

## 1 Introduction

Data-Link is a subscription service which allows you to price interest rate linked contracts using market data provided through our services.

Market data and calibrated models can be used into the Fairmat platform either on Monte Carlo simulation-based models or on analytic formulations-based models (provided by the Plain Vanilla plug-in<sup>1</sup>).

Differently from other data-providers, Data-Link service allows the calibration of interest rate models (like the Hull and White one and two factors and the Pelsser Squared Gaussian model) against market data while performing the valuation on the users PC/Laptop and preserving privacy of information.

The Data-Link subscription periods are designed for letting you access market data and the remote valuation services only when you need them, making Data-Link an affordable SaaS/on-demand solution for derivative pricing.

## 2 What's new in Data-Link 2.0?

- Money Markets Discounting curves (Cash-Rates/Fra-Rates/Swap-Rates) for the following markets (EUR,USD, CHF, GBP) are now available.
- Ability to merge, aggregate and normalize data from third parties data-providers, enabling equity theoretical models calibration and pricing of equity-linked and FX derivatives.

## 3 Why Data-Link?

When we designed Data-Link we focused on the following scenarios:

- Repricing: you already have a pricing solution but you need a second opinion.
- Low pricing volume: you don't have a sufficient number of contracts to justify a complex and expensive solution.

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<sup>1</sup>Plain-Vanilla plug-in documentation is available at <http://www.fairmat.com/plugins/documentation/plain-vanilla>

- You need to generate analytics only at specified dates (i.e for accounting purposes you can use Data-Link in conjunction with our IAS-39 plug-in<sup>2</sup>).
- Contracts prototyping: remember that Fairmat is a modeling tool hence you are not limited to the pricing of specific contracts, but you can model a large class of custom financial derivatives.

## 4 How Data-Link works

The pricing work-flow with Data-Link works as follows:

1. Download the Data-Link client from our plug-ins store.
2. Model your contract with Fairmat Academic: you can either build it from scratch or you can start from an existing sample<sup>3</sup>.
3. After entering the contractual information, you can set-up the theoretical model you want to use for pricing, and test it with synthetic market data. Only when the contract is ready to be priced you can decide to evaluate it using our service.
4. Set the Simulation date, at which the underlying models will be calibrated.
5. If you decide to evaluate with Data-Link you will be redirected to page in which you can buy (using an automatic and secure payment gateway provided by Moneybookers/Skrill<sup>4</sup>) a **one week**, a **one month** or a **one year** long access to the service with the benefits of buying the service only when you need it.
6. If you already have a Data-Link Client credit your valuation will be executed remotely using real-market data.

## 5 What the Data-Link Client plug-in do

- The **Fairmat.com/Data-Link** data provider is available on the **Settings/Fairmat Preferences/Core Preferences** data providers list. Select it as default data provider.
- A new **Data Source** tab is available on the stochastic processes editing forms. This tab is used to bind the process to the market and to specify how the process must be calibrated (i.e. using caps or swaptions).

<sup>2</sup>For the IAS-39 plug-in documentation see <http://www.fairmat.com/plugins/documentation/ias-39-hedge-accounting>

<sup>3</sup>Examples and samples can be found in <http://www.fairmat.com/resources>

<sup>4</sup><https://www.moneybookers.com/>

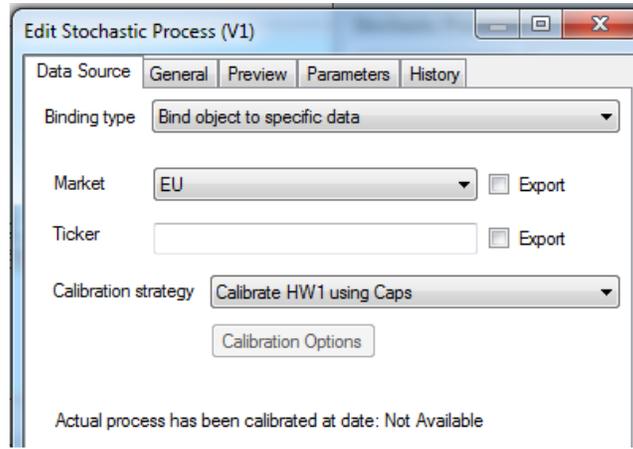


Figure 1: Additional Data Sources Tab allows to specify market data bindings.

## 6 Examples

Examples can be found at <http://www.fairmat.com/data-link#samples>.

## 7 Limitations

The current version of Data-Link Client is able to price contracts linked to the US-Libor and Euribor rates from 1st March 2012. Historical reset rates (i.e. Libor/Euribor etc rates) are available from 1st January 2007.