15.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/create-technician>
- Production: <https://api.testocloud.be/expose/create-technician>

15.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

15.1.4. Body Example

```
--data-raw '{
  "id": "",
    "external_id": "11487",
    "name": "Technician123",
    "mobile": "488000203",
    "email": "jan.haepers@cozie2.be",
    "status": "1",
    "wo_status": "1",
    "technical_information": {
      "authorised_technician": 0,
      "chimney_sweep": "1",
      "heating_adviser": ["Type 1"],
      "works_for_oca": "1"
    },
    "certificates": [
      {
        "region": 1,
        "type": 0,
        "number": "5000"
      },
      {
        "region": 1,
        "type": 0,
        "number": "5000"
      }
    ]
}
```

```

    }
  ],
  "devices": [
    {
      "id": 123,
      "action": "add"
    },
    {
      "id": 456,
      "action": "remove"
    }
  ]
}

```

15.2 Field Description

15.2.1. Technician Level Fields

Field Name	Valdiation	Type	Details
id	Optional	Number	Pro+'s Technician Id Example: 1
external_id	Required	String	Your system's Technician Id Example: 1a1
name	Required	String	Technician Name Example: abc
mobile	Required	String	Contact Number Example: 488000203
email	Required	String	Email Example: test@test.com
status	Optional	Number	Active/Inactive Status Example : 0 Available Values: 0,1
wo_status	Optional	Number	Working Mode of Technician Example : 1 Available Values: 1 = WO mode ,2 = Standard mode

15.2.2. technical_information Level Fields

Field Name	Valdiation	Type	Details
authorised_technician	Required	Number	Is Authorised Technician Check

			Example: 1, 1=Yes,0=no
chimney_sweep	Required	Number	Chimney Sweep Check Example: 0,1=Yes,0=no
heating_adviser	Required	String	Heating Adviser Type Example: ["Type 1"],["Type 2"],["Type 1","Type 2"]
works_for_oca	Required	Number	Works for OCA Check Example: 0,1=Yes,0=no

15.2.3. certificates Level Fields

Field Name	Valdiation	Type	Details
region	Required	Number	Applicable Region Example:Brussels Available values : Brussels,Flamish,Wallonia
type	Required	Number	Example: 0 Id value from below applicable region Flamish : [], Brussels : [], Wallonia : []
number	Required	String	Example: ["Type 1"],["Type 2"],["Type 1","Type 2"]

15.2.4. devices Level Fields

Field Name	Valdiation	Type	Details
id	Required	Number	Pro+'s Associated Device Id Example: 1
action	Required	String	Example: associate

			Available values : associate, remove
--	--	--	--------------------------------------

15.3. Create Technician Examples

15.3.1. Request of create technician

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/create-technician/
```

```
--header 'X-expose-secret-key:
```

```
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbnVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjoibVZGEwfreferfe3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
```

```
--header 'Content-Type: application/json' \
```

```
{
  "id": "",
  "external_id": "123",
  "name": "Technician123",
  "mobile": "1212121212",
  "email": "test@test@test.com",
  "status": "1",
  "wo_status": "1",
  "identification_number": "12345"
  "technical_information":
    {
      "authorised_technician": 0,
      "chimney_sweep": "1",
      "heating_adviser": ["Type 1"],
      "works_for_oca": "1"
    }
  ,
  "certificates": [
    {
      "region": "Flamish",
      "type": 0,
      "number": "5000"
    },
    {
      "region": "Flamish",
      "type": 1,
      "number": "50200"
    }
  ]
  ,
  "devices": [
    {
      "id": 1,
      "action": "associate"
```

```
}  
]  
}
```

15.3.2. Response of create technician

```
{  
  "success": true,  
  "data": {  
    "id": 19,  
    "customer_id": 2,  
    "user_id": 26,  
    "name": "Technician123",  
    "mobile": "488000203",  
    "email": "jan.haepers@cozie2.be",  
    "status": true,  
    "created_at": "2021-04-29 08:57:54",  
    "updated_at": "2021-04-29 08:57:54",  
    "wo_status": "1",  
    "external_id": "11487",  
    "can_technician_send_email": null,  
    "can_send_to_brussels": null,  
    "identification_number": "12345"  
    "technician_technical_information": [  
      {  
        "id": 234,  
        "technician_id": 19,  
        "field_name": "Authorized technician",  
        "field_type": "boolean",  
        "field_value": "0",  
        "created_at": null,  
        "updated_at": null  
      },  
      {  
        "id": 235,  
        "technician_id": 19,  
        "field_name": "Chimney Sweep",
```

