# **TheBooks**<sup>®</sup>

#### THEBOOKS<sup>®</sup> INCLUDES THESE MODULES

Trading & Broker Communications

Reconciliation

**Position Management** 

Trade Accounting

Performance Reporting

Risk Management

Data Manager

**Execution Gateway** 

Price Manager

End-User Report Designer

#### **THEBOOKS®** ADVANTAGES

- Streamlined Operations
   Integrated components eliminate redundant data and keypunching
- Improved Transparency Deliver information when and how your investors want it

Distinct Business Advantage Increase accounts, markets, brokers, and trading systems without increasing effort

Reduced Risk Automatically maintains positions and provides real-time valuations

- Multi-User Maximize resource utilization
- Robust, scalable platform Microsoft SQL Server™ database allows TheBooks to scale to the largest advisor's operation

Instruments Supported Futures, FX, Forwards, Equities, Options on Futures, Options on Equities, OTC Currency Options, Cash Swaps, Options on Cash Swaps, Calendar Spread Options, Delivery Point Spreads, Electricity and other Power contracts

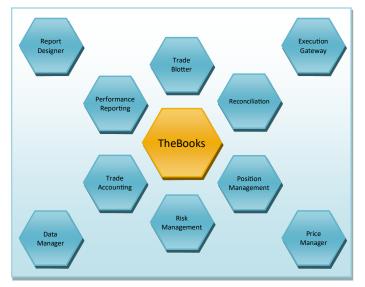
### THEBOOKS-COVER TO COVER CAPABILITIES

THEBOOKS IS A COMPLETE SUITE OF MODULES DEVELOPED SPECIFICALLY FOR THE ALTERNATIVE INVESTMENT MANAGER WITH MANAGED ACCOUNTS.

TheBooks<sup>®</sup> provides modules that manage trading, counterparty notification, position management, order generation, reconciliation, trade accounting, performance and risk management as well as data management.

These modules work together as an integrated solution or in some cases, separately, providing the level of automation required by the advisor.

Configurability, extensibility, and scalability are key attributes of TheBooks. Because no two advisors are exactly alike, which modules are used and how they operate is up to you. External systems such as order generators and other trade entry applications can be easily integrated using TheBooks Application Programming Interface. Because TheBooks uses Microsoft's SQL Server™ as its database, any application that can read an ODBC data source can be used to write customized reports.



TheBooks is an Integrated Suite of Components

Unlike a traditional accounting system, TheBooks has been designed with the trader in mind. Rather than being built independent of trading, The-Books integrates accounting and performance reporting into the trading process.

Reports are available in a wide range of formats including PDF, Excel<sup>®</sup>, Word<sup>®</sup>, HTML, and raw data. All reports are delivered via a web browser providing easy distribution of reports inside or outside your organization.

TheBooks includes all the automation required for an alternative investment advisor with managed accounts.

### The Integrated Advisor

The Integrated Advisor is trading organization where all data used to run the business is contained in a single, serverbased database so that applications and users draw upon the same data from anywhere within the network.

WHY IS THIS IMPORTANT?

Beyond practical issues, such as double-keying of data, there is the very real problem of decision making using incorrect or out-of-date information. If trades are posted in one system, and signals are produced from another, there is a risk that signals will be based on incorrect data.

Manual cross-checking of the various systems can certainly minimize this problem - but at what cost? The ability to grow the firm, either in markets traded, systems traded, or client accounts managed is hampered by the shear volume of work

#### THE INTEGRATED ADVISOR (CONTINUED FROM PAGE 1)

required to keep multiple systems synchronized.

If trade confirmations are reconciled (by hand, or otherwise) but positions are not, your performance can suffer due to errors by someone else. If answering a question about performance or positions for a client results in a fire-drill, your client's impression of you suffers; not to mention the time it takes away from managing your business.

#### Marketing Generation Price Data Performance Accounting Reconciliation Clearing Broker Clearing Broker

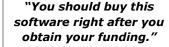
An Integrated advisor's operation

#### ble in another.

Because the modules are integrated, they share information such as contract specifications, client account information, allocation rules, and others.

Together, these components

handle all of the paper work and communication associated with your trading activity, leaving you with more time to research and trade your strategies.



Scott Ramsey Denali Asset Management LTD

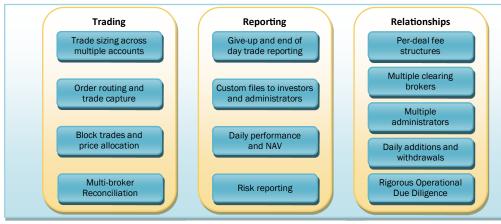
#### TheBooks is comprised of nine, integrated modules working from the same relational database. Information entered in

one module is instantly availa-

THEBOOKS

### INSTITUTIONAL MANAGED ACCOUNTS

Managed accounts are the new reality for alternative investment managers who want institutional allocations. Managed accounts mean additional complications such as block trades, fill price allocations, multiple clearing relationships, give-up reporting, and additional counter-parties.



TheBooks is designed specifically for this type of advisor and is used by advisors with a wide range of sizes and trading styles.

# BLOCK TRADES AND ORDER SIZING

When multiple accounts are being traded order sizing becomes more complex as contract rounding and position exiting become issues. For those organizations that ladder into and out of positions, the complexities of these issues are magnified. TheBooks provides multiple sizing algorithms including contracts per million, target level, and standard breakdowns to address these and others.

In addition, TheBooks has complete support for trading systems (sometimes known as strategies) and allows you to build trades that have components from multiple systems, going is opposite directions if needed.

FIX DROP AND POST TRADE ALLOCATION

As trading occurs, fills, regardless of source, can be automatically routed to TheBooks via FIX connections. Fills for each ticket are consolidated into trades within TheBooks and are allocated to a group of accounts using your price allocation rules.

#### **Reconciling Multiple Clearing Relationships**

Any advisor with managed accounts knows that one of the most time-consuming aspects of the job is reconciling with your clearing brokers. It seems "Our investors want to know we have tight controls, risk management, and the ability to provide the reports they want.

