

Swap Data Repository - API Development Details

Create API

In the production environment, go to your Customer Center and access My Profile by opening the menu under this icon:



Access the “API Management” menu, and select the “Create API ID” option.

My Account i

By creating and/or using an API ID, you agree to our [Terms of Use](#).
[What are API IDs?](#)

My Profile	API IDs are machine to machine IDs used for communication in CME Group applications that support an application programming interface to pass information.												
Trading Interest	In order to have an ID to gain access to an API application, please contact <i>CME Enterprise Application & System Entitlements</i> .												
Subscription Center													
Alerts													
Bookmarks	<i>United States</i> +1 312 456 1560 <i>Europe</i> +44 20 3379 3802 <i>Asia</i> +65 6593 5536 EASE@cme.com												
API Management													
CME Group Login Management													
PGP Key Management	Show 10 entries Search <input type="text"/>												
<table border="0" style="width: 100%;"><thead><tr><th style="width: 15%;">API ID</th><th style="width: 15%;">Status</th><th style="width: 15%;">Auth Type</th><th style="width: 15%;">Application</th><th style="width: 15%;">Role</th><th style="width: 15%;">Scope</th></tr></thead><tbody><tr><td colspan="6" style="text-align: center;">« « Prev Next » »</td></tr></tbody></table>		API ID	Status	Auth Type	Application	Role	Scope	« « Prev Next » »					
API ID	Status	Auth Type	Application	Role	Scope								
« « Prev Next » »													
Create API ID Claim API ID													

Select OAuth as the type, and enter an ID you would like in the API ID (it can be any alpha-numeric value, but be mindful that it is case sensitive and will need to match directly in your API call).

[Create an API ID](#)

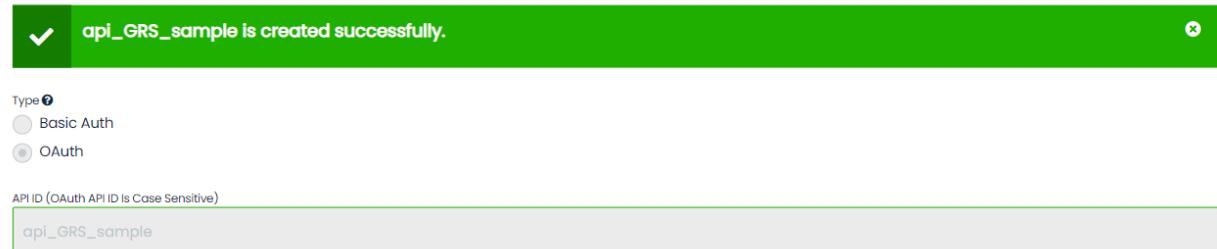
Type i

Basic Auth
 OAuth

API ID (OAuth API ID is Case Sensitive)
api_GRS_sample

After clicking create, you will be given a password/secret. Please keep this value saved securely and exactly as it is displayed, this will be needed for the API call.

Create an API ID



api_GRS_sample is created successfully.

Type ?
 Basic Auth
 OAuth

API ID (OAuth API ID is Case Sensitive)
api_GRS_sample

There is an entitlement that will need to be granted to the API ID for submission access. Please reach out to CME Group (repositorysupport@cme.com) after API creation and share the API ID in addition to the desired LEI(s) the API should be able to submit for.

Generate Auth Token

To generate auth token you will need API ID and Secret.

Token URL	NR: https://idpservicenr.cme.com/v1/token PROD: https://idpservice.cme.com/v1/token
Request Type	POST
Request Body	client_secret=<API_SECRET> client_id=<API_ID> grant_type=client_credentials

Curl Command	<pre>curl --request POST <URL> -d 'client_secret=<API_SECRET>' \ -d 'client_id=<API_ID>' \ -d 'grant_type=client_credentials'</pre>
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SDR WS Endpoints - Submission

Submission URL	<p>NR: <a href="https://posttrade.api.uat.cmegroup.com/sdr/submitCSV/<ASSET_CLASS>">https://posttrade.api.uat.cmegroup.com/sdr/submitCSV/<ASSET_CLASS></p> <p>PROD: <a href="https://posttrade.api.cmegroup.com/sdr/submitCSV/<ASSET_CLASS>">https://posttrade.api.cmegroup.com/sdr/submitCSV/<ASSET_CLASS></p>								
	<p>Valid ASSET_CLASS VALUES: CDS, IRS, FX, EQUITY, CMDTY, COLL</p>								
Http Header parameters	<p>REQUEST TYPE: POST</p> <table border="1"> <thead> <tr> <th>Parameter Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Authorization</td> <td>Bearer <OAuth2 Token></td> </tr> <tr> <td>ActiveLEI</td> <td><LEI></td> </tr> <tr> <td>Content-Type</td> <td>multipart/form-data;</td> </tr> </tbody> </table>	Parameter Name	Value	Authorization	Bearer <OAuth2 Token>	ActiveLEI	<LEI>	Content-Type	multipart/form-data;
Parameter Name	Value								
Authorization	Bearer <OAuth2 Token>								
ActiveLEI	<LEI>								
Content-Type	multipart/form-data;								

