Cboe Clear US Margin Files v2.0

Please contact Cboe Clear US sales representatives (clearus.sales@cboe.com) or the Cboe Clear US membership team (clearus.membership@cboe.com) for more information on this documentation.

Contents

1 Change History

Date	Message(s) or Section	Description
20231102		Version 1.0
20241107		Version 2.0 Cboe Clear US updates

2 General Concepts

2.1 Rate Limiting

Requests are throttled per IP address. Limit: 5 requests in a 10 second period.

When the rate limit is exceeded, a response with status **429 -> Too Many Requests** is returned.

If the limit is exceeded the IP address will be restricted from making new requests for 60 seconds.

We highly recommend adding logic to your application to gracefully process the 429 To Many Requests message. We suggest that if the limit is breached, your application will pause for the required time in order to be within the rate limiting again. An application that repeatedly breaches the limit will keep extending the restricted period, thus, preventing your application from functioning correctly again.

Cboe Clear

3 Public Files API Service

Cboe Clear US offers a public API service that can be used to retrieve certain publicly available files programmatically.

3.1 REST API Endpoint URL

- Production : https://publicfiles.cboedigital.com/prdpublicfiles
- New Release (test) : https://publicfiles.newrelease.cboedigital.com/nrlpublicfiles

3.2 File Types

The following file types will be available in the Public Files API Service:

- SETTLEMENTS (For Midday and End of day cycles)
- MARKET_DATA
- MARGIN_RATES_APPROVED

3.3 List Available Files

This endpoint will be used by users to retrieve for a given day, the list of files that are available to be retrieved.

- HTTP Request Type: GET
- **Endpoint:** /{YYYY}/{MM}/{DD}/index.txt

Inputs

Field	Req'd	Value
YYYY	Y	Year. Format: YYYY
MM	Y	Month. Format: MM
DD	Y	Day. Format: DD

Example Request:

```
import requests

url = "https://publicfiles.cboedigital.com/prdpublicfiles/2024/11/25/index.txt"


response = requests.request("GET", url)
print(response.text)
```

Output

List of files available for the given date

Example Response:

```
CNTRCT_20241125_20241126000004.csv
MARGIN_RATES_APPROVED_20241125_20241125214012.csv
MARKET_DATA_20241125_20241126023010.csv
MARKET_DATA_20241125_20241126144514.csv
settlements_END_OF_DAY_20241125_20241125221542.csv
settlements_MID_DAY_20241125_20241125181527.csv
```

3.4 Get File

This endpoint will be used to retrieve a file.

- HTTP Request Type: GET
- **Endpoint:** /{YYYY}/{MM}/{DD}/{filename}

Inputs

Field	Req'd	Value
YYYY	Y	Year. Format: YYYY
MM	Y	Month. Format: MM
DD	Y	Day. Format: DD
filename	Y	Name of the file to be retrieved

Example Request:

```
import requests

url =
"https://publicfiles.cboedigital.com/prdpublicfiles/2024/11/25/settlements_END_OF_DAY_20
241125_20241125221542.csv"

response = requests.request("GET", url)
print(response.text)
```

Output

File in csv format.

Example Response:

```
Record
Date,RecordType,ContractCode,MaturityYear,MaturityMonth,Maturity/ExpirationD
ate,Cap,SettlementPrice,BaseCurrency,QuoteCurrency,ExchangeRate
2024-11-25,FSP,FBTH25,2025,3,20250328,,97091.0,BTC,USD,97091.0
2024-11-25,FSP,FETH25,2025,3,20250328,,3538.7,ETH,USD,3538.7
2024-11-25,FSP,FBTF25,2025,1,20250131,,95792.0,BTC,USD,95792.0
2024-11-25,FSP,FETF25,2025,1,20250131,,3500.9,ETH,USD,3500.9
2024-11-25,FSP,FBTZ24,2024,12,20241227,,95028.0,BTC,USD,95028.0
2024-11-25,FSP,FETZ24,2024,12,20241227,,3480.7,ETH,USD,3480.7
2024-11-25,FSP,FBTX24,2024,11,20241129,,94243.0,BTC,USD,94243.0
2024-11-25,FSP,FETX24,2024,11,20241129,,3458.9,ETH,USD,3458.9
```

4 File Formats

4.1 Settlement Prices

A summary report of settlement prices.

	Field	Description	Format
1	Record Date	Date for which the settlement prices apply	YYYY-MM-DD
2	RecordType	FSP = Futures Settlement Price	String
3	ContractCode	Contract code	String
4	MaturityYear	Contract Maturity year	YYYY
5	MaturityMonth	Contract Maturity month	m
6	Maturity/ExpirationDate	Contract Maturity Date	YYYYMMDD
7	Cap	Upper Price Boundary of a contract (Previously used for fully funded - not applicable to margin)	Decimal
8	SettlementPrice	Settlement price	Decimal
9	BaseCurrency	Base currency	String
10	QuoteCurrency	Quote currency	String
11	ExchangeRate	Exchange rate	Decimal

4.2 Market Data

A summary of volume, open interest and other metrics for a given date.

	Field	Description	Format
1	Date	Date for the data in the file	YYYY-MM-DD
2	Product	Clearing Product Code	String
3	Contract	Clearing Contract code	String
4	ExpirationDate	Contract Maturity Expiration Date	YYYY-MM-DD
5	Number of Trades	Number of trades for the trade date	Decimal
6	Volume	Volume traded for the trade date	Decimal
7	OI	Open Interest	Decimal
8	Block Volume	Volume registered as Block trades	Decimal
9	EFP Volume	Volume registered as EFP trades	Decimal
10	Settlement Price	Settlement Price for the trade date	Decimal
11	Open	The opening price for the trade date	Decimal
12	High	The highest price traded for the trade date	Decimal
13	Low	The lowest price traded for the trade date	Decimal
14	Close	The Closing price for the trade date	Decimal
15	Contracts Delivered	Number of contracts that we delivered upon at expiration	Decimal
16	Sub Exchange	Sub Exchange code	Decimal
17	Lower Bound	Price Boundary of a contract (Previously used for fully funded - not applicable to margin)	Decimal
18	Upper Bound	Price Boundary of a contract (Previously used for fully funded - not applicable to margin)	Decimal

4.3 Margin Rates Approved

A summary of volume, open interest and other metrics for a given date.

	Field	Description	Format
1	Date	Date for the data in the file	YYYY-MM-DD
2	Product	Clearing Product Code	String
3	Contract	Clearing Contract code	String
4	Contract 2	2nd Contract populated for spread margin amounts	String
5	Initial Margin	Initial margin for a position	Decimal
6	Maintenance Margin	Maintenance margin requirement	Decimal
7	Margin Currency	Currency in which the margin is charged	String