

## Tips for IDB API Clients

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## 1. What is IDB API?

The easiest way to understand IIR IDB (Industrial Database) API is to think it as an alternative way to retrieve the PECWEB data, via the backend. Both PECWEB and IDB API follow a similar paradigm. See the Project Search example below:

**Product Search -> Parameter Combo -> Result (Summary or Detail) -> Paging/Looping**

### 1.1 PECWEB:

#### 1.1.1 Project Search -> "PEC Timing = P1" + "Minimum TIV Amount = \$10,000,000":

The screenshot shows the 'PECWeb - Project Search' interface. On the left is a navigation menu with options like 'Dashboard', 'Search Filters', and 'Tracking Lists'. The main area contains several filter sections:
 


- Timing & Activity:** Select All (Capital, Maintenance), PEC Timing (P1 - Planning), and PEC Activity (P1 - (01) Market Analysis).
- Project Schedule:** 1. Choose the timing field to search (AFE, Equip RFQ, Sub Bid Doc), 2. Select date criteria (2 Months Out, 4 Months Out, 1 Year Out), and Project Probability (Low 0-59%, Medium 70-80%, High 81-99%, Completed 100%).
- Name, Status, & Value:** Project Name (Umbrella Project Name), Project ID, Plant Name, and Project Total Investment Value (Minimum TIV Amount: \$1000000).

#### 1.1.2 Project Search Results > Summary Records -> Paging Through Multiple Pages


The screenshot shows the 'Search Results' interface. At the top, it indicates 'Your Query Returned: 111,644 Projects worth \$14.92 Trillion (USD)'. Below is a table with the following columns:
 

Industry	Project ID	Project Name	TIV (USD)	Owner Name	Plant Name	Country / Zone	Project Status	Release Date	Umbrella Project ID	Umbrella Project Name	Umbrella Project Count	Flags
Power	300619215	HAAPAVESI PUUTION SAARI 250MW GRASSROOT WINDFARM	\$297,900,000	YSB Uusiutuva Energia Suomi Oy	Puutionsaari Windfarm	Finland / FP01	Active	2020-Jul-21				
Power	300619303	KAJAJANI KIVIKANGAS 264MW GRASSROOT WINDFARM	\$309,300,000	Abo Wind Oy	Kajajani Kivikangas Windfarm	Finland / FP01	Active	2020-Jul-21				
Industrial Manufacturing	300569766	TOWN OF ANTIGONISH 6MW BROWNFIELD SOLAR ARRAY & BATTERY STORAGE ADDITION	\$7,000,000	Alternative Resource Energy Authority	Town of Antigonish Facilities	Canada / NS'02	Active	2020-Jul-21				
Industrial Manufacturing	300455299	SANTA ROSA JUNIOR COLLEGE 5.7MW MICROGRID ADDITION	\$20,000,000	Santa Rosa Junior College	Santa Rosa College Facilities	U.S.A. / CA'03	Active	2020-Jul-21	14279	GROUP 3 - CALIFORNIA ENERGY COMMISSION MICROGRID STUDY (GFO-17-302)	2	
Industrial Manufacturing	300569748	TOWN OF MAHONE BAY 3MW BROWNFIELD SOLAR ARRAY & BATTERY STORAGE ADDITION	\$5,600,000	Alternative Resource Energy Authority	Town of Mahone Bay Facilities	Canada / NS'02	Active	2020-Jul-21				
Industrial Manufacturing	300454237	WEST NEWBURY MUNICIPAL CAMPUS 2 MW MICROGRID	\$1,500,000	Town of West Newbury Massachusetts	West Newbury Municipal Campus Microgrid	U.S.A. / MA'01	Active	2020-Jul-21				
Industrial Manufacturing	300551767	CITY OF TALLAHASSEE 3.5MW MICROGRID ADDITION	\$8,000,000	City of Tallahassee	Tallahassee City Facilities	U.S.A. / FL'06	Active	2020-Jul-21				
Industrial Manufacturing	300573755	SOUTHERN ILLINOIS UNIVERSITY 1MW PV SOLAR PLUS BATTERY STORAGE MICROGRID	\$1,516,000	Southern Illinois University	Carbondale University Facilities	U.S.A. / IL'03	Active	2020-Jul-21				
Industrial Manufacturing	300440717	NEWPORT COMMUNITY 5MW MICROGRID PHASE 1	\$10,000,000	Newport Project Development Company (NPDC)	Newport Community Microgrid	U.S.A. / RI'01	Active	2020-Jul-21				
Industrial Manufacturing	300457224	TOWN OF HUNTINGTON (LONG ISLAND) 8.5MW MICROGRID	\$24,000,000	Town of Huntington Long Island New York	Town of Huntington Facilities	U.S.A. / NY'04	Active	2020-Jul-21				

