



Technical Guide API Connection

March 2nd, 2023



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| Référence | TechnicalGuide-INGRID-API-EN | Classement | |
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| Accessibilité | <i>Accès réservé</i> | | <i>Restreint</i> | | <i>Interne</i> | | <i>Libre (à préciser)</i> | X |
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| Résumé |
| This document explains how to connect to Ingrid API |

1. Content and versioning

| Version | Date | Writer(s) | Content |
|---------|------------|------------|---|
| V1.0 | 10/10/2022 | C.CHERRIER | Initial version |
| V1.1 | 30/01/2022 | C.CHERRIER | Add comment on API list |
| V1.2 | 03/02/2023 | C.CHERRIER | Add explanations on Postman and some new APIs |

2. Description

This document explains how to connect to Ingrid API. The description how each API can be found in the corresponding technical guide.

3. Access request

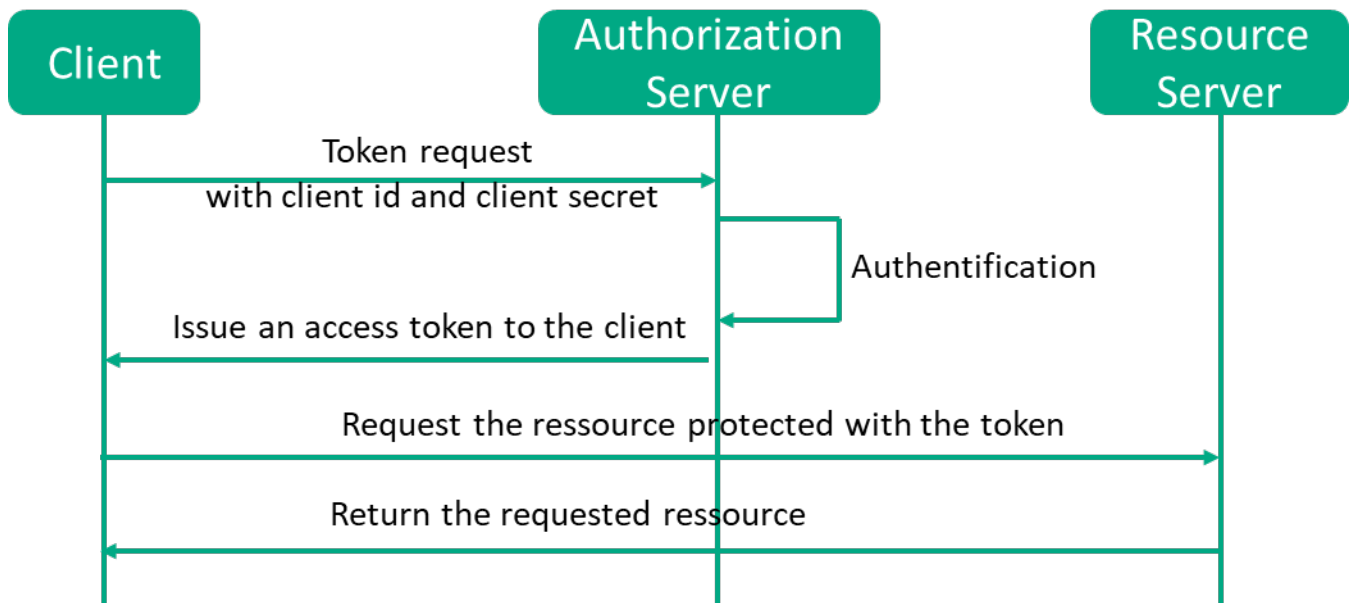
In order to access API service of Ingrid, you are invited to send an email with the name of your company and the contract code to your GRTgaz Account manager.

4. Technical support

For any questions regarding API calls and connectivity you can send an email to:
ingrid.connectivity.support@grtgaz.com

5. Connection mode

The authorization mode implemented supports the OAuth 2.0 Authorization Framework client credentials type flow.



