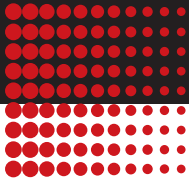




Software Solution for
Investment Portfolio Management

SIDAT HYDER



AN INFORMATION SOLUTION

Today, one of the major challenges faced by investment managers is the inaccessibility of reliable, comprehensive and cost-effective analytical data management systems. Limitations of existing business intelligence systems hinder the incorporation of regulations, the recognition of market dynamism and the growth of investments for investment management companies including asset management companies, banks, wealth managers, insurance firms and others.

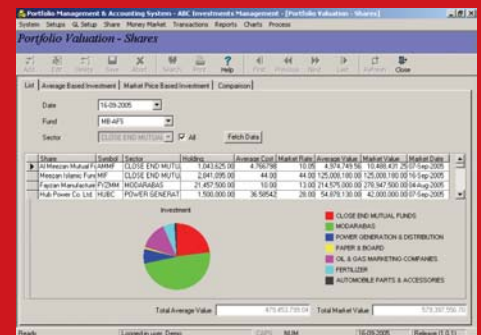
With growing and competitive markets, pressures mandate better investment performances setting new standards of required speed, reliability and quick adaptability to market changes. Thus, all investment managers require reliable & robust tools that facilitate detailed analysis and promote accuracy in decision making and trade execution.

Sidat Hyder - **INVESTMENTS PORTFOLIO ACCOUNTING & MANAGEMENT SOLUTION (iPaMs)** enables the investment manager to elevate the business to new levels of efficiency by minimizing errors, diversifying risks, eliminating unnecessary costs and redirecting internal focus. iPaMs automates the investment processing cycle by seamlessly executing all transaction-based actions and provides intelligent reporting right at the desktop, gearing up investment organizations to make optimal decisions to manage growing investment needs. Thus, iPaMs incorporates analysis and accuracy in trade processes without sacrificing growth or opportunities for the investment organization. Investment managers can now focus on growing investment portfolios, while enjoying the positive impact and ROI of effective monitoring, controlling and management of the entire cycle.

iPaMs caters to daily transaction and management reporting requirements for investments in Equity, CFS, Futures, Money Market and Treasury, with the capability to seamlessly integrate to back-office accounting systems available including Sidat Hyder-FINANCIALS. The solution can manage equity and bonds trading and settlement, portfolio composition, can value and track its performance, check compliance against preset rules and policies, generate accounting entries and produce a variety of operational and management reports. Its comprehensive Treasury module records and manages all transactional activities of borrowing & placements with generation of relevant reporting. This is further supplemented with a series of sub-modules, which include pledge/un-pledge, cross-referencing, margins, exposure limits and more.

COMPREHENSIVE INVESTMENT MANAGEMENT SOLUTION

- ▶ Shares
- ▶ Continuous Funding System
- ▶ Term Finance Certificates
- ▶ Treasury Bills & Borrowing/Placements
- ▶ Bonds (FIB, PIB)
- ▶ Rights
- ▶ Futures Trading
- ▶ Premium Amortization, Yield, IRR
- ▶ IAS Compliant
- ▶ Multi Currency
- ▶ Arabic Interface
- ▶ Forex Gain/Loss



INTELLIGENT REPORTING

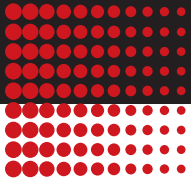
- ▶ Portfolio Valuation
- ▶ Moving Averages (Historical & Carrying Cost)
- ▶ Manager Broker Accounts
- ▶ Monitor Corporate Actions
- ▶ Profit/Loss

FLEXIBLE & SCALEABLE

- ▶ Fits any size of operation
- ▶ Comprehensive features
- ▶ User-defined setups
- ▶ Upload daily equity prices
- ▶ Intuitive data entry forms
- ▶ Integration with GL
- ▶ Upload CDS Holding, Daily PKRV, KIBOR, Currency rates

ADDITIONAL COMPONENTS

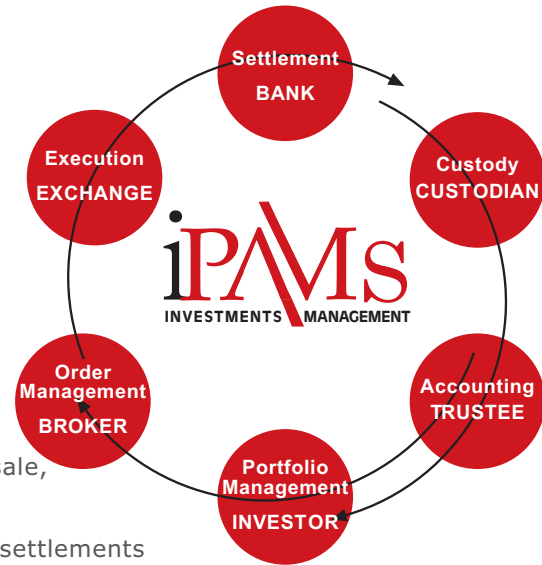
- ▶ Executive Dashboard
- ▶ Excel Plug-in
- ▶ Business Intelligence Module
- ▶ Graphical View of all Transaction Reports
- ▶ Alerts/Reminders



