MARGIN CALCULATOR
User Guide

August 2016

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Change History

Date	Changes
8/4/2016	Initial version
8/30/2016	Updated document title

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Introduction

The goal of this document is to serve as a manual and walk-through for the features of the CME Margin Calculator. This document should serve as a guide for training any new user.

Over the years, we've had several customers explicitly ask for a way to view initial and maintenance margins. While customers currently can get this information from their FCMs, it is often only available periodically or at the end of the day — often too late to make changes to avoid margin calls.

The CME Margin Calculator is designed to let Metro users view their initial and maintenance margins for their CME cleared products. It uses the CME CORE API margin service to provide the end user with a periodically updated "official" margin calculation from the CME.

This guide attempts to capture the typical user's workflow along with everything that user needs to get up and running. This includes configuration settings, how jobs interact with one another, a walkthrough of the GUI, and what to expect in them.

Configuration and Setup

The CME Margin Calculator is controlled on the backend by a CMEMarginCalcJob. In order to run the CME Margin Calculator, the user must have this job up and running. This means that the job is started up on instance either via Freeway, or via the Metro Job Control accessible by right clicking the rightmost "New Metro Now Widget" icon in the Metro toolbar and then clicking Job Control. This brings up the Freeway Jobs window which shows all the jobs that are currently available to run on this instance. The status for the job should be green and it should AutoStart after a server restart. If not running, the job will have to be restarted by selecting the job and clicking Start.
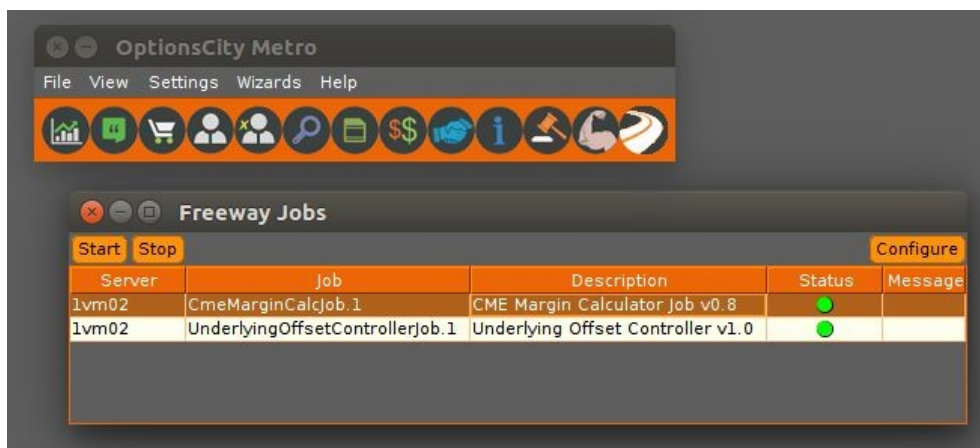

Fig. 1: Vela Metro Toolbar with Freeway jobs window

Now that the job is up and running the user will want to launch a new instance of the CME Margin Calculator from the Metro Toolbar, if the icon is available. In the case in which the icon is not available in the Metro Toolbar, the user can make it available by clicking on "New Metro Now Widget", checking the "Toolbar?" checkbox for this widget, and clicking "Add Widget." The new icon to the right of the inventory manager. Click it to launch the CME Margin Calculator.
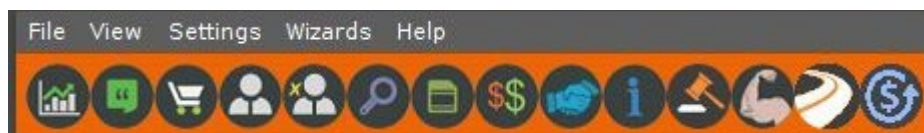

Fig. 2: Vela Metro toolbar with CME Margin Calculator icon added

Standard Application Usage Overview

View Margin Requirements Throughout the Trading Day

The widget would be primarily used by a trader that trades CME Group products and would like to view their margin requirements throughout the day. The trader would open the widget and keep it open as they make trades.

The following events trigger a refresh of the margin data for all trade accounts:

- **App Launch**: when the user manually opens the app
- **Position Change**: when the user's Metro position changes
- **Manual Refresh**: when the user presses the refresh button

To retrieve margin requirements on positions, the application use the CME Core Margin API. This service can be slow, with the response from CME sometimes taking several seconds. To indicate that the application is in this waiting state, the refresh button and the table are disabled with the cursor being replaced with a spinner. Once the margin data in the table is refreshed, the table and refresh button are enabled again, and the spinner is removed, allowing regular user interaction.

Using Logging Statements

There are multiple events that can cause the application to refresh or wait for data. These events or user actions are hence logged in the log window at the bottom of window to help the user understand the sequence of events.

GUI Definitions

Fig. 3: CME Margin Calculator Main Window

Label	Description
Refresh	Button that when pressed fetches updated margin data from CME for all accounts on this instance
Account	Name of the trade account that the trade was made under
Initial Margin	The amount of the purchase price of securities (that can be purchased on margin) that the investor must pay for with his own cash or marginable securities
Maintenance	The minimum amount of equity that must be maintained in a margin account
NOV	Net Options Value
NFV	Net Future Value
As of Time	Time when Standard Portfolio Analysis of Risk (SPAN) calculations of what if market scenarios were last done
Update Time	Time when margin data for these portfolios was last updated