Summary Report:

report			
PROJECT INDEX			
	Industry/Date/Project ID/Umbrella Project ID	Project Name/Owner Name/Plant Name/Umbrella Project Name	TIV(USD)/Country/Zone/Status/Umbrella Project Count
	Metals & Minerals	BOULONNAIS LIMESTONE QUARRY EXPANSION	\$6,000,000
	17-Jul-2020	Les Granulats du Groupe CB	France / FR*01
	300619128	Ferques Boulonnais Limestone Quarry	Active

Detail Report:

Capital PEC Report		Project ID: 300619128	
	<b>Project Name</b> BOULONNAIS LIMESTONE QUARRY EXPANSION <b>Industry Code</b> 08 Metals & Minerals <b>TIV (USD)</b> 6,000,000 <b>SIC Code</b> 1422 Crushed & Broken Limestone <b>SIC Product</b> 1422*0008 Limestone, except bituminous: crushed and broken-quarrying <b>Status</b> Active <b>Environmental</b> Air (A) Land (L) Water (W)	<b>Project Type</b> Plant Expansion <b>Sector</b> Mining <b>Last Update</b> 17-Jul-2020 <b>Initial Release</b> 17-Jul-2020 <b>Construction Labor Preference</b> Unconfirmed <b>Operations Labor Preference</b> Unconfirmed	<a href="#">PEC Activity Diagram</a>
<b>Plant Owner</b> Les Granulats du Groupe CB <b>Plant Name</b> Ferques Boulonnais Limestone Quarry <b>Plant ID</b> 3207542 <b>Location</b> Rue Louis Le Senechal Carrieres du Boulonnais <b>City/State</b> Ferques, Nord-Pas-de-Calais 62250 France		<b>Plant Parent</b> Les Granulats du Groupe CB <b>Unit Name</b> <b>Phone</b> +33 321 996 700 <b>Zone/County</b> FR*01, Pas-de-Calais	
<b>Project Responsibility</b> Project Company <b>Project Manager</b> Les Granulats du Groupe CB Rue Louis Le Senechal Ferques, Nord-Pas-de-Calais 0000 France		<b>Project Contact</b> Heubert Quenu Project Manager [Tel.] +33 321 996 700 [E-Mail] hquenu@groupecb.com	
<b>Project Director</b> Les Granulats du Groupe CB Rue Louis Le Senechal, Carrieres du Boulonnais Ferques, Nord-Pas-de-Calais 62250 France		<b>Thierry Decool</b> Site Head [Tel.] +33 321 996 700 [E-Mail] tdecool@groupecb.com; [LinkedIn] thierry-decool-5077a575	
<b>Inspection/Validation/Startup</b> Les Granulats du Groupe CB Rue Louis Le Senechal, Carrieres du Boulonnais Ferques, Nord-Pas-de-Calais 62250 France		<b>Miguel Bernard</b> Technical Head [Tel.] +33 321 996 700 [E-Mail] mbernard@groupecb.com (!); [LinkedIn] miguel-bernard-873086105	
