

# SolutionsLab

## Solutions Lab Forex Option System Product Brochure

---

**Release Date: January 2003**

**Copyright ? 2003 SOLUTIONS LAB PTE LTD. All rights reserved.**

## ***Trademarks and Acknowledgement***

---

The following trademarks and acknowledgements apply to the following:

The ***Solutions Lab CoreEngine and the Solutions Lab Suite of products*** are the technology and products of SOLUTIONS LAB PTE LTD, Singapore.

## ***Disclaimer***

---

No part of this manual will be reproduced or duplicated, transmitted, transcribed or distributed and stored in a retrieval system or translated into any human or computer language, in any form or by any means electronic or manual, without the express written permission of **SOLUTIONS LAB PTE LTD.**

The software and accompanying written materials (including instructions for use and this document) are provided "as is" without warranty of any kind.

SOLUTIONS LAB PTE LTD reserves the rights to make changes without further notice to any products described herein to improve reliability, function or design. This documentation is copyrighted and may not be altered without written consent from SOLUTIONS LAB PTE LTD.

## ***Introduction***

Today's FX option deals are typically done over the telephone. Sometimes, the financial advisor is given a crude spreadsheet to determine the option price, with no interaction to existing market changes. The consequences are:

- low operational efficiency
- high dealing costs
- high potential for errors
- inefficient allocation of dealer resources from more critical trading functions
- inept management of risks
- ineffective audit trail
- lack of transparency, etc.

## ***Solutions Lab Forex Option System***

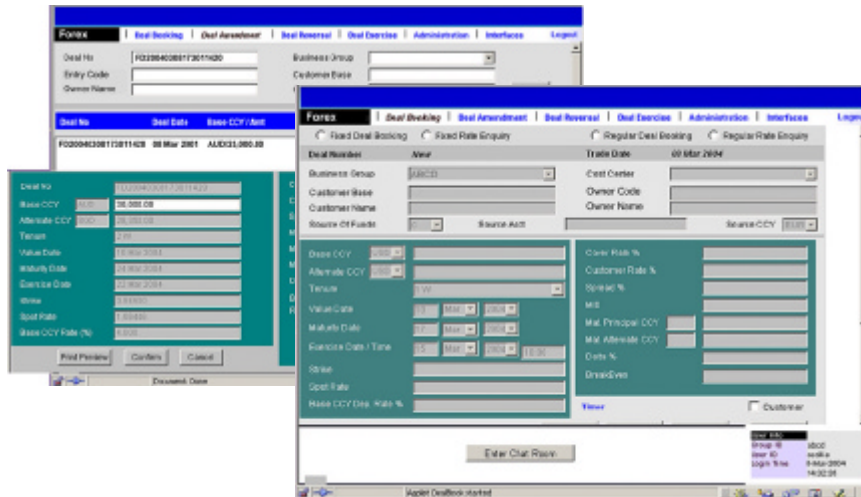
Solutions Lab has addressed these concerns with the Solutions Lab Forex Option System. The system is a browser-based software solution that:

- Improves price discovery of FX option with real-time pricing using live spot rate, deposit rate, etc. at time of booking.
- Significantly reduces potential for errors and overheads as ability to book, amend and cancel forex option deals are done with simple strokes of the computer key.
- Imposes strict business rules to minimize risk, ensure integrity of the system and prevent abuse. For example, it checks the minimum or maximum amount that can be booked at per customer level; determines the spread to be given based on currency pair, amount, etc; determines the degree of changes available for certain fields; etc.
- Performs extensive validation checks throughout the lifecycle of the FX option.
- Strengthens audit capability as all transactions are captured and audited.
- Increases operational efficiency by alleviating the dealer from quoting and booking option deals but instead focusing on more critical trading functions.
- Automatically calculates fees for a FX option.
- Allows integration with 3<sup>rd</sup> party system for full end-to-end flow and better management of risk.
- Advises the dealer in exercising or allowing options to lapse based on existing market rates.

## System Features

Solutions Lab Forex Option System comprises:

- Real-time FX option booking, amendment and reversal.
- Exercise/lapse of FX option.
- Feed management.
- Staff/Customer management.
- Integration to 3<sup>rd</sup> party system.



