

Margin Service API - Objects

The Margin Service API defines the following objects.

- [Error](#)
- [Margin](#)
- [Margin Amounts](#)
- [Optimize Amounts](#)
- [Portfolio](#)
- [Portfolio Entities](#)
- [Portfolio Margin Amounts](#)
- [Transaction](#)
- [Transaction Payload](#)

Error

The error object is used to represent an error that occurred.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Message	msg	Attribute	String	1	1	A string describing the error.
Code	code	Attribute	Integer	1	1	A numeric code for the error.

Margin

The margin object is used to represent a margin calculation for a [portfolio](#).

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Amounts	amounts	Element	Margin Amounts	0	1	The amounts calculated.
As-of Time	asOfTime	Attribute	Date/Time	0	1	The point in time at which the margin is calculated.
Create Time	createTime	Attribute	Date/Time	0	1	The time the margin record was created in the system.
ID	id	Attribute	String	0	1	The unique identifier for the margin assigned by CME CORE.
Portfolio ID	portfolioId	Attribute	String	1	1	The unique identifier for the portfolio for which the margin is calculated.
Settlement Indicator	settleInd	Attribute	Settlement Indicator	0	1	Indicates whether a margin is for settlement or not.
Settlement Qualifier	settleQual	Attribute	Settlement Qualifier	0	1	Indicates the status of settlement for margins.
Update Time	updateTime	Attribute	Date/Time	0	1	The time the margin record was last updated.
Transactions	transactions	Element	Transactions	0	unbound	The transactions that will be added to the portfolio for margin calculation.

Margin Amounts

The margin amounts object is used to represent the various amounts determined during margin calculation.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Concentration	conc	Attribute	Decimal	1	1	Concentration or liquidity risk.
Currency	ccy	Attribute	Currency	1	1	The currency in which the amounts are calculated and expressed.
Initial	init	Attribute	Decimal	1	1	The margin required to be collateralized in order to open a position.
Maintenance	maint	Attribute	Decimal	1	1	The minimum amount to be collateralized in order to keep an open position.
Non-option Value	nonOptVal	Attribute	Decimal	1	1	The profit or loss on the day of a position is then paid to or debited from the holder by the futures exchange.
Option Value	optVal	Attribute	Decimal	1	1	The premium that they would need to pay to buy back the option and close out their position.

Optimize Amounts

The optimize amounts object is used to represent the various amounts determined during optimize calculation.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Concentration	conc	Attribute	Decimal	1	1	Concentration or liquidity risk.
Initial	init	Attribute	Decimal	1	1	The margin required to be collateralized in order to open a position.
Maintenance	maint	Attribute	Decimal	1	1	The minimum amount to be collateralized in order to keep an open position.
Futures margin current portfolio	futCurrAmt	Attribute	Decimal	1	1	SPAN@margin for the current allocation of futures in the SEG account.
Futures margin baseline portfolio	futPreAmt	Attribute	Decimal	1	1	SPAN@margin for all futures (OTC and SEG futures) in account.
Futures margin post-optimized portfolio	futPostAmt	Attribute	Decimal	1	1	SPAN@margin for SEG futures allocation identified by the Optimizer.
OTC margin current portfolio	otcCurrAmt	Attribute	Decimal	1	1	OTC IRS margin for the current allocation of IRS+OTC futures in the account.
OTC margin baseline portfolio	otcPreAmt	Attribute	Decimal	1	1	OTC IRS margin for IRS positions only.
OTC margin post-optimized portfolio	otcPostAmt	Attribute	Decimal	1	1	OTC IRS margin for IRS + OTC futures identified by the Optimizer.

Portfolio

The portfolio object is used to group transactions together for margining and analytics.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Create Time	createTime	Attribute	Date /Time	0	1	The time the portfolio record was created in the system.
Description	desc	Attribute	String	0	1	A textual description of the contents or usage of the portfolio. The following characters are allowable, some special characters are not: space !#%&'()+,-./0123456789: ABCDEFGHIJKLMNOPQRSTUVWXYZ_`abcdefghijklmnopqrstuvwxyz
Entities	entities	Element	Portfolio Entities	1	1	Entities associated with the portfolio.
ID	id	Attribute	String	0	1	The unique identifier for the portfolio assigned by CME CORE.
Name	name	Attribute	String	0	1	The display name for the portfolio. The following characters are allowable, some special characters are not: space !#%&'()+,-./0123456789: ABCDEFGHIJKLMNOPQRSTUVWXYZ_`abcdefghijklmnopqrstuvwxyz
Reporting Currency	rptCcy	Attribute	Currency	0	1	The currency used for reporting on the portfolio. Amounts calculated in the base currency for each transaction will be converted to this currency. The default value is USD.
Update Time	updateTime	Attribute	Date /Time	0	1	The time the portfolio was last updated.

Portfolio Entities

The portfolio entities entity describes the various entities which are associated with a portfolio.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Clearing Member Firm ID	clrMbrFirmId	Attribute	String	0	1	The identifier of the clearing member firm to which the portfolio is associated.
Customer Account ID	custAcctId	Attribute	String	0	1	The identifier of the customer account to which the portfolio is associated.

Portfolio Margin Amounts

The portfolio entities entity describes the various entities which are associated with a portfolio. These are available in CORE schema 1.2 and above (<http://cmegroup.com/schema/core/1.2>)

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Futures Pre-Portfolio Margining Amount	futPreAmt	Attribute	Decimal	0	1	The margin amount for futures prior to portfolio margining.
Futures Post-Portfolio Margining Amount	futPostAmt	Attribute	Decimal	0	1	The margin amount for futures after portfolio margining.
IRS Pre-Portfolio Margining Amount	futPreAmt	Attribute	Decimal	0	1	The margin amount for IRS prior to portfolio margining.
IRS Post-Portfolio Margining Amount	otcPostAmt	Attribute	Decimal	0	1	The margin amount for IRS after portfolio margining.
Difference Amount	diffAmt	Attribute	Decimal	0	1	Margin Savings amount due to portfolio margining.

Transaction

The transaction object is used to represent entities (such as trades, positions, and delta ladders) which can be used in margin calculations.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
ID	id	Attribute	String	0	1	The unique identifier for the transaction assigned by CME CORE.
Create Time	createTime	Attribute	Date/Time	0	1	The time the transaction record was created in the system.
Status	status	Attribute	Entity Status	0	1	Indicates the status of the transaction.
Update Time	updateTime	Attribute	Date/Time	0	1	The time the transaction record was updated in the system.
Portfolio ID	portfolioId	Attribute	String	0	1	The unique identifier for the portfolio to which the analytic belongs.
Type	type	Attribute	Transaction Type	1	1	The type of transaction.
Error	error	Element	Error	0	1	The error for the transaction.
Payload	payload	Element	Transaction Payload	0	1	The payload containing the actual transaction.

Transaction Payload

The transaction payload object is used to contain the actual contents of a transaction, and contains the transaction in a format such as FIXML or FpML.

Name	XML Name	XML Type	Data Type	Min Occurs	Max Occurs	Description
Format	format	Attribute	Transaction Format	1	1	The format for the transaction payload.
Format Version	formatVer	Attribute	String	0	1	Version name for the format. This is not currently required.
String	string	Element	String	0	1	Payload content in raw string encoding . Content must be wrapped a c DATA block.