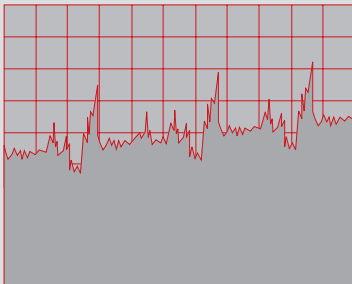
BUSINESS FEATURES

COMMON FEATURES (EQUITY, MONEY MARKET AND TREASURY)

- Pre-Trade Compliance Constraints as per management policy and regulatory requirements
- Manage multiple funds/investment portfolios/managed accounts
- IAS compliant
- Daily Portfolio Valuation (NAV)
- Configure and enforce investment approval limits
- Set predefined brokerage rates
- Complete Brokerage Accounting
- Tax Module to configure applicable taxes [CVT, Tax on sale, Withholding tax, etc.]
- System acknowledgement on book closures/maturities/settlements
- Powerful integration options to link with back-office accounting for each fund
- Comprehensive reporting for: fund managers, accounts departments, settlements department, trading department, auditors, brokers, trustee, custodian, Stock Exchange and SECP
- Daily automatic accruals



E Q U I T Y M A R K E T



- DETAILED COMPANY SETUP
- USER-DEFINED SECTOR CONFIGURATION
- EFFICIENT FRONT-OFFICE ORDER ENTRY & PROCESSING
- CONFIGURE MONTHLY SETTLEMENTS CALENDAR
- MONITOR CORPORATE ACTIONS (BONUS, DIVIDENDS AND RIGHT SHARES)
- AUTOMATIC MARKET PRICES UPLOAD FACILITY
- VALUATION OF LISTED/DE-LISTED COMPANIES
- MOVEMENTS FROM ONE CLASSIFICATION OF FUND TO ANOTHER
- CATER CONTRA-ENTRY TRANSACTIONS
- RIGHT SHARES SUBSCRIPTION, SALE, PURCHASE, AND REVALUATION
- COMPLETE FUTURES TRADING, INCLUDING READY BUY FUTURE SELL (RBFS)
- CFS TRANSACTIONS WITH PARTIAL RELEASE OPTIONS
- MAINTAIN CARRYING COST IN PARALLEL WITH HISTORICAL COST
- MANAGE FUTURE TRANSACTIONS, SETTLEMENT AND REVALUATION
- DAILY CDS RECONCILIATION MODULE
- CATERS TO IFRS 39 REQUIREMENTS
- DIVIDEND ADJUSTMENT IN COST
- DAILY CASH FLOW STATUS

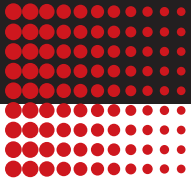


MONEY MARKET

- Coverage of different bond marketable securities [TFC, FIB/PIB, T-Bills, COI, TDR]
- TFC Call/Put options, principal-repayment, conversion option
- Link TFC to any floater, e.g. KIBOR, SBP discount rate, etc.
- Premium amortization on IRR and Linear Basis
- Yield, price and accrual calculation
- IRR Calculation using Excel Goal Seek Method and Interpolation
- Accrual on settlement, as well as on trade date
- Bonds valuation, average yield, moving average & carrying cost
- Realized & unrealized profit/loss on moving average or on specific lot
- Profit and principal repayment on coupon maturity
- Complete integration with back-office accounting as per IAS

TREASURY

- Link Deal to any floater [KIBOR, SBP discount rate, etc.]
- Flexible payment option
- Propose Pledge shares
- Configure exposure limits party-wise
- Set margins on security pledge
- Caters to all types of Borrowing & Placements
- Different payment schedules for profit and principal-repayment
- Pledge multiple securities
- Security release and re-pledge option
- Multiple Rollover facility on any deal
- Keep track on cross-referenced deals
- Daily accruals
- Manage brokerage accounts
- Integration with back-office accounting database
- Comprehensive reporting for: dealers, treasury department, investments banking department, accounts department, auditors, brokers, state/central bank, etc.