<b>PEC® Timing</b> P1 <b>Project Probability</b> Low (0-69%) <b>Scope</b> Les Granulats du Groupe CB continues with Project Scope for Boulonnais Limestone Quarry Expansion. DETAILS: Expand Existing 7MT/yr Limestone Quarry to Keep Production at Current Capacity and Prolong Lifetime of Quarry. REQUIRES: Conveyor Belts, Excavators, Grinders, Limestone Stockpiles/Storage, Mining Equipment, Power Shovel, Haul Trucks, Limestone Crusher, Hoppers, Screens, Washers, Loaders, Motors, Drives, MCC, Controls (PLC). ENVIRONMENTAL: (A) Dust Collection/Suppression System; (L) Spill Containment; (W) Wastewater Treatment. *Expanded capacity yet to be decided		<b>PEC® Activity</b> Project Scope	
<b>Schedule</b> Les Granulats du Groupe CB continues with Project Scope 3Q20 (Jul). AFE Approvals by 2Q21 (May). Upon Approvals, Les Granulats du Groupe CB seeks and selects Contractor 3Q21 (Jul). Selected Contractor, releasing Bid Documents for selection of specialized Subcontractors and Procurement of Machinery and Equipment 3Q21 (Sep) - 4Q21 as required. Expansion Kick-Off Expected 4Q21 (Oct). Completion/Final Commissioning Scheduled 3Q22 (Sep).		<b>Completion</b> 14-Sep-2022 <b>Precision</b> QUARTER <b>Construction Duration</b> 12 Months	
<b>Project Milestones</b> <b>Eng 202107</b> <b>Eng 202105</b> <b>Sub Bid Doc 202109</b> <b>Completion 14-Sep-2022</b> <b>Precision QUARTER</b> <b>Construction Duration 12 Months</b>	<b>Equipment RFQ 202109</b> <b>Kick-Off 202110</b> <b>Kickoff Slippage 0 Months</b>	<b>Project Key Needs</b> Civil Electrical Environmental HVAC Instrumentation Mechanical Structural Control Room Process Equip Storage Valves Packaging Pumps Transportation Communication Continuous Process Solid	
<b>Matter Phase</b> Energy Buy Sell			
<b>Plant Standard Contacts</b>			
<b>Functional/Actual Title</b>	<b>Contact Name/E-mail</b>	<b>Telephone/On-site</b>	<b>QC Date/LinkedIn ID</b>
<b>Plant Manager</b>	Thierry Decool	+33 321 996 700	Jul-2020
<b>Site Head</b>	tdecool@groupecb.com	Yes	thierry-decool-5077a575
<b>Maintenance Manager</b>	Miguel Bernard	+33 321 996 700	Jul-2020
<b>Technical Head</b>	mbernard@groupecb.com (!)	Yes	miguel-bernard-873086105
<b>Engineering Manager</b>	Miguel Bernard	+33 321 996 700	Jul-2020
<b>Technical Head</b>	mbernard@groupecb.com (!)	Yes	miguel-bernard-873086105
<b>Human Resource Manager</b>	Carole Doyelle	+33 321 996 700	Jul-2020
		Yes	doyelle-carole-3561ab9
<b>Mine Manager</b>	Thierry Decool	+33 321 996 700	Jul-2020
<b>Site Head</b>	tdecool@groupecb.com	Yes	thierry-decool-5077a575

