



## Initial Margin (IM) Analytics & Optimization for Front & Middle Office

OTC trading is more onerous and expensive than ever before. Cleared and bilateral margin requirements make holding costs and collateral requirements much more significant. True best execution needs to consider all the real world costs of holding a trade in the overall execution decision.

Charles River customers have access within the Investment Management Solution to pre-trade margin analytics and optimization services, including tools for Cleared OTC, Global Futures and Options (ETD), & Bilateral (SIMM). Customers can calculate what-if Initial Margin and carry cost on all available trading routes on derivative instruments prior to execution.

Regulations created in the aftermath of the financial crisis, including the Clearing Mandate for standardized swaps and BCBS/IOSCO margin framework for uncleared derivatives, require firms to post increasing amounts of collateral as Initial Margin. Additionally, the emerging Uncleared Margin Rules (UMR) now require designated firms to post and secure Initial Margin for uncleared swaps. CRD customers have access to a full ISDA SIMM Licensed calculator that provides on demand calculations at pre-trade, intraday & regulatory end of day requirements.

### What All Firms Trading Derivatives Need To Know

OTC Cleared & Bilateral, Futures & Options (ETD)



**Initial Margin impact (directly from CCP)**



**Cheapest CCP & clearing broker (FCM)**



**Lifetime Costs Analysis (IM, collateral funding impact, CCP & FCM fees)**



**Collateral - availability, trading impact & cost of usage**

## Initial Margin Estimate in Charles River IMS generated in Cassini

Account	Notion	Data	CLR_BROKER1	CLR_BROKER2
CMDEMO1	5,000,000	Margin	121,255.39	142,236.65
		Funding C...	1,455.06	1,705.84
		Fees	27	27
		Lifetime C...	1,482.06	1,733.84
CMDEMO2	6,000,000	Margin	143,598.23	178,135.48
		Funding C...	1,723.18	2,240.13
		Fees	32.4	32.4
		Lifetime C...	1,755.58	2,272.53

  

Account	Acct Name	Notional	Principal	Accrued	Net Money	IM Amt	Clearing B...
CMDEMO1	Collateral Mgmt Demo Acc...	5,000,000	0	0	0	140,233.40	CLR_BRO...
CMDEMO2	Collateral Mgmt Demo Acc...	6,000,000	0	0	0	178,135.48	CLR_BRO...

  

Totals (2)	Notional	Principal	Accrued	Net Money	IM Amt	Clearing B...
	11,000,000	0	0	0	318,368.88	CLR_BRO...

## Front Office Benefits

The ability to obtain pre-trade estimates directly from the Charles River IMS as part of the OTC derivatives trading workflow helps improve trading decisions by providing an accurate and consistent view of margin impact and lifetime trade costs across the trade lifecycle. This helps firms make the most efficient use of scarce margin and minimize drag on portfolio returns. Charles River IMS also enables the front office to have full visibility into pledged collateral levels in real time.

## Middle Office Benefits

Charles River IMS enables collateral management teams to stay in sync with trading activity. Informed by a timely view of available assets, teams can leverage electronic workflows to help ensure margin calls are fulfilled and communicated in a timely manner between the front and middle office.

Screenshots are for informative purposes only; no live data being used.



## About Cassini Systems

Since 2014, Cassini has been a leading innovator and developer in the margin and collateral analytics industry. Its award-winning analytics have become essential for asset management firms, hedge funds, pension funds, commodity trading companies, clearing brokers, and prime brokers.

The company is unique in combining advanced algorithms with intelligence-driven analytics to provide derivative users improved returns, reduced operational risk, and fast margin calculations on any cleared or uncleared derivatives asset. Cassini enables visibility and control over margin, liquidity, and collateral costs and is able to analyse margin exposure and maximize margin efficiency across the whole trade lifecycle. For more information, visit [cassini.com](https://cassini.com)

## About Charles River Development, A State Street Company

Investment and wealth managers, asset owners and insurers in over 30 countries rely on Charles River IMS to manage USD \$59 Trillion in assets. Together with State Street's middle and back office services, Charles River's cloud-based front office technology forms the foundation of State Street Alpha®. Charles River IMS helps automate and simplify the investment process across asset classes, from portfolio management and risk analytics through trading and post-trade settlement, with integrated compliance and managed data throughout. Charles River for Private Markets helps solve complex data challenges for investors in private credit, real estate, private equity, and infrastructure. Charles River's partner ecosystem enables clients to access the data, analytics, application and liquidity providers that support their product and asset class mix. With more than 135% increase in headcount over the last 5+ years, Charles River serves clients globally offering 24/7 support. Learn more at [crd.com](https://crd.com) (Statistics as of Q1 2024. Assets are inclusive of clients using the platform for purposes of secondary compliance)

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