Margin Service API - Margin - Calculate

The calculate margin request performs a margin calculation on an existing portfolio with optional additional transactions.

Entity	Margin
Action	Calculate
URL	`/margins`
HTTP Method	POST
Parameter Input	No
XML Input	Yes
Multiple Output	No
Synchronous	No

Description

The request allows the client to calculate the margin of an already existing portfolio which was added to CME CORE (Add Portfolio and Update Portfolio). The client must specify the margin type and must submit the unique CME CORE assigned portfolio identifier in the request URL. The URL may optionally include additional (transient) transactions by value or the transactions to exclude by identifier from the portfolio. Once the Client/ CMF (Clearing Member Firm) has submitted the above, the server will queue up the request for execution after which it is submitted to the risk engine for processing a request identifier and status that are returned. If the portfolio does not exist, referenced transactions do not exist, or there are other errors an error message/code will be returned.

Request

XPath	Name	Type	Required	Notes
`/marginReq@reqUserId`	Requesting User ID	String	No	
`/marginReq /margin@portfolioId`	Portfolio ID	String	Yes	
`/marginReq /margin@riskFramework`	Risk Framework	String	No	Specifies if the request should be margined in the SPAN or the SPAN 2 methodology. This is relevant to Futures & Options users only.

Response

XPath	Name	Type	Required	Notes
`/marginRpt@status`	Status	Async Status	Yes	
`/marginRpt/margin@createTime`	Create Time	Date/Time	Yes	
`/marginRpt/margin@id`	ID	String	Yes	
`/marginRpt/margin@portfolioId`	Portfolio ID	String	Yes	
`/marginRpt/margin@updateTime`	Update Time	Date/Time	Yes	
`/marginRpt/error@code`	Error Message	String	No	
`/marginRpt/error@msg`	Error Message	String	No	

Errors

Code	Description
400	Bad XML syntax or missing content. More information will be provided in the error message.
403	Returned if the user does not have permission to perform calculations on the portfolio
500	The server was not able to process the request. More information (if available) will be provided in the error message.

Examples

Basic

This example requests that a portfolio with ID `123` be margined. The unique ID of the margin request is returned along with the portfolio identifier.

Calculating Margin for CME

Request - All Margin Methodologies

```
POST {{API_URL}}/margins
```

```
<core:marginReq xmlns:core="http://cmegroup.com/schema/core/1.2">
  <margin portfolioId="123" />
</core:marginReq>
```

Request - SPAN 2 Margin

For the SPAN 2 project, the CORE API has been enhanced with a new attribute "riskFramework" which specifies if the request should be margined in the SPAN or the SPAN 2 methodology during the SPAN 2 transition. This is relevant to Futures & Options users only.

Expected values in riskFramework attribute:

- CURRENT - current production margin framework
  - This will equate to SPAN methodology until the SPAN 2 project go live
- NEXT - upcoming production margin framework, in production parallel
  - This will equate to SPAN 2 methodology for in-scope products

```
<core:marginReq xmlns:core="http://cmegroup.com/schema/core/1.12">
         <margin portfolioId="123" riskFramework="NEXT" />
</core:marginReq>
```

Response

```
<ns2:marginRpt
    xmlns:ns2="http://cmegroup.com/schema/core/1.2" status="PROCESSING">
    <margin portfolioId="123" id="321"/>
</ns2:marginRpt>
```