## 1.2 IDB API:

### 1.2.1 IDB API -> Project Search -> "PEC Timing = P1" + "Minimum TIV Amount = \$10,000,000":

Parameter Name	Type	Description
offshoreAreaName	array of string	Offshore Area name of the plant. Searching by Offshore Area name can be done using one or multiple keywords. This parameter supports multiple values.
offshoreFieldName	array of string	Offshore Field name of the plant. This parameter supports multiple values.
industryCode	array of string	Industry Code of the project. IIR assigns each project to one of twelve industries. Search for projects using the two digit Industry code. This parameter supports multiple values. ▶ List of supported values:
industryCodeDesc	array of string	Industry Code description of the project. Search for projects using the Industry Code description. This parameter supports multiple values. ▶ List of supported values:
scope	array of string	The scope of the project. Search for keywords in the scope. This parameter supports multiple values and wildcard keyword search.
projectDetails	array of string	Additional details of the project. Search for keywords in the project details. This parameter supports multiple values and wildcard keyword search.
tivMin	int64	The minimum TIV (Total Investment Value) searches for projects equal to or greater than the value given. The minimum TIV can be used in conjunction with the maximum TIV amount to select a TIV range.
tivMax	int64	The maximum TIV (Total Investment Value) searches for projects equal to or less than the value given. The maximum TIV can be used in conjunction with the minimum TIV amount to select a TIV range.

Parameter Name	Type	Description
pipelineDiameterInchesMin	double	The minimum Pipeline Diameter (Inches) searches for projects with pipeline installation that have a diameter equal to or greater than the value given. The minimum Pipeline Diameter (Inches) can be used in conjunction with the maximum Pipeline Diameter (Inches) to select a range.
pipelineDiameterInchesMax	double	The maximum Pipeline Diameter (Inches) searches for projects with pipeline installation that have a diameter equal to or less than the value given. The maximum Pipeline Diameter (Inches) can be used in conjunction with the minimum Pipeline Diameter (Inches) to select a range.
pipelineDiameterCmMin	double	The minimum Pipeline Diameter (Centimeters) searches for projects with pipeline installation that have a diameter equal to or greater than the value given. The minimum Pipeline Diameter (Centimeters) can be used in conjunction with the maximum Pipeline Diameter (Centimeters) to select a range.
pipelineDiameterCmMax	double	The maximum Pipeline Diameter (Centimeters) searches for projects with pipeline installation that have a diameter equal to or less than the value given. The maximum Pipeline Diameter (Centimeters) can be used in conjunction with the minimum Pipeline Diameter (Centimeters) to select a range.
pecTiming	array of string	PEC Timing of the project. Each PEC Report is identified by one of six timing phases. This parameter supports multiple values. ▼ List of supported values: To search by Capital Projects use: P1 - Planning P2 - Planning E1 - Engineering E2 - Engineering C1 - Construction To search by Maintenance Projects use: C2 - Maintenance
pecActivityDesc	array of string	PEC Activity of the project. Each PEC Report is identified by one of forty-five activity phases. This parameter supports multiple values. ▶ List of supported values:

## API Http Request Search Parameters example (with JWT token):

curl -X POST

"https://api.industrialinfo.com/idb/v1.1/projects/summary?tivMin=1000000&pecTiming=P1" \

-H "Accept: application/json" \

-H "Authorization: Bearer

xxxxxxxxxxxxxxxxxxxxxxxxxJzdWliOiJndHNhaSlmF1ZCI6IkIU9BUeKiLCJpc3MiOiJJbmR1c3JpYWwgSW5m

byBSZXNvdXJjZXMiLCJpYXQiOiE1ODI4MzYyNjYslmV4cCI6MTU4NTQyODI2Nn0.N1HNdmTuaL8G7wSJkna

U7y9GuALqm42yDdQbkm8SpTU"

Results:

List of Summary Records: Looping Through

```
{
  "limit": 100,
  "offset": 0,
  "resultCount": 100,
  "totalCount": 111644,
  "projects": [
    {
      "projectId": 1003673,
      "projectName": "CORPUS CHRISTI BROWNFIELD 625-740MW NATURAL GAS LON C HILL COMBINED CYCLE",
      "industryCode": "01",
      "industryCodeDesc": "Power",
      "pecZone": "TX*05",
      "tiv": 800000000,
      "releaseDate": "2019-01-29T22:39:21Z[UTC]",
      "projectStatusDesc": "Cancelled",
      "projectOwnerName": "Consolidated Asset Management Services - CAMS",
      "plantId": 3128504,
      "plantName": "Lon C Hill Power Station",
      "plantPhysicalAddress": {
        "city": "Corpus Christi",
        "stateName": "Texas",
        "countryName": "U.S.A."
      }
    },
  ]
}
```

