ICE Data Services Initial Margin Calculation Services

Since 2016, the new BCBS-IOSCO margin framework for non-cleared derivatives has been introduced and applied to jurisdictions globally. This is a key part of the reform agenda put in place by the Group of Twenty (G20) as a response to the 2008 financial crisis and seek to reduce systemic risk in the non-centrally cleared OTC derivatives markets by ensuring appropriate collateral is available to offset losses caused by the default of a counterparty. The framework discusses the two approaches covered entities can use to calculate initial margin (IM): schedule-based (grid) or an approved model-based calculation, including having dispute resolution procedures in place.

The ISDA Standard Initial Margin Model (ISDA SIMM™) is a common methodology for calculating initial margin for non-centrally cleared derivatives, developed as part of ISDA’s Working Group on Margin Requirements (WGMR). The margin calculations depend upon the identification of ISDA SIMM Risk Buckets for each underlying asset. The grid methodology is a simple calculation intended for covered entities who cannot calculate initial margin amount based on a quantitative model. ICE offers initial margin calculation service based on both the ISDA SIMM methodology as well as the grid methodology.

Choice of Services

Initial Margin calculation incorporating the ISDA’s SIMM™ methodology:

1. Pre-trade and post-trade Initial Margin calculation incorporating ISDA’s SIMM™ methodology on ad hoc and end of day basis
2. Risk sensitivity calculations delivered in standard CRIF file format, covering a wide range of derivative instruments, from simple to complex, which can be used as an input in the user’s own initial margin calculations
3. “1+3 standard” static backtesting (1 year of stress and 3 years of most recent continuous portfolio market conditions) calculation and daily dynamic backtesting calculation
4. Initial Margin monitoring against the exchange threshold or any other customized threshold to help track the initial margin exposure

Initial Margin calculation incorporating the grid methodology:

1. Pre-trade and post-trade Initial Margin calculation incorporating grid methodology on ad hoc and end of day basis
2. Initial Margin monitoring against the exchange threshold or any other customized threshold to help track the initial margin exposure

Optionally, scheduled MTM valuations and Variation Margin (VM) calculations can be added to support workflows on an ongoing basis.

1 The calculations provided under this service follow the ISDA SIMM methodology published by ISDA. ICE Data Derivatives, Inc. does not guarantee the accuracy or completeness of the ISDA SIMM methodology and is not responsible for any errors or omissions that may be part of the ISDA SIMM methodology.
Operational Workflow and Delivery Mechanism

- Clients upload their trade population into the IPA platform in bulk using provided templates.
- Clients have the ability to view uploaded trades online, select instruments, choose initial margin methodology, and optionally also view their books, prices and run valuation and risk analytics in the IPA platform.
- Calculations are run, producing the standard sensitivities report (CRIF) and initial margin results including total initial margin and breakdown by counterparties, product class and risk class.
- Reports can be deposited in a Secure FTP server and can be picked up by the client or automatically pushed to client servers, and are also available online from the IPA platform's user interface.

The diagram below shows the architecture of the main component of the calculation service, as well as the high level operational workflow and delivery mechanism:

Benefits

- Extensive coverage across multiple assets classes and instruments from vanilla to advanced.
- Calculation powered by ICE Data Derivatives' derivatives market data.
- Flexible workflow, easy integration with other systems, fast implementation of cloud-based infrastructure.
- User interface with the ability to view initial margin reports at trade and counterparty level and interact with the system.
- Optional access through the IPA platform that can help price, verify and investigate discrepancies both historically and in real time.
- Continuously calibrate the SIMM methodology according to ISDA updates.
- Calculation supports ISDA SIMM Crowdsourcing facility data.
- Can be integrated with various collateral management systems.
- “Follow the sun” dedicated support team available for technical issues, model validation and price challenges.

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2 It is subject to direct agreement with ICE Benchmark Administration.
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