We want an easy to use system that automates our entire operation.

TheBooks<sup>®</sup> gives us the automation and flexibility to satisfy all our needs."

#### INSTITUTIONAL MANAGED ACCOUNTS (CONTINUED FROM PAGE 2)

that no two brokers have the same statement format, use the same symbology, or adhere to a consistent price convention.

What makes things even more frustrating is that most of the effort is spent reviewing trades that are correct in order to locate the ones that are wrong.

TheBooks reconciler automates this process and presents you with the trades, positions, and balances that do not agree, eliminating the tedious process of manually locating discrepancies.

MANAGEMENT AND INCEN-TIVE FEE CALCULATIONS Management and Incentive fees are configurable at the accountlevel in TheBooks. They are formula-based, meaning complex fee structures such as hurdle rates, tiered management fees based on assets, and fees based on beginning or ending monthly equity levels are possible.

#### Account Transparency and Liquidity

Investors want transparency; it is what is behind the move from funds to managed accounts. TheBooks provides what we call Customized Transparency.

This is the ability to provide the information the investor wants, in the format they want, with the frequency they want delivered, sent using the method they want.

TheBooks provides you with the ability to easily configure what reports go to what contacts, in what formats, sent by what method.

Because TheBooks is a daily system, all transactions, calculations, and accruals are done on a daily basis using the daily compounded method so you can easily provide daily liquidity and NAV reporting to your investors.

### TRADING AND BROKER COMMUNICATIONS

The Trading and Broker Communication module of The-Books<sup>®</sup> provides the tools you need to manage the order entry and trading activity notification process. It handles all the communication associated with placing and reporting trades.

#### **Order Management**

Orders can be entered through the user interface, loaded from files, created via our API, or automatically generated as the result of FIX drop copy trade capture. The system automatically assigns the appropriate number of contracts to your accounts. TheBooks handles the full range instruments normally traded by alternative investment managers. Day trades and GTC orders are supported. There's also an API you can use to enter orders directly from your order generator into the TheBooks from anywhere in your network.

When you place an order, The-Books automatically sends a breakdown to the execution desk or into the market if an execution gateway is installed.

**TRADE ALLOCATION** 

TheBooks supports High to Low, Low to High, and exchange APS allocation methods. It also has a synthetic Average Price allocation methods that will give each account in the trade with a mixed fill that is as close to the trade's average price as possible using the actual fill prices. It also knows how to allocate partial fills. You define where accounts go within the sort order. For traders that trade their own accounts along with their client's, you can specify that your accounts should always receive the worst fills.

#### COUNTER-PARTY NOTIFICATION

TheBooks provides a sophisticated relationship definition tool, allowing you to define the relationships you have with your brokers and clients. You can associate contacts with accounts and specify the frequency of notification (pertrade or daily) and the exchanges the party cares about. This means that the clearing broker who handles FX trades won't receive an email that contains Futures trades. Brokers will get activity for only those accounts they clear, minimizing the chances for clearing errors.

#### ACTIVITY REPORTING

The sending of breakdowns and activity reports is handled automatically as you perform your trades. Breakdowns are sent to the executing broker. Activity reports are sent to contacts such as administrators as the trades are filled or at the end of the day.

You configure each recipient's preferred format; an emailed report (a PDF document), or a customized data file suitable for importing into database or spreadsheet applications. The-Books can also FTP the information if required and data files are customizable on a perrecipient basis.

Notifications happen automatically as you trade and are sent from the server, leaving your workstation free to monitor markets, perform additional trades, or other activities.

#### Advantages

- Direct access to both pit and electronic exchanges through TheBooks Execution Gateway
- FIX drop copy support provides automatic order capture from a wide range of execution platforms and brokers
- Provide activity reports in the format and frequency desired by your investors and counter -parties
- Send only the activity required
- Minimize clearing errors
- Provide information to more investors and counter-parties with less effort
- Increased flexibility to execute trades
- File layout of data files can be customized for each recipient if required
- Market symbols can be customized for each recipient if required

# EXECUTION GATEWAY

Execution Gateways extend the Trading Desk concept in The-Books and allows the routing of trades directly to exchanges for execution. As trades are filled, they are automatically updated in TheBooks and for those gateways that have an associated trading platform, trades can be worked from within the platform; TheBooks automatically records your actions.

# Advanced Execution Options

TheBooks provides several advanced execution options tailored to systematic institutional advisors:

- Iceberged limit orders
- Virtual trading days

- Custom handling of blown stops on order release
- MOO and MOC gap handling
- eMail notification of order election
- Platform independent algorithmic trading

#### ELECTRONIC GIVE-UP

When the trade is complete, TheBooks performs price allocation to the accounts which make up the trade and give-up and breakdown information is passed electronically to the executing broker, providing seamless execution and reporting of the trade.

#### Straight-Through

**PROCESSING** Whether a trade originates in the trading platform, generated



by software, or is manually created in TheBooks, trade processing and reporting is automatically performed.

The goal of complete automation, from trade inception through performance fee calculation is now a reality.

#### Advantages

- Order routing and execution directly from TheBooks
- Electronic Give-up reporting reduces clearing errors and fees
- Orders can be worked in the execution platform or in TheBooks
- Advanced order handling for the special needs of systematic advisors
- Simultaneous simulation and production environments
- FIX drop copy support provides automatic order capture from a wide range of execution platforms, brokers, and exchanges

### RECONCILIATION

The Reconciliation module of TheBooks<sup>®</sup> provides comprehensive reconciliation of your accounts with your clearing brokers. It can quickly and automatically reconcile trade confirmations, open positions, balances, and trading commission. It handles all of the communication associated with reconciling your trading activity, positions, and balances.

Whether the runs are sent via email or come from FTP sites, the Reconciliation module automates the process of obtaining statements. Statements are automatically parsed, and their information is extracted as soon as they are received.

Because no statements are created equal, the Reconciliation module provides complete flexibility in symbol translation and market re-valuation. It allows accounts from multiple statements to be mapped to a single account and translates and converts all markets, exchange rates, and quantities to your standards. Contract prices and quantities can be scaled and inverted, FX trades can be re-stated, and exchange rates can be scaled and inverted.