## Project Summary Result: (projectId = 1003673)

API Server <https://api.industrialinfo.com/ldb/v1.1>  
Authentication API Key 'Authorization' in header


Response Status: 200:200

**RESPONSE**   RESPONSE HEADERS   CURL

```
{
  "limit": 100,
  "offset": 0,
  "resultCount": 100,
  "totalCount": 111644,
  "projects": [
    {
      "projectId": 1003673,
      "projectName": "CORPUS CHRISTI BROWNFIELD 625-740W NATURAL GAS LOW C HILL COMBINED CYCLE",
      "industryCode": "01",
      "industryCodeDesc": "Power",
      "pecZone": "TX*05",
      "tiv": 800000000,
      "releaseDate": "2019-01-29T22:39:21Z[UTC]",
      "projectStatusDesc": "Cancelled",
      "projectOwnerName": "Consolidated Asset Management Services - CAMS",
      "plantId": 3128504,
      "plantName": "Low C Hill Power Station"
    }
  ]
}
```

TRY   CLEAR   Copy

## Project Detail Search: (projectId = 1003673)



[Download Spec](#)

**Overview**

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**Authentication**

OPERATIONS

**User**

[Generate Access Token](#)

**Company Search**

[Return Company\(s\) Summary](#)

[Return Company\(s\) Detail](#)

**Project Search**

[Return Project\(s\) Summary](#)

[Return Project\(s\) Detail](#)

**Plant Search**

[Return Plant\(s\) Summary](#)

[Return Plant\(s\) Detail](#)

**Unit Search**

[Return Unit\(s\) Summary](#)

[Return Unit\(s\) Detail](#)

HTTP Beater

### Return Project(s) Detail

**POST** /projects/detail

Returns up to 5 project records by default (maximum is 50, with parameter "limit") based on the provided search criteria and user's coverage.

By default, the request sends back a default set of predefined fields specific to the endpoint used. To return the exact fields you need and improve performance, use the `fields` query parameter in your method call.

Example:

```
projects/detail?projectId=300100998&fields=projectId&fields=projectName&fields=tiv&fields=currency
```

These are the supported parameters:

**REQUEST**

**QUERY-STRING PARAMETERS**

<b>projectId</b> array of integer	<input type="text" value="1003673"/> <small>add-multiple +?</small>	<small>The ID of the project. The Project ID is a unique eight-digit number used by IIR that is assigned to an individual project. This parameter supports multiple values.</small>
<b>fields</b> array of string	<input type="text" value="add-multiple +?"/>	<small>Specify the fields you want to return.</small>
<b>limit</b> integer	<input type="text"/>	<small>Number of project results to return. By default, it will return 5 records. Maximum is 50 records.</small>
<b>offset</b> integer	<input type="text"/>	<small>Offset the list of returned project results by this amount.</small>

**API Server** <https://api.industrialinfo.com/idb/v1.1>  
**Authentication** API Key 'Authorization' in header

[TRY](#)

## Project Detail Result:

**API Server** <https://api.industrialinfo.com/idb/v1.1>  
**Authentication** API Key 'Authorization' in header

[TRY](#)

[CLEAR](#)

**Response Status:** 200:200

**RESPONSE**    RESPONSE HEADERS    CURL

```
{
  "limit": 5,
  "offset": 0,
  "resultCount": 1,
  "totalCount": 1,
  "projects": [
    {
      "projectId": 1003673,
      "projectName": "CORPUS CHRISTI BROWNFIELD 625-740MW NATURAL GAS LON C HILL COMBINED CYCLE",
      "industryCode": "01",
      "industryCodeDesc": "Power",
      "pecZone": "TX*05",
      "tiv": 800000000,
      "currency": "USD",
      "offshore": 0,
      "releaseDate": "2019-01-29T22:39:21Z[UTC]",
      "projectStatusId": "C",
```

[Copy](#)



## 2. Security - JWT Token & OAuth 2

JSON Web Token (JWT, [RFC 7519](#)) is a way to encode claims in a JSON document that is then signed.