```
"field_type": "boolean",
"field_value": "1",
"created_at": null,
"updated_at": null
},
{
  "id": 236,
  "technician_id": 19,
  "field_name": "Heating Adviser",
  "field_type": "checkbox",
  "field_value": "[\"Type 1\"]",
  "created_at": null,
  "updated_at": null
},
{
  "id": 237,
  "technician_id": 19,
  "field_name": "Works for an OCA",
  "field_type": "boolean",
  "field_value": "1",
  "created_at": null,
  "updated_at": null
}
],
"technician_recognition_numbers": [
  {
    "id": 2,
    "technician_id": 19,
    "region": "Brussels",
    "type": "0",
    "number": "5000",
    "created_at": "2021-04-29 09:02:25",
    "updated_at": "2021-04-29 09:02:25"
  },
  {
```



```
    "id": 3,  
    "technician_id": 19,  
    "region": "Brussels",  
    "type": "1",  
    "number": "50200",  
    "created_at": "2021-04-29 10:50:01",  
    "updated_at": "2021-04-29 10:50:01"  
  }  
]  
,  
  "message": "msg.Technician created successfully."  
}
```

16. Get Technician API

16.1. Get Technician

16.1.1. Description

This API helps customer to get technician information from Pro+ system. Customer just need to request to url and pass required parameters.

16.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/get-technician>
- Production: <https://api.testocloud.be/expose/get-technician>

16.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

16.1.4. Body

```
--data-raw '{  
  "id": "1",  
  "external_id": "1",  
  "external_name": ""  
}
```

16.2. Get Technician Examples

16.2.1. Request of get technician

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/get-technician/  
--header 'X-expose-secret-key:  
eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09IiwibWFjIjojNjVhZGEwfreferte  
3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465'  
--header 'Content-Type: application/json' \  
  
--data-raw '{  
  "id": "1",  
  "external_id": "1",  
  "external_name": ""  
}
```

16.2.2. Response of get technician

```
{  
  "success": true,  
  "data": {  
    "id": 19,  
    "customer_id": 2,
```

```
"user_id": 26,
"name": "Technician123",
"mobile": "488000203",
"email": "jan.haepers@cozie2.be",
"status": true,
"created_at": "2021-04-29 08:57:54",
"updated_at": "2021-04-29 08:57:54",
"wo_status": "1",
"external_id": "11487",
"can_technician_send_email": null,
"can_send_to_brussels": null,
"identification_number": "12345",
"technician_recognition_numbers": [
  {
    "id": 2,
    "technician_id": 19,
    "region": "Brussels",
    "type": "0",
    "number": "5000",
    "created_at": "2021-04-29 09:02:25",
    "updated_at": "2021-04-29 09:02:25"
  },
  {
    "id": 3,
    "technician_id": 19,
    "region": "Brussels",
    "type": "1",
    "number": "50200",
    "created_at": "2021-04-29 10:50:01",
    "updated_at": "2021-04-29 10:50:01"
  }
],
"technician_technical_information": [
  {
    "id": 234,
```

```
"technician_id": 19,
"field_name": "Authorized technician",
"field_type": "boolean",
"field_value": "0",
"created_at": null,
"updated_at": null
},
{
  "id": 235,
  "technician_id": 19,
  "field_name": "Chimney Sweep",
  "field_type": "boolean",
  "field_value": "1",
  "created_at": null,
  "updated_at": null
},
{
  "id": 236,
  "technician_id": 19,
  "field_name": "Heating Adviser",
  "field_type": "checkbox",
  "field_value": "[\"Type 1\"]",
  "created_at": null,
  "updated_at": null
},
{
  "id": 237,
  "technician_id": 19,
  "field_name": "Works for an OCA",
  "field_type": "boolean",
  "field_value": "1",
  "created_at": null,
  "updated_at": null
}
]
```

```

    },
    "message": "msg.Technician retrieved successfully."
}

```

17. Pull Certificate by Workorder Documents

17.1. Get Pull Certificate Data

17.1.1. Description

This API helps customer to pull their appliance's certificate data from the Pro+ system. This API returns ids of certificate files documents and its images. This Ids were used to download them from download api.

17.1.2. URL

There are different URLs for Staging and Production:

- Staging: <https://stagingapi.testocloud.be/expose/pull-certificates-by-wo>
- Production: <https://api.testocloud.be/expose/pull-certificates-by-wo>

17.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

17.1.4. Body

The body shall include following parameter.