The result is that all data is presented in a single, consistent format the way you want it, using the symbols, account numbers, and conventions you use.

To reconcile trade confirmations, simply select Discrepancies and then Confirms. Trades with differences, trades missing from the statement, and trades missing from your system are displayed. To see differences at the Broker level, select the Broker and then click on Confirms. Reconciling positions and balances work the same way.

If required, multiple people can reconcile at the same time, each working with one or more brokers.

The reconciler keeps track breaks from prior days and recognizes corrections of the breaks resulting in the list of open trade breaks for each account. These are included on the break sheet for sending to the clearing broker for resolution.

The Reconciliation module includes an online statement archive which allows you to recall any statement and its data from anywhere in your network. There is no need to look for statements in your files. Just select the date, and you can review all statements and their data for that day.

Because all extracted data is stored in an ODBC server database, it is available for you to analyze using any of the popular reporting tools. "The reconciliation module is quick and easy to use. It saves us hours of time each day."

Ryan Harper Sunrise Capital Partners

#### Advantages

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- Reconcile in minutes rather than hours
- Reconcile confirms, positions, trading commissions, and balances
- Automatic download of equity runs
- Catch out-trades and position problems sooner
- Top day and T+1 reconciliation is supported
- Automatic tracking of open trade breaks from prior days
- Data translated into a single, consistent format and made available for reporting and analysis

### POSITION MANAGEMENT

The Position Management module of TheBooks<sup>®</sup> performs real-time P&S processing ensuring that you always know your positions. It can produce roll trades, exit trades, and reversals. Trades for account opens, closes, additions, and redemptions can also be produced. If you trade multiple systems, it will maintain positions by system without double posting.

#### TRADE MATCHING

Allocations are received from the Trading and Communication module of TheBooks and are matched with existing positions. For traders that trade multiple systems, positions for the systems involved in the trade are also matched. The matching is done on every trade, rather than at end of day, ensuring that your positions are always accurate.

# CURRENT AND HISTORIC ACTIVITY

The Position Management module of TheBooks tracks trading activity and updates positions as you trade. Because it retains a historical record of all of your trading activity, you can always go back to a previous trading day and review trade confirmations, P&S activity, and open positions.

Information is available online and can be displayed by clearing FCM, account group, trading system, or by account.

Adjusting for fill price changes is simply a matter of doubleclicking on the trade and changing the price - the Position Management module automatically re-matches the trade and all affected positions to the current date, ensuring that all positions and P&L changes are correctly recorded.

#### MARK TO MARKET

The Position Management module integrates with The-Books Price Manager, an interface to real-time data feeds such as CQG for marking positions to market. In addition to the price data directly available from the data feed, the interface also supports forward price calculations (for currencies and metals) as well as option valuations.

#### TRADE PREPARATION

The Position Management module of TheBooks provides the tools to produce trades that are based on your existing positions, automating the preparation of Roll Trades, Exit Trades, and Reversals. It can also produce the trades to open or close an account as well as those required for additions and redemptions.

Trades can be produced by system or based on the net of all systems - greatly simplifying the process of managing multiple trading systems. In addition, trades can be produced for one account, or for a group of accounts.

Trades prepared by the Position Management module are automatically entered into the Trading and Communication module - minimizing data entry requirements and the chance for errors. "If you trade multiple systems, TheBooks will maintain street positions and positions by system without double posting."

#### Advantages

- Maintains positions and positions by system without double entry
- Produces trades for rolls, exits, account opens, closes, additions and redemptions
- Automatic generation of option assignment and exercise trades on option expiration
- Back-dated trade changes automatically adjust all affected positions
- Integrates with Trading, Reconciliation, and Performance Reporting modules
- Trade multiple systems without additional effort
- Know your positions at all times

### PRICE MANAGER

TheBooks Price Manager provides a data vendor independent interface to a wide range of data vendors and is used by the TheBooks to obtain prices from multiple vendors at one time.

Price Manager supports both real time data feeds such as DTN and CQG as well as end of day data feeds like CSI.

#### ARCHITECTURE

The Price Manager can run on the same computer as The-Books or on another computer and there can be multiple Price Managers within your network. Each Price Manager can communicate with multiple data vendors.

This architecture provides the ability to obtain prices for the same instrument from multiple sources. For example, it is possible to define four daily price sources for Corn; one CQG pit prices, one CQG all sessions, one DTN pit, and one DTN all sessions. These could then be used to feed separate historic data sources in the Data Manager. Combined with the Data Manager's Compare derived data source, you can automatically obtain and compare prices from multiple vendors for research and signal generation purposes.

From a valuation standpoint, you can use these capabilities to



value your portfolio using all sessions symbols during the day and use Pit symbols to obtain settlement prices.

#### FORWARD AND OTC PRIC-ING

TheBooks Price Manager also has the ability to calculate forward pricing for LME and FX instruments when the data

#### Advantages

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- Provides a price data vendor independent interface
- Allows the use of different data vendors for different markets.
- Wide range of price data vendor options
- Forward and OTC currency option pricing models
- Real time and end of day pricing
- Used for both Data Manager and accounting components of TheBooks

#### PRICE MANAGER (CONTINUED FROM PAGE 5)

vendor does not provide them. Given the spot and forward points, it will interpolate prices for you. In addition, it includes the pricing models for OTC currency options allowing valuations on the tick for these instruments.

#### **PRICE DATA VENDORS** Price Data Vendor is the term used in TheBooks for a supplier of market prices. The Price Manager provides interfaces for the following vendors:

CQG via RTD/API	Intraday/End of Day
CQG Data Factory	Intraday/End of Day
CSI Files	End of Day
CSI API	End of Day
DTN	Intraday/End of Day
Excel ranges	End of Day
CE OTC Energy file	End of Day
Metastock	End Of Day
Fick Data	Intraday/End of Day
/ahoo	End of Day

### TRADE ACCOUNTING

The TheBooks<sup>®</sup> Trade Accounting provides a multi-currency accounting engine tailored to the accounting and reporting requirements of the alternative investment advisor with managed accounts.