6. Access URLs

URLs to the authorization server to request a token:

Production environment : <https://auth-api.offre.grtgaz.com/oauth2/token>

Tests environment : <https://auth-api.offre-stg.grtgaz.com/oauth2/token>

URLs to access the API:

Production environment : <https://api.ingrid.grtgaz.com/>

Tests environment : https://api.ingrid-stg.grtgaz.com



7. Request to token endpoint

The access token request is done by the client application to the Authorization server.

```
POST /oauth2/token
```

Request Parameters in Header

Authorization

The client application sends a `client_id` and a `client_secret` in the authorization header through Basic http authorization. The credentials are base64 encoded: `Base64Encode(client_id:client_secret)`.

Content-Type

'application/x-www-form-urlencoded' - Required

Request Parameters in Body

grant_type

'client_credentials' - Required

Scope

Not used. Optional

Example to request an access token on the testing environment.

```
POST https://auth-api.offre-stg.grtgaz.com/oauth2/token
```

```
Content-Type='application/x-www-form-urlencoded'&
```

```
Authorization=Basic aSilk549iujendek32ouzsm
```

```
grant_type=client_credentials
```

Response from token endpoint :

```
HTTP/1.1 200 OK
```

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

```
{  
  "access_token":"blablablaxxx",  
  "token_type":"Bearer",  
  "expires_in":7200  
}
```

8. Ressource invocation

The client application presents the access token and then requests the resource server.
In this part are shown only http HEADER required for the OAUTH request.

Request Parameters in Header

Authorization

'<access_token>'

Content-Type

'application/json'

9. Available API

The API that you can call are listed below:

- Portfolio of Services and Capacities
 - o upstream-allocated-capacities
 - o standardized-capacity-subscriptions
 - o downstream-allocated-capacities
 - o services
- Confirmation Notice
 - o confirmation-notice
- Operational Capacity Notice
 - o operational-notices
- Maintenance Schedule
 - o consolidated-maintenance-programs

10. Testing with Postman

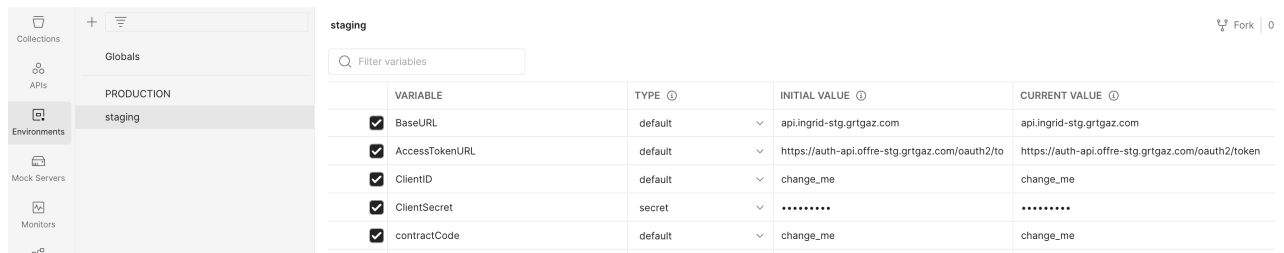
A Postman collection file is provided. With Postman you can easily call available API on the testing (Staging) and Production environment.

Step 1 : import the collection file in Postman and the environment files (staging and production)

Step 2 : For each environment fill the value for ClientID, ClientSecret and ContractCode. Don't forget to save.

ClientID and ClientSecret are provided to you by GRTgaz

ContractCode : your contract code



| VARIABLE | TYPE | INITIAL VALUE | CURRENT VALUE |
|--|---------|---|--|
| <input checked="" type="checkbox"/> BaseURL | default | api.ingrid-stg.grtgaz.com | api.ingrid-stg.grtgaz.com |
| <input checked="" type="checkbox"/> AccessTokenURL | default | https://auth-api.offre-stg.grtgaz.com/oauth2/to | https://auth-api.offre-stg.grtgaz.com/oauth2/token |
| <input checked="" type="checkbox"/> ClientID | default | change_me | change_me |
| <input checked="" type="checkbox"/> ClientSecret | secret | ***** | ***** |
| <input checked="" type="checkbox"/> contractCode | default | change_me | change_me |

Step 3: From the Authorization tab press the Get New Access Token button.

You can now call Ingrid API.