Field Name	Valdiation	Type	Details
wo_number	Required,	String	Example: test1

17.2. Get Certificate Examples

9.2.1. Request of Pull Certificate by wo

```

curl --location --request GET 'https://stagingapi.testocloud.be/expose/pull-certificates-by-wo?wo_number=test1' \
--header 'X-expose-secret-key: eyJpdil6lIFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwfreferte3t33545OTE1ZTNhODE0MjJkYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \
--header 'Content-Type: application/json'

```

17.2.2. Response of Pull Certificate by wo Request

```

{
  "success": true,
  "data": [
    {
      "id": 90,
      "client_id": 11875,
      "client_heating_appliance_id": 11911,
      "type": "periodic",
      "status": 1,

```

```

"certification_date": "22-04-2020",
"next_certification_date": "22-04-2021",
"client_name": "VJ",
"heating_appliance_name": "WALL",
"certificate_files": [
  {
    "id": 272,
    "doc": "1587555506.json"
  },
  {
    "id": 273,
    "doc": "22042020_1708_0_VJ_Périodiquement_FR.pdf"
  }
],
"certificate_images": [
  {
    "id": 23,
    "image": "22042020.jpg"
  }
]
],
"message": "Success"
}

```

18. Pull Client by other properties API

18.1. pull Client

18.1.1. Description

This API helps customer to pull client details from Pro+ system. Customer just need to pass request related to c.

18.1.2. URL

There are different URLs for Staging and Production:

Staging: <https://stagingapi.testocloud.be/expose/pull-client-by-other-properties>

Production: <https://api.testocloud.be/expose/pull-client-by-other-properties>

18.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

18.1.4. Body

The body shall include on if the following parameter.

Field Name	Valdiation	Type	Details
------------	------------	------	---------


```

    "created_at": "2021-11-19 17:28:14",
    "updated_at": "2021-11-19 17:28:14",
    "heating_appliance": [],
    "cooling_appliance": [],
  }
},
"message": "Success"
}

```

19. Create device API

19.1. Create Device

19.1.1. Description

This API helps customer to create device for Pro+ system. Customer just need to pass request related to c.

19.1.2. URL

There are different URLs for Staging and Production:

Staging: <https://stagingapi.testocloud.be/expose/create-device>

Production: <https://api.testocloud.be/expose/create-device>

19.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

19.1.4. Body

The body shall include on if the following parameter.

Field Name	Valdiation	Type	Details
device_group	Required	String	Example: 1 (Available values : 1 - heating ,2 - cooling)
type	Required	String	Example: 1 (Available values :1=>Testo 300,2 =>Testo 330,3=>Testo 557s)
serial_number	Required	String	Example: abc
purchase_date	Required	Date	Example:2022-4-8
mfg_date	Required	Date	Example:2022-4-8

19.2. Create Device Examples

19.2.1. Request of Create Device

```

curl --location --request POST 'https://stagingapi.testocloud.be/expose/create-device' \
--header 'X-expose-secret-key: eyJpdil6IIFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGZGEwJfreferte3t33545OTE1ZTNhODE0MjY2OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \

```


--header 'Content-Type: application/json'

19.2.2. Response of Create Device

```
{
  "success": true,
  "data": [
    {
      "id": 80300,
      "name": "VJ",
      "region": "2",
      "brussels_type_1": "",
      "brussels_type_2": "",
      "street": "",
      "city": "AH",
      "postal_code": "1212",
      "contact_person": "",
      "fax": "",
      "phone": "12312312",
      "email": "vardhman@yopmail.com",
      "region_type": "",
      "region_preciser": "",
      "region_enterprise_name": "12",
      "region_company_name": "",
      "region_kbo": "",
      "status": "1",
      "address": "VJ",
      "wallonia_type": "",
      "created_at": "2021-11-19 17:28:14",
      "updated_at": "2021-11-19 17:28:14",
      "heating_appliance": [],
      "cooling_appliance": [],
    }
  ],
  "message": "Success"
}
```

20.Link unlink device API

20.1. Link unlink Device

20.1.1. Description

This API helps customer to associate device to the technician Pro+ system. Customer just need to pass request related to c.

20.1.2. URL

There are different URLs for Staging and Production:

Staging: <https://stagingapi.testocloud.be/expose/link-unlink-device>

Production: <https://api.testocloud.be/expose/link-unlink-device>

20.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

20.1.4. Body

The body shall include on if the following parameter.

