

# SMART

## Risk, Margin & Valuation Analytics

**LCH** The Markets'  
Partner

### THE CUSTOMER CHALLENGE

The need to manage margin on a more proactive basis is weighing on the industry, as it seeks to adapt to evolving capital, market and regulatory conditions. Some of the pressing issues faced by our customers today include:



#### Funding and Liquidity Optimisation

As the need to optimise funding and ensure efficient allocation of a firm's capital increases, market participants require an accurate and reliable way to analyse a range of pre-trade scenarios.



#### Margin Reconciliation

The need to perform regular margin reconciliations creates further challenges for effectively managing the operational and financial costs associated with clearing.



#### Risk Management

In today's economic environment, it is crucial to monitor risk sensitivities and understand key margin drivers to make informed decisions regarding your margin requirements.

### HOW SMART CAN HELP

LCH SMART is an award-winning risk tool that enables members and clients to simulate their margin requirements across their listed rates or OTC portfolios (with cross-margining via LCH Spider) and SwapClear Solo Compression. Using instantaneous "what if" calculations, SMART users can view their curve and tenor risk exposures and analyse their margin impact, composition and movement against LCH prior to clearing.



## KEY BENEFITS

### 01.

#### IM and VM Reconciliation

Input your portfolio of trades and watch SMART automatically apply curves, tenor buckets and worst-case scenarios to ensure accurate margin estimates.

### 02.

#### Full Breakdown of Risk Exposure

Access a comprehensive view of your IM and margin add-ons across your portfolio, as well as a breakdown of portfolio sensitivities and trade-level valuations.

### 03.

#### Multi-Asset Support

As well as OTC and Listed Rates, SMART is also available for the ForexClear service, supporting deliverable and non deliverable FX.

### 04.

#### Portfolio Margining Simulation

View portfolio margining opportunities on SMART for OTC or exchange-traded interest rate books, and look for cross-margining savings via the LCH Spider service for rates.

### 05.

#### Compression Simulation

Simulate the SwapClear Solo Compression suite, including Standard and Blended Rate Compression for rates, and the ForexClear Solo Compression suite for NDFs and deliverable FX forwards, to see where you can achieve potential capital and operational efficiencies.

### 06.

#### Usability

Use SMART as a desktop application to take advantage of interactive screens, or as a software API to integrate SMART within your own technology stack.

## ENHANCED SERVICE

SwapClear is enhancing its offering with the introduction of SMART Silver and SMART Gold. This will extend the existing SMART Bronze service and deliver many additional benefits to users from front to back office. With the introduction of the new services<sup>1</sup>, members and clients will have increased opportunities to optimise their risk and margin management, improve the pre-trade decision-making process and release tied-up capital.



