### **About QED**

Founded in 1987, QED Information Systems, Inc. is the leading provider of portfolio management and investment accounting systems to institutional buy-side firms, such as pension funds, investment advisors, endowments, and treasuries.

QED's strong and qualified teams of professionals specifically support client needs and requirements. Extensive experience in the financial field allows QED to leverage and deploy their diverse resources to offer clients the best solutions, services, and support in the industry.

Currently used to manage nearly \$1 trillion in assets, QED's innovative software solutions have gained wide acceptance within the financial community. QED's expansive client list, coupled with their industry knowledge and experience, substantiate that QED is *Quod Erat Demonstrandum* — that which has been proven.





Portfolio Management



Investment Accounting



Securities Operations

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# TAKE A CLOSER LOOK.

# The most compelling reason for upgrading your legacy investment management system is at hand.

#### Feature-Rich ... Intuitive ... Rock-Solid.

Q2 is the complete portfolio management and investment accounting system that external institutional managers, hedge funds, plan sponsors, and treasury institutions have been seeking. Q2 is an all-in-one, feature-rich, scalable, and cost-effective solution.

Q2 provides complete front-to-back office functionality that offers unprecedented control over the information needed to manage business operations and respond to customer needs. Powerful, integrated, and efficient, Q2 streamlines investment management functions and workflow processes with minimal IT commitment.

#### **Comprehensive Solution**

As a truly comprehensive investment management solution, Q2 automates all aspects of investment operations, including transaction processing, mark-to-market valuation, reconciliation and trade settlement, performance measurement and analysis, and investment accounting. What's more, Q2 is intuitive, user-friendly, and fast.

By combining extensive portfolio management, investment operations, and accounting functionality into one cohesive, multi-threaded desktop application, the **Q2** hub allows information to be centrally controlled and distributed in real time across your enterprise. With control, reliability, and dashboard user operation, **Q2** is truly an all-in-one enterprise solution.

### **Contemporary System Architecture**

Q2 runs on Sun Microsystems servers and has transparent interfaces to Windows, Windows NT, Linux, and other operating systems. Clients benefit from the superior processing power of a scalable UNIX server, without disrupting their familiar desktop environments. The Q2 architecture ensures dynamic, real-time data access and reporting because the system infrastructure utilizes innovative database technologies that promote highly responsive, immediate, and accurate data access.

Q2's open foundation centers on the unique structure of its database library and its ability to comprehensively integrate with other systems. The database library contains an extensive data dictionary and actively maintains current and historical investment data, accounting information, and market data for seamless data regression and instantaneous financial reporting.

#### **Key Features:**

- Extensive Fixed, Equity and Derivatives Coverage
- Multi-Currency Processing and Reporting
- Straight Through Processing Conduit
- Book-of-Record Investment Accounting
- "As of" Evaluated and Hard-Close Reporting
- Extensive Portfolio Management Tools
- Dashboard Fund Accounting/Cash Management
- Real-Time Position and Trade Evaluations
- Multi-Vendor Pricing and Corporate Action Feeds
- Rules-Based Recon and Settlement Control
- Automated DTCC Confirmation and Affirmation
- Integrated User Collaboration and Data Sharing
- AIMR Performance Measurement Reporting
- Universal Third-Party Import/Export Conduits
- Ad-Hoc Web Reporting and Publishing
- HTML and PDF Board Quality Reporting
- Quick and Accurate Implementation
- Scalable, Easily Maintained Architecture
- Operator-Friendly, Personalized Interface
- Industry-Leading Customer Support

## Quick, Reliable, and Accurate Conversion and Implementation

QED's highly skilled project management and implementation professionals ensure timely and successful installation of **Q2**. QED's comprehensive QuickPort implementation process is part of a full turnkey solution where QED professionals manage system implementation from initial needs assessment through hardware and software installation, data migration, and user training.

QED project managers maintain frequent contact with client project team leaders and work closely with project team members to develop comprehensive implementation plans that include goals, requirements, and deliverables.

QED implementation team members are experts in the investment industry and are motivated by client success. Placing great emphasis on client business needs, QED team members perform all necessary installation, integration, and training tasks to ensure flawless operation of **Q2** within client organizations.