It handles commission and fee accruals and charging. Management fees, incentive fees, interest, and expense accruals are formula-based providing the flexibility required for the wide range of deals that you encounter.

#### DAILY ACCOUNTING

TheBooks is a daily system. All accruals and performance calculations are performed daily, not monthly like some systems. Back and forward-dated transactions are supported and are automatically reflected in performance tables.

Trading information automatically flows into the accounting module; separate posting of commission and fees is not required. Back-dated trade changes are automatically reflected in the accounting module.

#### **CHART OF ACCOUNTS**

The Chart of Accounts provides balance sheet, income statement, trading cash flow, and performance table views for accounts and can aggregate by account group or clearing FCM.

Selecting a cell within any view displays the transactions that affected that cell during the time frame displayed. Performance Reports Beginning Gross Trading Trading Commissions/Fees Non-Trading Ending Results Commissions/Fees Income/Expenses Equity Broker Management Incomtee Miscellaneous Expenses Expenses Trading Position Instrument Valuation Rules

#### **TRADING COMMISSIONS** Commissions are per-

instrument, per-account as well as per-broker. Pip charges for FX trades can also be configured. These can be used in combination to describe the most complex commission structures.

#### Management

**AND INCENTIVE FEES** These fees are based on percentages and basis formulas which are defined for each account.

TheBooks performs automatic high-water marking for incentive fee calculations and because the fee basis is formula based, you can include virtually any combination of performance table values as part of the fee calculation.

TheBooks can also generate invoices for your managed accounts.

#### INTEREST AND EXPENSE Accruals

Interest accruals are defined using account-specific formula. You can define interest formulas for cash held at the broker, cash held elsewhere, and for the proceeds from short sales.

Expense accruals work the same way and you can define accruals that are included and those that are excluded from incentive fee calculations.

#### **OTHER TOOLS**

Screens that make it easy to sweep foreign balances, record interest, search for transactions, and adjust equity values reduce the effort required to maintain accurate accounting of all your accounts.

#### **Performance Tables**

TheBooks presents performance tables using three standard views: Summary, Capsule, and Detailed.

Performance tables can be compiled for individual accounts and groups of accounts and can present daily and monthly returns.

#### "Back-dated changes cause performance tables and fees to automatically recalculate."

#### ADVANTAGES

- Multi-currency trade accounting
- Fully integrated with the trading, position management, and reconciliation modules
- Back-dated and forwarddated transactions
- Formula-based management and incentive fee calculations with invoice generation
- Formula-based interest and expense accruals
- Broker-specific exchange rates and settlement prices if desired
- Exchange rate gain and loss calculations are automatic
- Daily NAV calculations

# RISK MANAGEMENT

The Risk Management module of TheBooks<sup>®</sup> provides tools to quantify the risk a given subset of accounts have to price movements.

#### VALUE AT RISK

Value at Risk is the industrystandard way of quantifying, within a desired confidence interval, the maximum amount of money a portfolio is likely to loose in the next day given it's positions.

The Value at Risk module provides both a current snapshot and a sector profile of VAR for an arbitrary portfolio, and also includes up to a thirty day history of portfolio VAR.

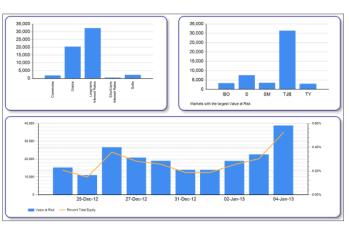
The data is presented graphically with the option of sending the underlying data to applications such as Excel<sup>®</sup> for further analysis.

#### STOP LOSS ANALYSIS

A stop loss analysis utility provides a second view into your portfolio's exposure by analyzing your current positions and any protective stops you may have in the market.

Several reports and an interactive, graphical analysis tool make up the stop loss analysis components and they can provide expected losses at the trade, market, sector, and account level.

MARGIN UTILIZATION TheBooks also keeps track of



margin utilization and can be configured to provide warnings when an account exceeds a predefined margin level.

Margin usage can be reported on at the account and the instrument level and can also be charted historically.

#### SCENARIO ANALYSIS

TheBooks provides the ability to analyze an arbitrary portfolio's reaction to price movements. Select a market condition, such as "Find me the most recent 10 times the S&P moved 2 percent in one day" and The-Books will display those events.

Select one of those events and TheBooks will evaluate the selected portfolio's reaction to the event in terms of realized and unrealized gains by market and sector.

Select them all, and TheBooks will evaluate the reaction to all the events and provide average, median, minimum, and maximum returns, again by market and sector. Exit stops, if specified, will be executed with slippage.

All results are displayed in tables and are charted. Charts and data can be copied and pasted into other applications for further analysis or presentation.

#### RISK EXPLORER<sup>TM</sup>

The Risk Explorer draws from all the risk management capabilities of TheBooks and organizes them into a single, interactive user interface. It allows the risk manager to easily perform what-if analysis on a portfolio and see the results both graphically and in tables.

#### "...tools to quantify the risk a given subset of accounts have to price movements."

#### Advantages

- Integrated with the trading, position management, and data manager
- Valuations on the tick when a real-time price feed is available
- Ability to import positions from other applications
- Perform what-if analysis by making hypothetical changes to an existing portfolio and examining the results
- Charts and data are easily exported to external applications for presentation and analysis purposes

# Performance Reporting

The Performance Reporting module of TheBooks<sup>®</sup> provides both real-time, intra-day performance and risk reporting, valued on the tick, and historic reporting and standard performance tables.

All reports are delivered on demand via a web-browser interface or can be scheduled to be sent via email. Reports are available in PDF, Excel®, Word®, HTML, and CSV formats.

#### Performance Explorer<sup>TM</sup>

The Performance Explorer is an interactive, graphical performance analysis tool that allows you to review performance for a portfolio or a subset of the portfolio and drill down into the sector and market components of the P&L.

The user interface allows drilldown by simply clicking on the area of a chart to cause it to expand and show the underlying details. You can select arbitrary time frames and examine the effects of removing markets, accounts, or entire sectors from the portfolio over the selected time.