<sup>1</sup>Subject to governance approvals

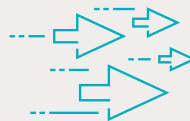
Service	Features	Benefits
<b>SMART Bronze</b> SMART Bronze enables LCH members and clients to manage initial margin requirements and simulate portfolio risk prior to clearing.	<ul style="list-style-type: none"> <li>• <b>OTC and listed rates</b> margin simulations using last end-of-day market data</li> <li>• <b>SMART for Compression</b> integrated within a single desktop tool</li> <li>• <b>Portfolio margining</b> on SMART via LCH Spider</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Access essential calculator</b> to simulate margin requirements</li> <li>• <b>Online mode available</b>, eliminating the need to manually download and upload reports into the tool</li> </ul>
<b>SMART Silver<sup>1</sup></b> SMART Silver has been designed for users who want more accurate margin estimations, taking into account full intra-day risk exposure to assist with funding and margin management decisions.	<ul style="list-style-type: none"> <li>• <b>Access to near-real-time intra-day trades</b> and portfolio updates in SMART</li> <li>• <b>Automated access to historical risk</b> and market data with a 10-day look-back period</li> <li>• <b>New charts and visualisations</b> to illustrate simulation results, delta ladders and P&amp;L vector</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Estimate margin</b> with access to up-to-date portfolios in near-real time</li> <li>• <b>Track intra-day portfolio changes</b> and view trade-level risk and valuations</li> <li>• <b>Increase efficiency</b> and simplify data interpretation with new SMART risk and margin visualisations</li> <li>• <b>Receive automatic access to historical data</b> for reconciliation, reporting and analytical purposes</li> </ul>
<b>SMART Gold<sup>1</sup></b> SMART Gold is the premium service designed to significantly streamline the user experience and deliver brand-new SMART capabilities and services, enabling optimisation of intra-day liquidity and margin management, aiming to deliver real capital savings.	<ul style="list-style-type: none"> <li>• <b>Near-real-time</b> full trade-level cleared portfolio</li> <li>• <b>Intra-day</b> market data</li> <li>• <b>Custom portfolio views</b> and charts to visualise key information</li> <li>• <b>Access to deep historical market</b> and risk data with a three-month look-back period</li> <li>• <b>Portfolio update</b> notifications in SMART</li> <li>• <b>Flexible account aggregation</b>, allowing simultaneous selection of multiple margin accounts</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Estimate margin more accurately</b> with access to up-to-date portfolios using the latest market data to manage risk more effectively</li> <li>• <b>Track intra-day portfolio changes</b> and view trade-level risk and valuations</li> <li>• <b>Improve liquidity and funding management</b> with intra-day market data used by the Rates Service to calculate intra-day margin calls</li> <li>• <b>Receive automatic access to historical data</b> for reconciliation, reporting and analytical purposes</li> <li>• <b>Gain enhanced analytical capabilities</b> and full flexibility over cleared portfolio views, including filtering and grouping by any key trade characteristics</li> <li>• <b>Utilise SMART enhanced charting and visualisation tools</b> to build custom granular insights into cleared portfolios, including trade valuations and risk breakdown</li> <li>• <b>Stay up to date with real-time SMART notifications</b>, tracking changes made to your portfolio</li> <li>• <b>Simulate margin requirements</b> across any or all accounts at the same time for easy simulation of portfolio transfers and trade reallocation</li> </ul>

## ADD-ON SERVICES<sup>1</sup>

### SMART Margin Optimisation

A brand-new real-time service that allows customers to:

01. Optimise their margin across various entities in pre- and post-trade workflows
02. Simulate the optimal trade allocation across multiple clearing accounts, or suggest the execution entity, for increased margin savings



## THE SMART CHOICE

Service Plan	SMART Bronze	SMART Silver <sup>1</sup> Bronze + additional features & benefits	SMART Gold <sup>1</sup> Silver + additional features & benefits
<b>BASE PRODUCT FEATURES</b>			
OTC & Listed Rates Margin Simulations	Yes	Yes	Yes
SMART for Compression	Yes	Yes	Yes
Portfolio Margining (LCH Spider)	Yes	Yes	Yes
Library API	Yes	Yes	Yes
<b>ADDITIONAL FEATURES</b>			
Custom Visualisations	No	No	Yes
Flexible Account Aggregation	No	No	Yes
<b>DATA ACCESS FEATURES (MARKET/REFERENCE DATA)</b>			
Historical	Last EOD only	10-day rolling history	90-day rolling history
Intra-day Snaps	No	No	Yes
<b>PORTFOLIO ACCESS</b>			
Aggregated View	Yes	Yes	Yes
Trade Level	No	ITD trades only	Full trade-level portfolio
<b>PREMIUM ADD-ON CAPABILITIES</b>			
Margin Optimisation Service <sup>2</sup>	No	No	Yes

<sup>1</sup>Subject to governance approvals    <sup>2</sup>Coming in Q4 2020

## CONTACT US

For more information, contact us at [LCHSales@lch.com](mailto:LCHSales@lch.com).

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