Field Name	Valdiation	Type	Details
device_id	Required	String	Example: 1
technician_id	Required	String	Example: 1
action	Required	String	Example: link/unlink

20.2. Link-unlink device Examples

20.2.1. Request of Link-unlink device

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/link-unlink-device' \  
--header 'X-expose-secret-key: eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSlslnZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjIjojNjVhZGEwfreferte3t33545OTE1ZTNhODE0MjY1OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZiZCJ1465' \  
--header 'Content-Type: application/json' \  
--data-raw { \  
  "device_id": "1", \  
  "technician_id": "1", \  
  "action": "link" \  
}
```

20.2.2. Response of Link-unlink device

```
{ \  
  "success": true, \  
  "data": [], \  
  "message": "msg.Device linked successfully." \  
}
```

21. Webhook

21.1. Webhook Details

21.1.1. Description

This is a request that will be send to receiver in the form of Webhook .

21.1.2. URL

The URL will be the one which is set in customer profile of Pro+ portal.

21.1.4. Body

The body will include following parameter.

Field Name	Details
Id	Workorder id
wo_number	Value for workorder number
external_id	Value for external id for workorder
execution_date	Value for execution date for workorder.
certificate_id	Value for certificate pdf document id.
json_id	Value for certificate json document id.
Status	Value for status of workorder.
vat_id	Value for certificate vat document id.
technician_id	Value for certificate technician id.

22. Pull Client (By Pro+ Id, Name, Phone, Email, Third Party Id)

22.1. Pull Client

22.1.1. Description

This API helps customer to pull client details from Pro+ system. Customer just need to pass request related to c.

22.1.2. URL

There are different URLs for Staging and Production:

Staging: <https://stagingapi.testocloud.be/expose/pull-client-ha-ca?language=fr&name=test %26 ccc>

Production: <https://api.testocloud.be/expose/pull-client-ha-ca?language=fr&name=test %26 ccc>

22.1.3. Headers

X-expose-secret-key [Security Key]

Content-Type application/json

22.1.4. Body

The body shall include on if the following parameter.

Field Name	Valdiation	Type	Details
id	Required (If not other)	int	Example: 1
name	Required (If not other)	String	Example: test
phone	Required (If not other)	String	Example: 1111111111

email	Required (If not other)	String	Example: test@test.com
third_party_id	Required (If not other)	String	Example:abc123abc123

22.2. Pull client Examples

22.2.1. Request of pull client

```
curl --location --request POST 'https://stagingapi.testocloud.be/expose/pull-client-ha-ca?language=fr&name=test %26 ccc' \
--header 'X-expose-secret-key: eyJpdil6llFnS28xOEt5cU12NXNnRzIGTHN6M2c9PSIsInZhbHVlIjoib3E5WFFUdjNtUW5EbnpDeENzN2RGZz09liwibWFjljoiNjVkJGZGEwfreferte3t33545OTE1ZTNhODE0MjYjYjg4MGRhODAyY2I4OTQ1NjVjODc2Y2RiZmUyZjYyNGY1ZGE1ZjUzMjcwNzZlZCJ1465' \
--header 'Content-Type: application/json'
```

22.2.2. Response of pull client

```
{
  "success": true,
  "data": [
    {
      "id": 1,
      "name": "test & ccc",
      "region": "Bruxelles",
      "brussels_type_1": null,
      "brussels_type_2": null,
      "street": "",
      "city": "ACP Basilik'Art1",
      "postal_code": "1111",
      "contact_person": "",
      "fax": "121212",
      "phone": "121212121212",
      "email": "trupti.kacha@cygnetinfotech.com",
      "region_type": "",
      "region_preciser": "",
      "region_enterprise_name": "",
      "region_company_name": "test",
      "house_no": "173",
      "post_bus": "95",
      "region_kbo": "test",
      "status": 1,
      "address": "test",
      "wallonia_type": null,
      "created_at": "2021-01-11 05:31:53",
      "updated_at": "2022-05-04 07:58:18",
    }
  ]
}
```