## Intelligent, Flexible, and Friendly Operation

Q2's state-of-the-art graphical user interface and realtime processing create a user-friendly environment. Menudriven, intuitive, blotter-based screens provide easy access to data, while powerful, real-time processing supplies immediate and automatic data updates throughout the enterprise.

For optimal flexibility, the **Q2** desktop enables users to customize their working environments. Users can tailor the manner in which information displays on existing screens, create custom views for displaying and manipulating frequently accessed data, build personal tickler files, and set real-time filters and alerts.

#### Performance Evaluation, Measurement, and Analysis

Q2 simplifies performance measurement data production and reporting and minimizes the effort needed to maintain composite and benchmark references. With Q2 you can easily create and maintain unlimited constituent membership relationships, build rule- and formula-based blended benchmarks, and automate the evaluation process to run at any prescribed interval.

The convenience of reviewing performance data that is automatically updated on a daily basis is a superb management tool for portfolio managers and other investment professionals. Most importantly, the speed and reliability of measuring and analyzing performance in **Q2** enables users to assess critical information sooner and with more confidence and accuracy.

To help managers assess performance results, **Q2** also provides a drag-and-drop desktop browser that allows one-to-many, many-to-one, and many-to-many comparisons between combinations of composites, benchmarks, and account history for any time horizon. Direct drill-down to underlying accounting and referential information is as simple as clicking any reference point within any of the multiple graph choices available in the display.

Some of the many features of the **Q2** performance engine include:

- Full AIMR compliance
- Calculation of complete net asset value, including securities market values on trade date basis, cash, ex-date basis, earned and accrued income, securities receivables and payables, and accrued fees
- Daily evaluation and hard close at any point in time
- Calculation of component dollar and percentage returns for principal, income, foreign exchange gain/loss, other income and fees, as well as total return
- Calculation of returns by fund/account, AIMR segment, asset type, economic sector, industry classification, country, currency, user-defined groups, or individual security
- Creation and linking of unlimited benchmarks, including custom blended formulas
- Creation of unlimited composites, including automatic entry/exit constituent rules
- Ability to exclude unmanaged assets from any category
- Recording of security and cash transfers between or through accounts, without performance impact
- Net-of-fees return calculation that can include and exclude designated fee types, as desired
- Audit trails that directly link to underlying securities and accounting records for drill-down
- Export of performance results and underlying accounting data to external applications
- Import of historical performance and benchmark information from external sources

Performance results can be viewed online using standard or ad-hoc reports, or can be interactively interrogated using Q2's graphical online analysis tools (see the example on the previous page). In addition, Q2's PDF/HTML reporting engine can combine performance reports with other portfolio and enterprise information into a publication-quality, multi-document reporting package that can be delivered to your consumers either in printed form, by email, or via a Web portal.

#### **Dynamic Data Views and Drill-Down**

In our fast-paced industry, instant access to trade activity and position exposure is crucial to the success of your mission. For this reason, each **Q2** desktop incorporates multiple online blotters, real-time dashboard views, and powerful search tools that help you find, analyze, and monitor any desired metric or slice of your portfolio holdings and trade activity.

Customizable views provide simple point-and-click access for immediate drill-down to finite trade detail, pricing history, terms and conditions, commentary, and other referential information. A rules-based view editor enables triggers and filters to be set so that the desktop can provide critical visual alerts to defined events as they occur. When they occur, users can message one another directly within **Q2** and exchange the underlying data content for interactive peer collaboration.

#### **Universal Data Exchange**

Since cross-platform connectivity is critical for efficient and automated securities processing and management, **Q2** includes easy-to-use tools to facilitate data exchange with external sources. The QED QuickPort team builds interfaces during implementation and teaches clients how to use **Q2**'s development tools to quickly refine or build new interfaces. **Q2** connectivity manages:

- Bi-directional trade traffic from/to third-party or proprietary trading systems for straight through processing
- Trade and position advices to clients, regulatory agencies, and external applications
- Trade advices from external managers for automated trade postings
- Positions refresh to third-party or proprietary trading systems
- Security Master File information updates from data sources, such as Bloomberg and FT Interactive
- Transaction, position, and cash activity capture from custodian banks for automated reconciliation
- Pricing, corporate actions, and reorganization data import from source vendors
- Confirmations download from DTCC
- Affirmations upload to DTCC
- Inventory positions uplink to analytical systems, such as Barra, BondEdge, Soloman Yield Book, and others
- Journal entry export to third-party general ledgers, such as SAP, PeopleSoft, Great Plains, and Oracle
- Settlement and delivery instruction advices to custodian banks

## Trusted Investment Accounting and Cash Management

For more than two decades, investment institutions have trusted the reliability and accounting integrity of QED systems for their books of record. Upholding this tradition of excellence, Q2 offers incomparable investment accounting and cash management.