#### PERFORMANCE REPORTING (CONTINUED FROM PAGE 7)

Data is also returned in tables, allowing you to filter and select the data you want and create your own specialized charts.

You can also overlay one or more benchmarks to show how the selected portfolio performed compared to the benchmarks

All data and charts can be copied to other applications for further analysis or publication.

#### COUNTER PARTY REPORTING

Any report can be configured to be sent to any contact in any available format automatically on a daily, monthly, and annual basis. They can also be sent automatically on a scheduler throughout the day.

TheBooks makes it a simple process to provide a client a daily instrument summary and a month-end preliminary performance capsule on the last day of the month.

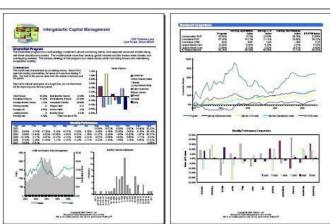
Using a few mouse clicks, you can configure what reports, in what format, are to be sent to what contacts and what accounts are to be included in the reports.

#### MONTHLY PERFORMANCE SUMMARY

One of the more timeconsuming tasks for an advisor is the production of the summary that is mailed each month outlining their programs. The production of the performance statistics, comparison benchmarks, and other information contained in the document often requires hours of preparation.

TheBooks<sup>®</sup> includes a template monthly summary that automates the production of this critical piece of marketing documentation.

The author designs the document layout and styles to fit the organization's requirements and can select from seven dif-



ferent charts and tables to be included in the document. These include benchmark comparisons with a selection of the eight industry-wide Barclay indices as well as userdefined benchmarks.

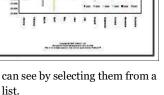
Once the author is satisfied with the layout and styles used in the document, TheBooks® will populate the selected tables and charts with the required information.

By saving the layout for use in subsequent documents, the production of the summary simply a matter of adding the commentary and having The-Books<sup>®</sup> populate the document with the latest statistics and data.

#### **INTRANET/INTERNET** REPORTING

For the advisor that wants to provide online access for clients, reports can be delivered directly to clients using a web browser. With a few clicks of a mouse, you can configure the TheBooks to allow you or your clients to view account activity and performance using a browser or web-enabled cell phone.

To ensure your data stays secure, TheBooks utilizes a multilevel approach to delivering data. You can control what reports are available for each client, as well as what account or group of accounts the client



# A SAMPLE OF AVAILABLE RE-

Here is a sample of the reports which are available from The-Books<sup>®</sup>:

- Instrument Returns
- Sector Returns
- Slippage

PORTS

- Round-Turns
- Win/Loss Review
- Daily/Monthly 13-column Performance tables
- Instrument by system
- Sector by system
- Margin to Equity
- Leverage
- Performance Metrics
- Allocation Fairness

#### ADVANTAGES

- Secure, web-based reporting to your clients
- Valuations on the tick when a real-time price feed is availahle
- Graphical analysis of performance
- Customizable web-based reporting for each investor
- Customizable email-based reporting for each investor allows you to push the reports to the investor in the format and frequency they desire
- Unparalleled levels of transparency
- Streamlines the preparation of the monthly performance summary mailer
- Wide range of reports pro-vides all the attribution breakdowns requested by investors
- Reports are available in all the popular formats, includ-ing as the raw data; allowing easy import into other tools for additionally analysis and/ or formatting
- End-user report designer allows you to develop your own reports and integrate them into TheBooks
- Access to performance data from anywhere, anytime

# Data Manager

The Data Manager module of TheBooks<sup>®</sup> provides a repository of market price data for research and order generation purposes.

It integrates data from a wide range of vendors into a single, consistent format. Combined with flexible continuous contract building and an automatic daily data downloader, the Data Manager is <u>the</u> tool for the systematic trader.

#### **UNIFIED PRICE REPOSITORY**

A single, server-based data store for all of your historic price data and continuous contracts, regardless of source, using your symbols and price conventions available from anywhere in your network. This is a unified data repository.

During the import operation, the vendor's market symbols are mapped to your market symbols and price data can be scaled and inverted.

#### **CONTINUOUS CONTRACTS**

The Data Manager provides multiple options for linking contracts and selecting roll dates. You can roll on specific dates, offsets from contract dates, and based on open interest. You can even roll based on your actual trading history.

Contracts can be forward or backward adjusted, and price series can be automatically shifted up to ensure positive prices.

#### DERIVED DATA

Sometimes your research may require the construction of data streams that are hybrids; built from the combination of one or more other data streams. In TheBooks, these are called Derived Data Sources. There are five pre-defined types:

- Ratio
- Index



- Term-Infused Spot
- Data Compare
- Splice

as well as a user-defined type which allows you to define the transformations on the input data streams to produce the output stream.

Once defined, Derived Data Sources can be used in the same way as Historic and Continuous Contracts. They can also be used as inputs into other derived data sources.

#### DATA EXPORT

Historic price and continuous contract data can be exported to a variety of formats for use by the most popular research and order generation tools.

When you define a data stream, you can define a location and format to export the data each time the data is updated. This is true of historic prices, as well as derived data and continuous contracts.

#### UPDATING DAILY DATA

You define the daily data source for each historic data stream and continuous contract. Then, either on demand or using the scheduler, the data is updated.

If you defined the data as export on change, the data is automatically exported in the format and to the location you defined, anywhere in your network, for use by research and order generation tools.

The Data Manager ensures that your research and order generator always use the most current data without the need for intervention by you.

#### DATA VIEWER

The Data Manager's data viewer not only provides charting with the ability to quickly pan and zoom through the price stream, but it also provides:

- the overlay of additional studies
- the overlay of actual trading with running positions and P&L
- OHLC Bars or Candlesticks
- Simultaneous display of data in a grid as well as on a chart

#### "If you work with historical and continuous contract data, you have got to get this tool."

Robert Friedl eco Capital Management

#### Advantages

- Unified price repository with bar sizes as small as one minute
- Manual or scheduled updates
- Update, build, and export all data series at once
- Only need a single real-time data vendor, rather than multiple historic data vendors
- Flexible continuous contract building
- Ability to use your actual trading history for roll dates if desired
- Derived (user-defined) data sources
- Powerful charting even allows overlaying your actual trading along with running positions and P&L
- Integrates with the trading components of TheBooks<sup>®</sup> to ensure continuous contracts are in the proper month.