It incorporates these important system features:

- **Real-time Option Pricing.** Solutions Lab Forex Option System incorporates a forex feed that taps the "live" forex market to price the option at the time of booking. All option prices are based on the Black Scholles model.
- **Advance Forex Feed.** In the forex market, the dealer obtains pricing market information from various sources and, based on the type of trade and his analysis, he utilizes the best rate from these various sources to facilitate his trade. Our advanced forex feed provides a similar framework for determining the best forex rate in the market at the time of option pricing. It obtains forex market information from various sources, transforms and computes the information through various business logic, and finally delivers, in real-time, the computed information as the best available forex rate. To do so, the feed incorporates the following logic for its computation:

- Best rates logic
- Time-based sources logic
- Priority-based / time-driven logic
- Bump quotes / faulty rates filtering logic



- **Time-based Price Validity.** All quoted FX option price is only valid for a specified period of time. Beyond this time, the user is required to obtain another FX option quote.
- **Simple and Easy Management of FX Option.** The system is design to allow the user to book, amend or cancel FX option with merely a few computer keystrokes. Where possible, most fields are defaulted with user-specific or system-wide defaults. Breakeven points are shown during booking. Fees are automatically calculated during cancellation. The system also provides a fast-track booking or enquiry of FX option price, with minimal user input.
- **High Accountability.** All sensitive transactions and customer actions are captured and audited in the system. The system provides extensive reports and online viewing facilities to this audit trail.
- **Enforcement of Business Rules.** The system conducts extensive validation checks and enforces strict business rules throughout the lifecycle of the FX option. For example, during booking, the system tracks the amount of changes to tenure, value date, etc; determines if critical dates fall on the holidays of the currency; determines the spread to be given based on the business group, currency and amount placed; interpolates rates based on length of the tenure; etc. Amendments are only allowed on selected fields, and changes are constrained within pre-defined limits.
- **Quick Exercise/Lapse of Options.** The system shows a list of options that is to be exercised for a specified date and time. It gives recommendations of which option deals to exercise or lapse depending on the current market price.
- **Flexible User Permissioning.** The system provides flexible user permissioning based on the role and the group that the user belongs to. The user profile also determines the minimum/maximum amount that can be placed, spread, etc.
- **High security.** All sensitive customer and transaction information is stored in a secure transactional database. The information contained within can be used to generate the necessary management reports.
- **Integration to 3<sup>rd</sup> party System.** Interfaces are available within the system to integrate to other 3<sup>rd</sup> party system for risk monitoring, portfolio management, etc.

## ***About SOLUTIONS LAB PTE LTD***

The staff at SOLUTIONS LAB is amongst the first in Asia Pacific to specialize in integrating electronic commerce, mobile commerce and voice commerce.

As a Company, SOLUTIONS LAB is proud of its technology innovations, and its team of technology experts. Together, the experienced team has achieved services and products that are of world-class quality – especially in the areas of e-business and e-broking. Within a short history, the staff at SOLUTIONS LAB has achieved many accolades, amongst them include the “2000 Technology Achievement Award” given only to 10 companies in Singapore for their commitment to R&D and exploiting technology to enhance business competitiveness.

SOLUTIONS LAB has the knowledge, the expertise and the experience in implementing mission-critical trading systems that spans across the region.

The staff at SOLUTIONS LAB is also one of the first to embark in mobile commerce, where we seek to mobilize e-commerce to help our customers tap on the convenience of mobile technology and the power of e-commerce. Our customers can conduct e-commerce with their customers using mobile technology, like hand phones, pagers, PDAs, and palmtops.

Our solutions are based on two major technologies, e-commerce engine and an component-based distributed architecture. We developed around these to build a robust engine with fault-tolerance and data integrity. The result is our SOLUTIONS LAB CoreEngine. Other applications on the SOLUTIONS LAB CoreEngine include: Funds e-trading, Currency e-trading, Equity e-trading, Wealth Management and Real-time Financial e-platform.

### *For more information*

SOLUTIONS LAB PTE LTD  
70A/B Amoy Street  
Singapore 069889  
Tel: (65) 6337 3710  
Fax: (65) 6333 0089

Contact Person: Kuan Teik Guan  
Email: [teikguan\\_kuan@solutionslab.com.sg](mailto:teikguan_kuan@solutionslab.com.sg)