JWTs can be used as OAuth 2.0 [Bearer Tokens](#) to encode all relevant parts of an access token into the access token itself instead of having to store them in a database.

JWT

<https://jwt.io/>

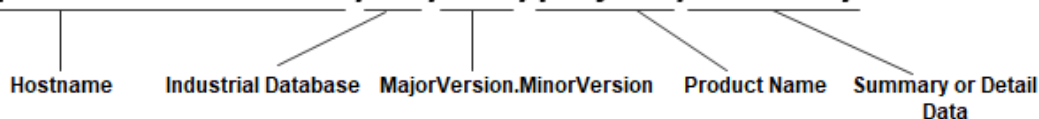
JWT & OAuth2

<https://oauth.net/2/jwt/>

## 3. IDB API Endpoints

### 3.1 API Endpoint Structure

**<https://api.industrialinfo.com/idb/v1.1/projects/summary>**



### 3.2 API Versioning

IDB API uses semantic versioning (major.minor.patch). All IDB API versions are displayed in descending order, with the latest version on top.

Also, you can be automatically upgraded to the latest minor version by only specifying the major version in the URL.

It's IIR's recommendation that you only specify major version in the URL as it will require less maintenance. We also recommend that you keep updating to the latest version as it provides the best up-to-date functionalities.

All the available versions and version change histories are listed in:

<https://api.industrialinfo.com/idb/index.html>

More information regarding IDB API Version Support Policy can be found below:

[https://api.industrialinfo.com/idb/IDBAPI\\_Version\\_Policy.pdf](https://api.industrialinfo.com/idb/IDBAPI_Version_Policy.pdf)



## 4. Summary/Detail/Count/Limit/Offset

The main differences between Summary vs Detail endpoints:

Summary	Detail
Supports all parameters	Supports only entity ID, fields, limit and offset parameters
Returns a default set of predefined fields.	Allows specifying the exact fields you need in the response.
Quicker performance	Acceptable performance
Returns up to 100 project records by default (maximum is 1000, with parameter "limit")	Returns up to 5 project records by default (maximum is 50, with parameter "limit")
Returns summary data view.	Returns detail data view
Best used for summary data	Best used for detailed data

Looping through data:

Field	Type	Description
<code>limit*</code>	<code>integer</code>	Limit number of project results to return. By default, it will return 5 records.
<code>offset*</code>	<code>integer</code>	Offset the list of returned project results by this amount.
<code>resultCount*</code>	<code>integer</code>	Number of project results returned. By default, it's limited to 100 records.
<code>totalCount*</code>	<code>integer</code>	Total number of projects IIR finds based on the search criteria. If the value exceeds 100, use multiple queries and combinations of the "limit" and "offset" parameters to refine search.

API Endpoints	Default	Max Limit
Summary API	100	1000
Detail API	5	50
References API	500	1000

### Examples:

- (1) Offset defaults to 0, if no offset is entered in the search parameter. Offset = 0 means that it will display the first record (offset/record number: 0) to the 100th record (offset/record number: 99), as record size (limit) is default to 100.
- (2) To get to the next 100 records (record number 101 -200), you should use offset=100. (limit=100 is implied).
- (3) To get the other next 100 records (record 201 -300), you should use offset=200, etc.

## 5. Reference Code List:

Commonly used reference codes are provided via the Reference API endpoints. You can use “&listAll=1” to retrieve all the listed values.

- Control Areas (76 Total)
- PEC Zones (498 Total)
- HS Products (8252 Total)
- Unit Types (270 Total)
- SIC Codes (582 Total)
- SIC Products (13823 Total)
- Equipment Types (21 Total)

## 6. Client Program Supports:

### 6.1 IDB API via Power BI:

Below is the instruction on how to create JWT token and call an IDB Offline Event API example within Power BI.