### Application Programming Interface

TheBooks Application Programming Interface (API) allows programs written in languages such as Visual Basic, C#, and Excel<sup>®</sup> to interface with TheBooks programatically.

Using TheBooks API, programmers can integrate external applications such as order generators and reporting tools to access account, position, market, price and exchange rate information as well as to directly create, enter, place, fill and cancel orders.

TheBooks provides both a COM+/.NET programming interface as well as a stored procedure interface.

#### COM+/.NET API

The COM+/.NET programming interface of TheBooks is serverbased that accepts from authorized users to request information and to create and process orders.

The API is implemented as an ActiveX DLL and .NET assembly that encapsulates the details of network communications into a single object easily callable from COM aware languages, as well as from .NET languages such as C# and VB.NET.

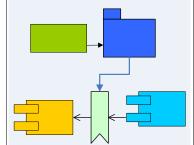
Because TheBooks API is a network service, applications can interact with TheBooks from anywhere within your network.

#### STORED PROCEDURE INTERFACE

For those environments where a direct database interface is more appropriate, TheBooks provides a set of stored procedures and views for interfacing with the database.

#### Event Model

TheBooks exposes it's event model allowing developers to write code that responds to system events as they happen. For example, your code can be executed automatically after an order is filled or when trade matching is complete.



#### DOCUMENTATION

Comprehensive documentation with examples as well as sample code written in Excel<sup>®</sup> are provided, simplifying the tasks required to integrate new or existing applications with The-Books.

TheBooks API enables The-Books to act as the integration platform for all trading, accounting, and performance data in your organization.

#### Advantages

- COM+ and .NET interface allows access from most windows languages and from applications such as Excel<sup>®</sup>
- Stored Procedure interface provides high-performance database access for the most demanding interface requirements
- Event Model allows tight integration by allowing you to integrate your coding into TheBooks processing flow
- Comprehensive documentation and examples reduces the time to implement complex integration projects

# DISASTER RECOVERY

Business continuity and disaster recovery has become an essential aspect of running a successful investment manager. The existence of a backup operating environment is now a key requirement of all due diligence questionnaires.

The ability to easily configure and manage systems so they can operate in production or backup modes is an important consideration when evaluating mission-critical applications.

#### STARTUP PROFILES

TheBooks incorporates a concept called Startup Profiles which are a set of system parameters describing how the system is to behave. Startup profiles describe things like the email server to communicate with, the price feed computer, and other system-related information.

TheBooks allows you to define multiple startup profiles. These are maintained within The-Books database. Each server that runs TheBooks can be assigned a different startup profile to use when it starts, allowing you to configure a startup profile for your production environment and a startup profile for your backup environment from your production environment.

When TheBooks database is restored in your backup environment, the settings appropriate to the backup environment are used.

#### LICENSING

Because DMAXX recognizes that an offsite backup facility is a requirement of your business, your license to use TheBooks<sup>®</sup> allows you to maintain as many offsite backup facilities you need at no additional charge.

#### **OFFSITE BACKUPS**

As an optional feature, The-Books can automatically back itself up and copy the backups to one of DMAXX's servers for secure, offsite backup.

#### Advantages

- Multiple startup profiles allows easy configuration of backup environments
- Software licensing allows backup sites without additional fees
- Optional remote backup service provides an automatic backup of your data to a remote, internet-accessible location

# FEATURE CHECKLIST

Trading and Broker Communications	
Trade blotter by trade date with filters for status, execution desk, trade purpose, sector, market, account, account group, and trading system	√
Low to High, High to Low, Weighted Average, and APS price allocation methods	✓
Support for partial fill allocation, with automatic trade creation for the balance	✓
Customizable account sort order for fill allocation	✓
Contracts per million, target level, contracts per trade, standard breakdown trade sizing methods	✓
Trading level can be a constant or formula based	✓
eMail and FTP communication of trades, fills, and account activity with customizable data file formats	✓
PDF document and customizable data file formats for trades, fills, and account activity	✓
Multiple trading systems (strategies) per trade, including net-zero trades	$\checkmark$
Combine multiple orders (same or multiple trading systems) into a single order	✓
Counter-party notification configurable at the account/exchange level	$\checkmark$
Per-Trade and/or Per-Day trading activity notifications on a per-recipient basis	~
Back-dated trade changes	~
Multi-order placement to broker/platform	×
Virtual trade date allowing global trading	$\checkmark$
Account-level executing broker rules enforce execution agreements	~
Trading desks can be limited to the exchanges it trades	~
Market and position limit checks on order placement	$\checkmark$
Sector and Market trading restrictions at the account level	~
Support for synthetic markets	1
User-defined fields can be attached to orders	1
Import orders and fills by dropping files into folders	1
API-based order entry	
FIX 4.2/4.4 drop copy support allows automatic order capture from a wide variety of execution platforms	
Execution gateway provides electronic order execution and reporting to clearing brokers as well as several advanced order handling options	1
Reconciliation	•
Automatically obtain statements via eMail and FTP	√
Extract data from human readable brokerage statements	1
Convert data from disparate statement formats into a single format defined by the user	<b>√</b>
Reconcile Balances, Trade Confirmations, Open Positions, Trading Commissions by firm, clearing broker, and user-defined group of accounts	1
Present trade breaks by trade or by account	√
Detail position reconciliation and net position reconciliation	<b>√</b>
Balance reconciliation at currency level and rolled up to account's reporting currency	√
Identify missing trades and late pickups	$\checkmark$
Top day reconciliation of trade confirmations	~
Maintain issues list recording open reconciliation issues at the broker level	~
eMail break sheet (human readable and CSV file) to clearing brokers with optional comments and optionally include all open issues	~
Maintain a statement archive allowing access to prior statements and data on line at all times	~
Copy extracted statement data to applications such as Microsoft <sup>®</sup> Excel <sup>®</sup>	~
Print statements multi-pages per page	~
Support for more than 130 different brokerage statements	~
Position Management	
Unlimited number of trading systems (also known as strategies)	~
Maintain positions by system and positions net to the street simultaneously	~
Real-time and batch trade matching	~

