

## Over the Counter Options

**The Misys Opics Plus Over the Counter Options module processes foreign exchange, equity, commodity and fixed income over the counter options. These matrices incorporate user defined time periods, delta levels and volatility rates to provide accurate prices and greek values.**

The Over the Counter Options (OTC) module is a complete and automated front through back-office straight-through processing (STP) solution that allows users to increase their STP rates, reduce the cost of transactions and minimise reconciliation. Opics Plus processing includes deal capture, pricing, position management, profit/loss, exception based workflow, payments, confirmations, accounting and interfaces.

### Front and middle-office

The flexible design and architecture of Opics Plus ensures fast pricing and risk calculations and allows users to cope with high volumes and the growing complexity of financial instruments. The end result is fewer systems, less manual processing and the ability to introduce and implement new products more quickly and efficiently.

The Opics Plus OTC module supports:

- + Underlying instruments such as foreign exchange, fixed income, equities and commodities
- + Single and double barriers, digitals and digital barriers with or without rebates
- + Asian, floating strike and lookbacks
- + Quanto and bermudians
- + "What-if" deals, broker deals, sales credit processing (i.e., mark-ups, rebates, commissions)

### Key features

- + Integrated pricer for over 25 exotic options
- + Real-time positions, profit & loss (P&L) and greek statistics
- + On-line limit checks for customer exposure and rate tolerance
- + Option expiration alert to exercise, expire, knockout, inspire, cash settle and create underlying transactions
- + Complete STP options including standing settlement instructions (SSIs).
- + SWIFT payment and confirmation messages
- + Integrated FENICS interface for deals and revaluation

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Opics Plus also incorporates an engine agnostic Pricing Service that offers the customer the ability to access one of our many pre-defined engines or utilise their own internal system for pricing and revaluation.

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Deal entry, pricing and risk management tools are consolidated on the trader's desktop. Each trader can customise and save their desktop settings, including the screens and blotters they want to use, the layout of the screens and the order and content of the fields based on the products they trade and the positions they manage.

Pricers and calculators are integrated with deal entry and allow for deals to be automatically priced using real-time market data. Existing market data can be manually changed and deals can be re-priced allowing for “what-if” scenario analysis and simulations. Solved details are then mapped into deal entry to save traders from having to manually re-enter the deals.

The position and profit and loss blotters include real-time updates of rates from data providers such as Reuters, Telerate and Bloomberg. Positions are updated and profit and loss is recalculated based on current market rates.

### Back-office processing

The Opics Plus Workflow Manager consolidates all back-office processing across the suite of Opics Plus products in a user definable workflow. The result is a front through back STP solution where only the exceptions are highlighted.

Opics Plus offers several standard workflow processes including verification and adding and authorising settlement instructions. In addition to the standard workflow processes, clients can create and customise their own events and actions.

### Entry of a vanilla currency option

Decode	Value	Description	Value	Decode
		Branch		
		Dealno		
		Purchase/Sale		
UNITED STATES DOLLARS	USD	CCY	JPY	JAPANESE YEN
2,000,000.00		Principal Amount	200,000,000.00	200,000,000.00
		Exotic Type		
		Trigger		
		Lo Trigger		
110.00	110	Strike	0.00000	0.00000
		Call		Put
20 Jun 2002	20 Jun 2002	Expiration Date		
European	Euro	Style		
FX TRADER	FX	Trade		
JANZ BANK OF AUSTRALIA	ANZ	Customer		
UNITED STATES DOLLARS	USD	Premium CCY		
2,12675615	2,12675615	Premium %		
		Premium		
42,536.12	42536.12	Premium Amount		
112.00	112.00	Spot	0.00000002	0.00000002
10.00000	10.00	Volatility		
0.52652	0.52652036	Delta	-0.51647679	-0.51648
0.07848	0.07847919	Gamma	0.00000002	0.00000
-0.00244	0.00284411	Theta	0.27274073	-0.27374
0.00127	0.00126034	Rho	0.14100709	0.14190
0.00165	0.00165455	Vega	0.21662000	0.21662
0.00101107	0.00101107	Forwarding Rate	0.00029140	0.00029140
07 Nov 2002	07 Nov 2002	From Value Date		
02 Jul 2002	02 Jul 2002	Settlement Date		

Settlements to nostro and demand deposit accounts (DDA) are easily managed using the Opics Plus Nostro and Cash Management module. SWIFT payments are generated plus nostro and cash balances can be projected.