[https://api.industrialinfo.com/idb/IDBAPI\\_PowerBI.pdf](https://api.industrialinfo.com/idb/IDBAPI_PowerBI.pdf)

### 6.2 IDB API via Power Query (Excel):

Below is a sample Excel file with Power Query code calling an IDB Offline Event API example:

[https://api.industrialinfo.com/idb/IDBAPI\\_ExcelPowerQuery.xlsx](https://api.industrialinfo.com/idb/IDBAPI_ExcelPowerQuery.xlsx)

**Note:** POST requests can be performed in PowerQuery by adding content to the request. Said content can be something as simple as an empty string converted to binary format. For example, the following PowerQuery M Function will send a POST request to the IDB API (Note: this is a simplified version of the query used in the ExcelPowerQuery.xlsx spreadsheet mentioned above):

```
= Json.Document(Web.Contents(
  "https://api.industrialinfo.com/idb/v1.1/offlineevents/summary?eventKind=0&eventStatusDesc=Ongoing&eventStatusDesc=Future&worldRegionId=1&worldRegionId=4&industryCode=01",
  [Content=Text.ToBinary(""), Headers=[Authorization="Bearer " &
  Table.FirstValue(Excel.CurrentWorkbook(){[Name="IIRAuthToken"]} [Content])]])
)
```

## 6.3 Using OpenAPI client program auto-generators:

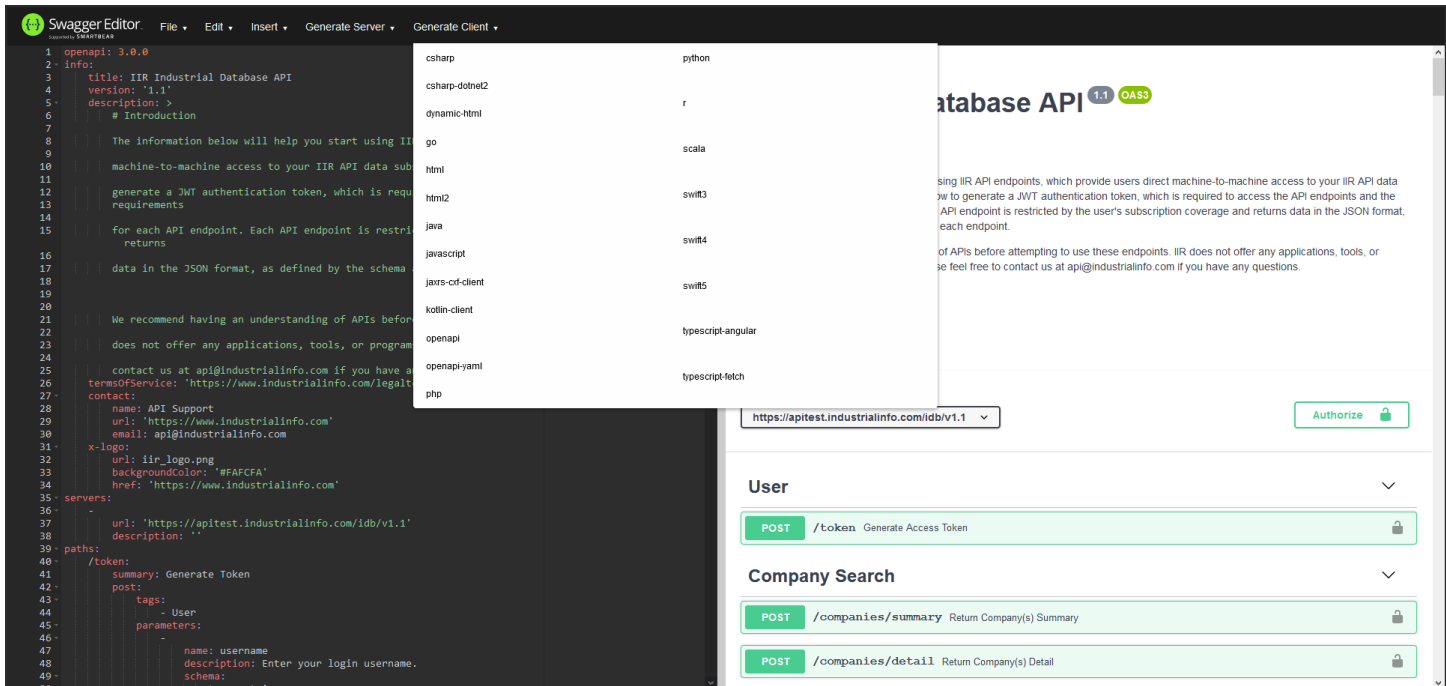
One advantage of using OpenAPI Spec is that the API Definition files can be used to create server stubs and client SDKs automatically by code-generator tools. We have extensively tested OpenAPI Client Generators such as: Swagger Codegen, APIMatic, AutoRest, OpenAPI Generator, NSwag, and others. However, the result is a mixed bag, as the tooling support for OpenAPI V3 is still inconsistent so far.