Http Response	Http Response Code	Message	Description
	200 OK	File has been submitted successfully. Processing results can be accessed using Submission Tracking ID : <SUBMISSION_TRACKING_ID>	User will receive this message upon successful submission
400 Bad Request		<ul style="list-style-type: none"> • No ActiveLEI found in request. Please resubmit request. • User authentication failed • No Data file found. Please resubmit request • Invalid file. Only csv files are allowed. Please resubmit request • Invalid Asset Class • User has invalid UNO Role to upload trade data, Please contact Security Admin Support 	<ul style="list-style-type: none"> • When ActiveLEI is empty • When Authorization token is empty or invalid • When submission file is not attached to request. • When submitted file is other than CSV file • When Invalid Asset class used in URL • When user is not authorized to submitted data for ActiveLEI mentioned in http header
500 INTERNAL SERVER ERROR		Error occurred while processing the request	User will receive this message when something went wrong at application side, like system error, app not able to connect to DB etc
401 Unauthorized		<ul style="list-style-type: none"> • Invalid Token • Token Expired 	Either Token is invalid or Token in expired.

**cURL
Command**

```
curl -k --location --request POST 'https://posttrade.api.dev.gcp.cme.com/sdr/submitCSV/EQUITY' \  
--header 'Authorization: Bearer <TOKEN>' \  
--header 'ActiveLEI: <LEI>' \  
--form 'file=@<FULLY QUALIFIED FILE NAME>''
```

SDR WS Endpoints - Submission Response

Submission Response URL	NR: <a href="https://posttrade.api.uat.cmegroup.com/sdr/submitResponse/<REQUEST_ID>">https://posttrade.api.uat.cmegroup.com/sdr/submitResponse/<REQUEST_ID> PROD: <a href="https://posttrade.api.cmegroup.com/sdr/submitResponse/<REQUEST_ID>">https://posttrade.api.cmegroup.com/sdr/submitResponse/<REQUEST_ID>								
cURL Command	<pre>curl -k --location --request GET 'https://posttrade.api.dev.gcp.cme.com/sdr/submitResponse/<SUBMISSION_REQUEST_ID>' \ --header 'Authorization: Bearer <TOKEN>' \ --header 'ActiveLEI: <LEI>'</pre>								
Http Header parameters	<p>REQUEST TYPE: GET</p> <table border="1"><thead><tr><th>Parameter Name</th><th>Value</th></tr></thead><tbody><tr><td>Authorization</td><td>Bearer <OAuth2 Token></td></tr><tr><td>ActiveLEI</td><td><LEI></td></tr><tr><td>Content-Type</td><td>text/plain</td></tr></tbody></table>	Parameter Name	Value	Authorization	Bearer <OAuth2 Token>	ActiveLEI	<LEI>	Content-Type	text/plain
Parameter Name	Value								
Authorization	Bearer <OAuth2 Token>								
ActiveLEI	<LEI>								
Content-Type	text/plain								

Http Response	Http Response Code	Message	Description
	200 OK	Submission Status: <STATUS>	User will receive this message upon successful retrieval
	400 Bad Request	<ul style="list-style-type: none"> • No ActiveLEI found in request. Please resubmit request. • User authentication failed • No record found for Request ID: <REQUEST_TRACKING_ID> • User has invalid UNO Role to view submission response, Please contact Security Admin Support 	<ul style="list-style-type: none"> • When ActiveLEI is empty • When Authorization token is empty or invalid • When request tracking id is incorrect • When user doesn't have access to view submission for submitted ActiveLEI
	500 INTERNAL SERVER ERROR	Error occurred while processing the request	User will receive this message when something went wrong at application side, like system error, app not able to connect to DB etc
	401 Unauthorized	<ul style="list-style-type: none"> • Invalid Token • Token Expired 	Either Token is invalid or Token in expired.
	SUBMISSION_TRACKING_ID= TRACKING ID RECEIVED WHILE SUCCESSFUL SUBMISSION. (Request tracking ID must start from REQ followed by numbers)		

SDR Real Time Ticker API endpoints

Ticker endpoints are public and doesn't require any authentication

Initial Load:

NR: https://posttrade.api.uat.cmegroup.com/sdrticker/initial/<ASSET_CLASS>

PROD: https://posttrade.api.cmegroup.com/sdrticker/initial/<ASSET_CLASS>

Pagination

NR:

https://posttrade.api.uat.cmegroup.com/sdrticker/paginated/<ASSET_CLASS>?datetime=&pagenumber=<PAGE_NUMBER>

PROD:

https://posttrade.api.cmegroup.com/sdrticker/paginated/<ASSET_CLASS>?datetime=&pagenumber=<PAGE_NUMBER>

Auto Refresh

NR: https://posttrade.api.uat.cmegroup.com/sdrticker/paginated/<ASSET_CLASS>?datetime=<DATE_TIME>

PROD: https://posttrade.api.cmegroup.com/sdrticker/paginated/<ASSET_CLASS>?datetime=<DATE_TIME>

- **ASSET_CLASS**=FX, IRS, CDS, CMDTY, EQUITY
- **Http Request method:** GET
- **datetime format**=YYYYMMDDHHMMSS