### Accounting and reporting

Accounting entries are automatically generated for deal date, value date, expiration date and reversal date events and include various attributes of the deal including currency and counter currency amounts, broker fees, base currency amounts, revaluation amounts, delta amounts, premium amounts, cash settlement amounts and embedded fees.

Opics Plus produces a suite of reports specific to the OTC module. These reports are transactional views, position and profit and loss, settlements, exceptions and accounting.

The **OTC Options module** has been fully componentised. This provides our customers with unparalleled customisation of the Option types they wish to trade.

### Deal entry of a double knockout option

Decode	Value	Description	Value	Decode
	CCY		CTR.CCY	
	31	Branch		
		Deal no		
	P	Purchase/Sale		
UNITED STATES DOLLARS	USD	CCY	JPY	JAPANESE YEN
2,000,000.00	2m	Principal Amount	224,000,000	224,000,000.00
Double Knockout	Double Knockout	Exotic Type		
		Trigger		
116.00000000	116	H Trigger		
109.00000000	109	L0 Trigger		
112.00	112	Strike	0.00000	0.00000
		Call	CallPut	Put
20-Jun-2002	2m	Expiration Date		
European	Euro	Style		
FX TRADER	FX	Trader		
ANZ BANK OF AUSTRALIA	ANZ	Customer		
UNITED STATES DOLLARS	USD	Premium.CCY		
0.06013521	0.06013521	Premium %		
		Premium		
1,202.70	1,202.70	Premium Amount		
112.00	112.00	Spot	0.00092057	0.00092057
10.00000	10.00	Volatility		
0.00316	0.00315997	Delta	-0.00295533	-0.00295
-0.01153	-0.01153340	Gamma	-0.00010235	-0.00010
0.00183	0.00182511	Theta	0.20452444	0.20452
0.00002	0.00001837	Rho	0.00020573	0.00020
-0.00020	-0.00022751	Vega	-0.02519177	-0.02519
0.06101107	0.06101107	Financing Rate	0.00025148	0.00025148
07-Nov-2002	07-Nov-2002	Prem. Value Date		
02-Jul-2002	02-Jul-2002	Settlement Date		

### Complete Over the Counter Options solution

The Opics Plus OTC module works independently or in conjunction with other Opics Plus modules to provide a complete and fully integrated treasury solution including:

- + Analytics
- + Case Investigations
- + Confirmation Matching
- + Cross Product Netting
- + Customer Credit
- + FENICS Interface
- + Hedge Accounting
- + Multicurrency Accounting
- + Nostro and Cash Management

### Security and audit trail

The OTC module has all the integrated security of Opics Plus, providing users with a complete audit trail for all database activity including deal input, updates, authorisations, dates, times and reversals. All of the information logged on the Opics Plus database can be retrieved and used for investigations and reporting purposes.

In addition to standard network security, Opics Plus also provides application security including security by user, encrypted passwords, security by program, audit file logging & automated screen time-out.

### Componentisation

The OTC Options module has been fully componentised. This provides our customers with unparalleled customisation of the Option types they wish to trade.

Opics Plus also incorporates an engine-agnostic Pricing Service that offers the customer the ability to access one of our many pre-defined engines or utilise their own internal system for pricing and revaluation.

These aspects provide Opics Plus with an OTC Options solution that presents our customers with market leading flexibility and time to market for new products.



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