# FEATURE CHECKLIST (continued from page 11)

Position Management (continued)	
Multiple settlement prices per instrument per day allowing broker-specific exchange rates and FX prices	~
Trading and position activity on a specific day (present or past) and well as for a time range, net to the street or by system	~
Detailed positions as well as net positions by account or selected accounts with the ability to show/hide flat FX and LME positions	~
Re-state results into any currency	~
Account sizing wizard builds trades for account open, close, resize events	~
Pending rolls report uses roll rules to provide a one-week horizon into pending rolls	~
Exit, Roll, Reversal trade generation from selected positions	~
Option exercise and assignment with auto-generation of assignments and exercises on option expiration	✓
Back-dated trade changes automatically update positions	~
Spread-trade allocation as well as FIFO when performing trade matching configurable at the clearing broker level	~
Synthetic instrument support	~
Settlement prices and exchange rates can be imported from broker statements	~
Auto-expiration for cash settled markets	~
Position valuation on the tick when integrated with a real-time data feed	~
Trade Accounting	
Multi-currency chart of accounts	~
Balance sheet, performance table, trading cash flow, and income statement views of accounts or groups of accounts	~
Accounts can be domiciled in any currency and reported on in any other currency	~
Formula-based management and incentive fee calculations with automatic high-water marking and daily accruals	~
Formula-based interest and expense accruals at the account level	~
Back and forward dated transactions	~
Trading commissions at the account/market level	~
Broker-based trading commissions with separate fixed and variable charges for execution-only, cleared-only, and executed and cleared scenarios	~
All commission and fee structures are date-based allowing structure changes over time allowing back-dated accounting and trade changes	~
Account hierarchies allow results from multiple trading accounts to be combined for the purpose of performance and fee calculations	~
Single and batch transaction entry when manual posting is required	~
Batch transactions can be saved and recalled for application at a later time	~
Currency fluctuation (FX gain/loss) income calculated	~
Daily NAV calculations with automatic monthly and yearly returns	~
A currency sweep function for those advisors that sweep their foreign balances rather than trade them	~
All transactions are time stamped and the user who made the entry is recorded along with the transaction including full traceability of changes	1
Daily compounded returns method provides daily liquidity and NAV	~
Transaction search tool for locating transactions by account, transaction, performance table column affected, ledger column affected, and value over time	· ·
Advisor fee invoicing on monthly, quarterly, or custom time frame basis with invoices available in PDF, Word <sup>®</sup> , Excel <sup>®</sup> , and HTML formats	✓ ✓
	v
Risk Management Step loss analysis	√
Stop-loss analysis	× ✓
Options for system to propose protective stops based on user-definable risk parameters	,
Margin to equity and margin to trading equity at the account, market, and sector levels	*
Historic margin to equity	v
Ability to set warning levels for account margin utilization	*
Value at Risk for an arbitrary portfolio	*
User-settable VAR options for confidence interval, look-back period, and instrument proxies	×.
Scenario analysis allows investigation of a selected portfolio's reaction to market shocks	×
Evaluate a single event or a number events simultaneously	~
Chart and tabular views of results with sector and market-level details	~
Re-state results into any currency	~

# FEATURE CHECKLIST (continued from page 12)

Data Manager	
Unified price data repository for research and signal generation purposes	~
Bar sizes as small as one minute with virtualization to any larger size bar as required	~
Ability to define virtual trading days, allows the creation of daily bars based on any timeframe	~
Obtain data from a variety of sources and store in a single, consistent format	~
Flexible continuous contract building	~
Roll continuous contracts based on actual trading history	~
Derived data capabilities allowing user-defined construction of price streams based on other price streams	~
Data downloads are schedulable by market and can occur multiple times per day	~
Export data in a wide variety of standard formats	~
User-define export formats including symbol translation and numeric scaling	~
Data viewer with charting and data tables allowing zooming and panning through the data	$\checkmark$
Overlay studies such as moving averages and others	~
Overlay actual trading history including running positions and P&L	~
Automatic compare of price streams from multiple sources with user-defined rules for conflict resolution	~
Historic time zone database facilitates global sub-daily historic data and restatement of data to any time zone required	~
Outbound Communications	
Built-in eMail and FTP with automatic encryption of files and reports	~
Send log retains all outbound communications	~
Send log viewer displays status, item, and recipient information	~
Easily locate all communication related to a specific order	~
Forward, re-send, cancel, and delete send log entries	~
Pause sending with ability to release selected items	~
Preview before sending	~
To, CC, BCC on all communications	~
Automatic send log purging reduces system management requirements	~
Performance Reporting	
Browser-based end-user reporting	~
All reports available in PDF, Excel <sup>®</sup> , Word <sup>®</sup> , Text, HTML, and CSV formats	~
Any report can be configured to be automatically emailed or FTPed to any contact in any format on a daily, monthly, and annual basis	~
Reports that include the current day are valued on the tick and incorporate top-day trading activity	~
Web-based access can be provided to clients with restrictions on what accounts and reports the client can see	~
NFA Performance Capsule generator	~
Performance Explorer™ provides an interactive, graphical tool for examining performance at the portfolio, account, sector, and market level	~
Built-in support for Barclay indices with monthly updates of indices	~
VAMI, drawdown, volatility, Omega function, Sharpe Ratio, Sortino Ratio calculations	~
Pro forma performance tables based using any subset of accounts at a user-specified management and incentive fee	~
User-defined benchmarks allow comparison of portfolios to industry standards of your choosing	~
Customizable colors schemes and ability to include your logo and company information on reports	~
Reports can be presented in any currency desired	~
Reports that include the current day can auto-refresh on a per-user schedule	~
Ability to define arbitrary groups of accounts and report on them as a single composite	~
Most reports are available by trading system as well as net of all trading systems	~
Templates for easy production of monthly performance summary (Tear sheet)	~
End-user report designer allows easy development of customized reports with full integration into TheBooks for sending to clients	~