```
"heating_appliance": [  
  {  
    "id": 1,  
    "client_id": 1,  
    "same_as_client": "1",  
    "name": "test heating",  
    "region": "",  
    "address": "test",  
    "city": "ACP Basilik'Art",  
    "telephone": "test",  
    "email": "test@test.com",  
    "post_code": "1111",  
    "house_no": "173",  
    "post_bus": "95",  
    "created_at": "2021-01-11 06:00:50",  
    "updated_at": "2022-05-12 22:54:08",  
    "brussels": {  
      "id": 1,  
      "heating_appliance_id": 1,  
      "company_name": null,  
      "company": null,  
      "enterprise_number": null,  
      "client_type": null,  
      "client_type2": null,  
      "floor": "test flr",  
      "building_name": "test br",  
      "installation_contact_person": "test",  
      "installation_email": "test@test.com",  
      "installation_tel": "test",  
      "installation_reference_epb_unit": "est",  
      "no_environmental_permit": null,  
      "heating_system_identification": null,  
      "brussels_reason_handling": null,  
      "brussels_other_reason": null,  
      "heating_system_type_one": null,  
      "heating_system_type_two": null,  
      "heating_system_no_of_boilers": null,  
      "heating_system_no_of_building": null,  
      "heating_system_no_of_epb": null,  
      "heating_system_permit_date": null,  
      "appliance_type_one": null,  

```

```

        "appliance_type_two": null,
        "appliance_condensing": null,
        "appliance_connected_as": null,
        "appliance_connected_as_a": null,
        "appliance_connected_as_b": null,
        "appliance_connected_as_c": null,
        "appliance_fall_detector": null,
        "appliance_fuel_type": null,
        "appliance_gas_type_one": null,
        "appliance_other_gas": null,
        "appliance_gas_type_two": null,
        "appliance_solid_type": null,
        "appliance_other_solid": null,
        "appliance_exhaust_channel": null,
        "appliance_other_info": null,
        "device_name": null,
        "device_plate_present": null,
        "device_make": null,
        "device_type": null,
        "device_manufacturing_no": null,
        "device_year": null,
        "device_nominal_power_min": null,
        "device_nominal_power_max": null,
        "device_flow_rate": null,
        "device_unit": null,
        "burner_power_modulation": null,
        "burner_plate_present": null,
        "burner_make": null,
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        "burner_year": null,
        "burner_manufacturing_no": null,
        "burner_flow_rate": null,
        "burner_flow_rate_unit": null,
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"cooling_appliance": [
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"id": 1,
"mobile_cooling_appliance_id": null,
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"client_id": 1,
"same_as_client": "1",
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"region": null,
"address": "test",
"city": "ACP Basilik'Art",
"telephone": "9898989898",
"email": "test@testststst.com",
"post_code": "1111",
"house_no": "173",
"certification_date": "2021-06-25",
"next_certification_date": "2021-12-04",
"qr_id": null,
"created_at": "2021-06-23 13:49:58",
"updated_at": "2021-09-17 07:59:37",
"commissioning_date": "2021-08-19",
"brand": "sdfsdd",
"type": "d",
"kind": "sd",
"vrv": "0",
"refrigerant": 2,
"kg_precharge": "3.000",
"gwp": "3.00",
"co2": "9.0000",
"kg_startup": "5",
"hermatically_sealed_sys": "0",
"inspection_frequency": 12,
"leak_detection_system": "0",
"leak_detection_type": "12",
"operation": "0",
"hd": "12",
"ld": "12",
"electrical_connection": 2,
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  "mobile_condensor_id": null,
  "cooling_appliance_id": 1,
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    "updated_at": "2021-09-17 09:30:34"
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  "verdampers": {
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    "mobile_verdamper_id": null,
    "cooling_appliance_id": 1,
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    "type": "rtrt",
    "performance": "test",
    "serial_number": "test",
    "glycol": "test",
    "cold_room_temperature": "3.00",
    "relative_humidity": "3.00",
    "number_of_fans": 4,
    "expansion_valve_brand": "test",
    "expansion_valve_type": "test",
    "expansion_valve_outlet": null,
    "created_at": "2021-09-17 16:30:34",
    "updated_at": "2021-09-17 16:30:34"
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  "compressors": {
    "id": 1,
    "mobile_compressor_id": null,
    "cooling_appliance_id": 1,
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    "type": "test",
    "motor_capacity_control": "1",
    "hd_pressure_switch": "23",
    "ld_pressure_switch": "23",
    "oil_pressure_switch_point": "23",
    "visual_oil_level_present": "1",
    "crankcase_resistance_current": "0",
    "created_at": null,
    "updated_at": "2021-08-20 08:02:19",
    "serial_number": null
  }
}
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        }
      }
    ]
  }
],
  "message": "Success"
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