Q2 investment accounting solutions completely automate securities processing, corporate actions, and pricing. Extensive data scrubbing and relational validation checking ensure accurate posting and provide immediate error notification. Reversals and corrections to posted activity automatically adjust subsequent history and flow through to all accounting results. Q2 also provides extensive security and audit trails, including an online, real-time update monitor that displays system-wide changes as they occur.

Q2 automatically generates all accounting journal entries, including transactions, cash activity, and valuations (earning accruals, bond amortization, realized gains/losses, and market and foreign exchange valuation). Furthermore, detailed or summary journal entries can be exported to third-party or proprietary general ledger systems using customizable charts of accounts.

Q2 security types are client definable and include:

- Fixed Income and Structured Debt
- Equities
- Cash and Cash Equivalents
- MBS/ABS/CMO
- Variable and Stepped Rate
- Foreign Securities and Currency Contracts
- Mutual Funds, UITs, and Conduits
- Options, Futures, and Limited Partnerships
- Collateral Adjustments
- Most "animal" and esoteric Instruments

Fixed income calculations include book and market yields (including the impact of prepayment speed assumptions and mandatory redemption schedules), average life, multiple duration metrics, convexity, and more.

Q2 also features complete cash accounting and cash management. Cash activity is automatically updated upon transaction posting, and receivables and payables (including foreign tax withholdings and recoveries) are tracked. Cash is updated with direct cash entries, including external contributions/withdrawals, fees, and interest on cash (such as sweep accounts). Cash ledgers isolate corpus, income, and AIMR segment components as separate running ledger balances

Real-time cash balances are available online on a trade availability or settlement basis, and security cash flows can be projected to any future horizon.

### **Integrated User Collaboration and Data Sharing**

Since effective workforce collaboration is crucial to efficient investment operations, Q2 includes an integrated, easy-to-use messaging facility that enables users to communicate and share data without leaving the **Q2** desktop.

Similar to familiar instant messaging applications, **Q2**'s messaging feature promotes user collaboration by allowing peers to communicate and exchange working data. What's more, **Q2**'s copy functionality allows users to attach security positions, trades, tickler notes, or other user-selected data to messages so that the recipients can review, research, analyze, process, update, and report on the embedded information.





# It's time to transition to a comprehensive solution. It's time to transition to Q2.

### **Automated Reconciliation and Account Verification**

The automated reconciliation of investment accounting data with external sources such as custodian banks, external managers, prime brokers, trading systems, and DTCC, is an effective way to improve investment operation efficiency and reduce costs. The **Q2** automated securities reconciliation feature was designed for ultimate flexibility in promoting straightforward reconciliation between interested parties

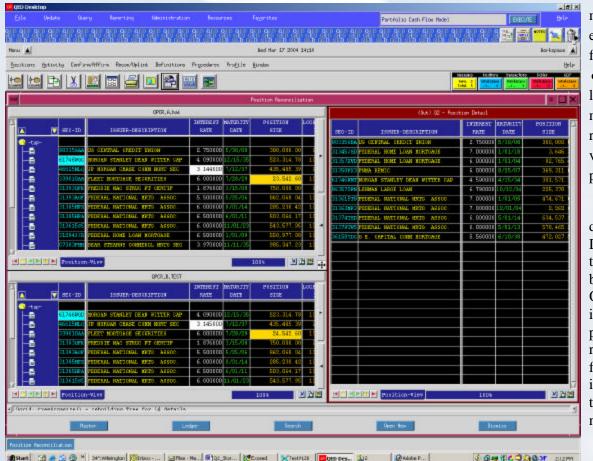
The Q2 reconciliation platform enables clients to extract transactions or positions from the Q2 accounting database across any time period. Using the data import manager, Q2 can automatically gather data from other sources to be reconciled directly against the Q2 book-of-record. Because external dataset formats can be comma delimited, pipe delimited, fixed field, tab delimited, XML, SWIFT or custom formatted, data exchange with Q2 is automatic and reliable. Referential compatibility is also automatically handled within the rules defined for the interface and can be quickly updated on the desktop whenever necessary.