# FEATURE CHECKLIST (continued from page 13)

Instrument Support	
Futures	~
Forwards	~
Foreign Exchange, including NDF currencies	~
Equities	~
Cash Swaps	~
Options on Futures	✓
Options on Forwards	~
Options on Foreign Exchange	~
Options on Equities	✓
Options on Cash Swaps	~
Calendar Spread Options	~
Delivery Point Spreads	~
ICE OTC energy contracts such as Henry Hub swing swaps, electricity, and other daily settled power contracts	~
New Zealand and Australian electricity contracts	~
Available Market Data Interfaces	
CQG (real-time and Data Factory)	√
CSI	~
DTN ProfitX Webservices	~
ICE OTC Energy contracts data file	~
Metastock	~
Tick Data	~
Yahoo (exchange rates, equities and mutual funds, and some futures contracts)	~
Excel Spreadsheet (cell reference and named ranges)	~
User-defined text files	~
Available Execution Platforms	
CME STP (Trade Capture)	√
CQG	~
ICE Trade Capture	~
JP Morgan eXtraTrade	~
Neovest (both Equities and Futures/Options)	~
Open E Cry	~
Patsystems	~
RealTick	~
RediPlus	~
TradeStation	~
Trading Technologies	~
TradingScreen	~
Technology	~
Three-tier client server architecture	
	$\checkmark$
Three-tier client server architecture Microsoft SQL Server 2008, 2012, 2014, 2017 (32 and 64 bit versions)	√ √
Three-tier client server architecture Microsoft SQL Server 2008, 2012, 2014, 2017 (32 and 64 bit versions) 32/64 bit versions of Microsoft Windows 10, Windows 8.1, Windows 7 Professional, Windows Server 2008, Windows Server 2012 R2, Windows Server 2016	
Three-tier client server architecture Microsoft SQL Server 2008, 2012, 2014, 2017 (32 and 64 bit versions) 32/64 bit versions of Microsoft Windows 10, Windows 8.1, Windows 7 Professional, Windows Server 2008, Windows Server 2012 R2, Windows Server 2016 Browser-based reporting	~
Three-tier client server architecture Microsoft SQL Server 2008, 2012, 2014, 2017 (32 and 64 bit versions) 32/64 bit versions of Microsoft Windows 10, Windows 8.1, Windows 7 Professional, Windows Server 2008, Windows Server 2012 R2, Windows Server 2016 Browser-based reporting COM+, .NET and stored procedure programming interfaces with event model	~
Three-tier client server architecture Microsoft SQL Server 2008, 2012, 2014, 2017 (32 and 64 bit versions) 32/64 bit versions of Microsoft Windows 10, Windows 8.1, Windows 7 Professional, Windows Server 2008, Windows Server 2012 R2, Windows Server 2016 Browser-based reporting	~

#### DMAXX, LLC

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#### System Requirements

Server Windows 8, 8.1 Windows 7 Professional Windows 10 professional Windows Server 2008 Windows Server 2008 R2 Windows Server 2012 R2 Microsoft SQL Server 2008, 2008 R2, 2012, 2014, 2017, or SQLExpress

Client Workstations Windows 8, 8.1 Windows 7 Professional Windows 10 Professional

Windows Server 2008 Windows Server 2008 R2 Windows Server 2012 R2 Windows Server 2017





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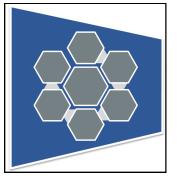
DMAXX, LLC has been providing software and services to the Managed Futures industry since 1994. Our customers range from some of the largest to some of the smallest advisors. Our projects have included multiple top-to-bottom custom-developed back, middle, and front office systems. We were the first company to implement systems compliant with the MFA/FIA standards for the transmission of electronic order and fills.

Using our experience, we developed TheBooks<sup>®</sup> for the Alternative Investment community, with an emphasis on those advisors with managed accounts. By combining an off-the-shelf solution with our years of business consulting and software development experience, we can help you gain the competitive advantage that technology can bring to your operation.

# WHY ADVISORS USE THEBOOKS<sup>®</sup>

We surveyed our customers to identify the reasons why firms use TheBooks as the core of their operating software environment. Here are the most frequently mentioned reasons:

- Reduced expenses as compared to out-sourced back office functions.
- Dramatic reduction in time and effort required for reconciliation.
- Consolidation of multiple systems and databases into a single, companywide system with a unified database of trading and performance information.
- Streamlined counter-party notification of trading activity.
- Ability to expand the range of instruments traded without the need to wait for in-house system development.
- Real-time position updates and valuation providing improved risk management.
- Ability to make back-dated trade changes and journal entries.
- Automatic daily NAV calculations with daily, monthly, and yearly returns.
- The ability to obtain closing prices earlier for use in order generation.
  - The ability to provide any level of transparency required by the investor and to deliver the information in the format and via the method they require.



- Real-time access to performance information via web -enabled cell phone.
- Increase the number of accounts, clearing relationships, and execution relationships without any associated increase in manpower.
- The ability to track positions and performance by system as well as net to the street without the need to double-post trading information.
- Multi-user capabilities removed operational bottlenecks associated with previous system.
- Ease of integration with existing order generation systems.
- Built on Microsoft's SQL Server™ database which provides a stable and reliable platform able to handle the largest advisors.
- Ability to maintain all historic trading and performance information in a single repository with the ability to report on any date range.
- Remove the risk, expense,

and inflexibility associated with in-house developed and maintained systems.

- Integrated risk platform includes the ability to evaluate the impact of position changes.
- Electronic execution with seamless give-up reporting.
- Advanced data management features including minute bar handling and derived data allows research never before possible.
- Easily produce monthly performance summary mailer for marketing purposes.
- A wide range of reports provide the ability to more effectively manage the fund.

These are some of the reasons our customers use TheBooks. To find out more, or to arrange a demo, contact us at 847-234-4969.



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