In general, we recommend these two tools for client code generation:

- (1) Swagger Editor or Swagger CodeGen (free)

<https://editor.swagger.io/>

<https://swagger.io/tools/swagger-codegen/>



## (2) APIMatic (paid)

<https://www.apimatic.io/>

Overall, APIMatic has the most complete features and even a start-up tutorial for different SDK.

IIR IDB API OpenAPI spec can be downloaded from RapiDoc:

**Industrial Info Resources**  
Download Spec

### IIR Industrial Database API v1.1

#### Introduction

The information below will help you start using IIR API endpoints, which provide users direct machine-to-machine access to your IIR API data subscription. This document will explain how to generate a JWT authentication token, which is required to access the API endpoints and the requirements for each API endpoint. Each API endpoint is restricted by the user's subscription coverage and returns data in the JSON format, as defined by the schema associated with each endpoint.

We recommend having an understanding of APIs before attempting to use these endpoints. IIR does not offer any applications, tools, or programs for using these endpoints. Please feel free to contact us at [api@industrialinfo.com](mailto:api@industrialinfo.com) if you have any questions.

**Terms:**  
<https://www.industrialinfo.com/legal/c.jsp>  
**Email:** [api@industrialinfo.com](mailto:api@industrialinfo.com)  
**Name:** API Support  
**URL:** <https://www.industrialinfo.com>

#### AUTHENTICATION

No API key applied

**HTTP Bearer**

IIR API uses JWT authentication tokens (JSON Web Tokens) to validate all endpoints. The first step for accessing these endpoints is to generate a JWT authentication token, since all API endpoints require a valid token. For security reasons, tokens are only valid for a limited period (By default, tokens will expire after 1 day, Maximum is 30 days).

Send Authorization in header containing the word Bearer followed by a space and a Token String.

```
api-token SET
```

#### USER

#### Generate Access Token

POST /token

HTTP Bearer

(3) The following are generated client code samples in languages supported by our codebase:

1. Javascript:

a. ES6 code generated by **Swagger Editor**:

[https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor\\_JS-client.zip](https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor_JS-client.zip)

b. Typescript code generated by **AutoREST**:

[https://api.industrialinfo.com/apiExample/openAPICodeGen/AutoREST\\_Typescript-client.zip](https://api.industrialinfo.com/apiExample/openAPICodeGen/AutoREST_Typescript-client.zip)

<https://github.com/Azure/autorest>

2. Java:

a. Sample code generated by **Swagger Editor**:

[https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor\\_Java-client.zip](https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor_Java-client.zip)

b. Sample code generated by **AutoREST**:

[https://api.industrialinfo.com/apiExample/openAPICodeGen/AutoREST\\_Java-client.zip](https://api.industrialinfo.com/apiExample/openAPICodeGen/AutoREST_Java-client.zip)

3. C#:

a. Sample code generated by **Swagger Editor**:

[https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor\\_csharp-client.zip](https://api.industrialinfo.com/apiExample/openAPICodeGen/SwaggerEditor_csharp-client.zip)