Custom-defined reconciliation rules specify which combination of fields are to be reconciled and can include hard or percentage-based tolerances. The reconciliation process can be viewed and managed at the desktop or scheduled for background operation. Even the available hard copy exception reports can be tailored to exact user preferences and can include highlighting of near match values.

Some of these features include:

- Separate customizable views for managing opposing trade/position sets
- Identification of near matches and fail conditions on a per record and per field basis
- Automatic write-off of differences that fall within established matching tolerances
- Direct navigation to transaction history, position holding, security master, and pricing history
- Dataset regression that accommodates multiple rule-set strategies
- Aggregation function that handles one-to-one, one-to-many, many-to-one, and many-to-many record matching
  - Integrated peer
    messaging that attaches exception records
    for team collaboration
  - Rules-based translation and crossover mappings that enable reconciliation with virtually any third party

Q2 provides standard interfaces to DTCC and major custodial and regional banks. As part of QED's QuickPort implementation interfaces are provided during system implementation based on client needs.

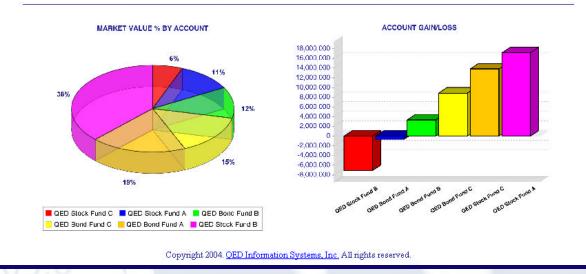




#### QED INFORMATION SYSTEMS PORTFOLIO VALUATION

Valuation as of: 4/30/04

FUND NAME	BOOK VALUE	MARKET VALUE	ENDING ACCRUAL	TOTAL MARKET	GAIN/LOSS
QED Bond Fund A	213,850,974.45	213,215,132.33	4,320,123.39	217,535,255.72	-635,842.12
QED Bond Fund B	126,607,926.66	129,942,675.93	2,277,990.86	132,220,666.79	3,334,749.27
QED Bond Fund C	160,145,514.49	169,018,757.88	3,008,464.91	172,027,222.79	8,873,243.39
QED Stock Fund A	107,392,574.70	124,567,289.55	0.0	124,567,289.55	17,174,715.55
QED Stock Fund B	429,851,327.92	422,761,442.72	0.0	422,761,442.72	-7,089,885.20
QED Stock Fund C	53,073,014.77	66,898,421.72	0.0	66,898,421.72	13,825,406.95
Grand Total	1,090,921,332.99	1,126,403,720.13	9,606,579.16	1,139,886,273.19	35,482,387.14



### **Board, Client, and Management Reporting**

Create brilliant, insightful reports with **Q2**'s report writing and publishing tools to enhance your image and engender brand recognition. These powerful tools allow you to create, share, and reuse custom document layouts incorporating **Q2** data with content located anywhere throughout your network or the Web.

Reports are constructed using a drag-and-drop layout editor to select and place desired content objects within a page construction area. Pull-down lists are used to select visible attributes such as font style, size, weight, color, and borders that add style to the page. Object placement and conditional formatting provide controls that can accommodate virtually any desired layout.

Q2 reports can even include such effects as custom colors, images (logos, etc.), watermarks, Q2-generated graphs (including 3-D pie charts, histograms, bar charts and line-point graphs), pagination, and custom headers and footers. The built-in PDF layout editor allows multiple reports

and external documents located within the client's LAN or Web to be merged into a single, professional, multi-page document. Once created, the exhibits can be generated ondemand for desktop review, printing, or delivery in HTML or Adobe PDF formats.

Best of all, QED's professional services group is always available to help manage your reporting projects to help ensure that you achieve optimal results.

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