SOFTWARE FEATURES

Sidat Hyder - Investment Portfolio Management & Accounting software is built with sophisticated technology, offering your organization the capability to record and deliver information accurately and efficiently throughout the enterprise. Some core technology feature and benefits include:

FLEXIBILITY & ADAPTABILITY

Whether a change in accounting regulations, introduction of a new instrument type, or a tax code change, iPaMs externalized user-defined business rules empower your business professionals to develop, test and implement change throughout your enterprise without coding.

SCALABILITY

iPaMs multi-tier architecture allows for unmatched scalability, providing the option to execute and support heavy transaction volumes.

ONE SYSTEM, ONE INSTANCE

Built for the Web, iPaMs enables you to install one system with one database regardless of the markets, offices, users your firm supports. You will no longer be concerned with synchronizing and maintaining multiple databases, which will save both time and money for your organization.

EASE OF USE

On Screen Sorting and Searching Option are available. Comprehensive Report Dialogs have been designed for user defined filtering, grouping and sorting. Page-by-Page data fetching in reports is geared by a proprietary engine that enhances user response time and ease of use.

INFORMATION SHARING & DISSEMINATION

Conversion of reports to PDF, MS Word, MS Excel and other formats help in information dissemination and use.

REDUCES DEPLOYMENT & SUPPORT COSTS

Zero Client Side Deployment Issues – the solution is web based and all you need is a browser to run the application.

SUPPORTS MULTIPLE DATABASES

Support for multiple back end databases is available.

COMPREHENSIVE APPLICATION SECURITY

Comprehensive Security Shell to assign User and Role based security with Complete Audit Log on each Activity.





EFFECTIVE REPORTING

The associated reports with this system are of key importance and value for management, control and decision-making. With maximum flexibility and user defined parameter selection, data is retrieved, processed and presented in a set of carefully designed reporting formats.

Some key reports in use include:

PORTFOLIO VALUATION

Equity and Money market securities valuation may be done on average cost or FIFO basis. Grouping is possible according to sector and funds. Value is then determined based on market price along with applicable gains/losses.

CAPITAL GAINS

With option to view by date, security and broker, this report signifies the capital gain/loss on sales transactions.

MOVING AVERAGE

Supplemented with a specific processing module, this report may be generated for a selected period with options to view for a single security or all the securities in a portfolio.

DAILY ACCRUAL

Daily accrual of Money market securities can be done through system and user can view accrual for the month, or of any specific interval, or for the coupon.

BROKERAGE ACCOUNTING

Detailed broker report is available for each broker signifying, the type of transaction (Share, CFS, Money market etc.), amount, and brokerage commission.

CONTINUOUS FUNDING SYSTEM

Four options are available in this case and all may be viewed over a selected time period and filtered by date, share or broker. These include:

(1) Trade report highlighting the CFS trade activity during the period

(2) Capital Gains signifying the realized gain/loss on the CFS transaction.

(3) Open position option identifies the CFS for which sales settlement date is to be defined.

(4) Deal Tickets may be used for operational purposes and management. For CFS related trade, Two deal tickets are generated per sale transaction for purchase & sales settlement.

BONUS SHARES & DIVIDEND REPORTING

The system generates reports that help in identifying the upcoming bonus shares and dividends that will affect the portfolio. This is based on the respective share holding in the portfolio and book closures.

TREASURY REPORTS

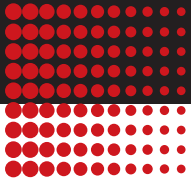
Number of Treasury reports can be generated to effectively manage deals relating to lending/borrowing. These will include I) Position of securities ii) Deal Slips iii) Ratification report iv) Form of Transfer for operating on SGL (for all securities) v) Transaction Note vi) Inflow/Outflow during the month vii) Outstanding (lending/borrowing) viii) Daily Accrual of Income ix) Outstanding Maturities x) Overnight/Term's Deal for the month xi) Confirmation of Transaction.

OTHER REPORTS

A number of other reports also form part of the system supporting different instruments and associated transactions.

REPORTING DIALOGS & FILTER OPTIONS

Comprehensive reporting dialogs allowing filtering and selection of data tremendously enhances the reporting capacity & usage for proper and informed decision-making.



APPLICATION ARCHITECTURE

The application was designed to provide easy to use and intuitive windows based interface to the user. Application system is designed in accordance with Microsoft Windows .Net Platform and implements N-Tier Architecture. This comprehensive architecture of the suite reduces the networking cost and increase flexibility and compatibility.

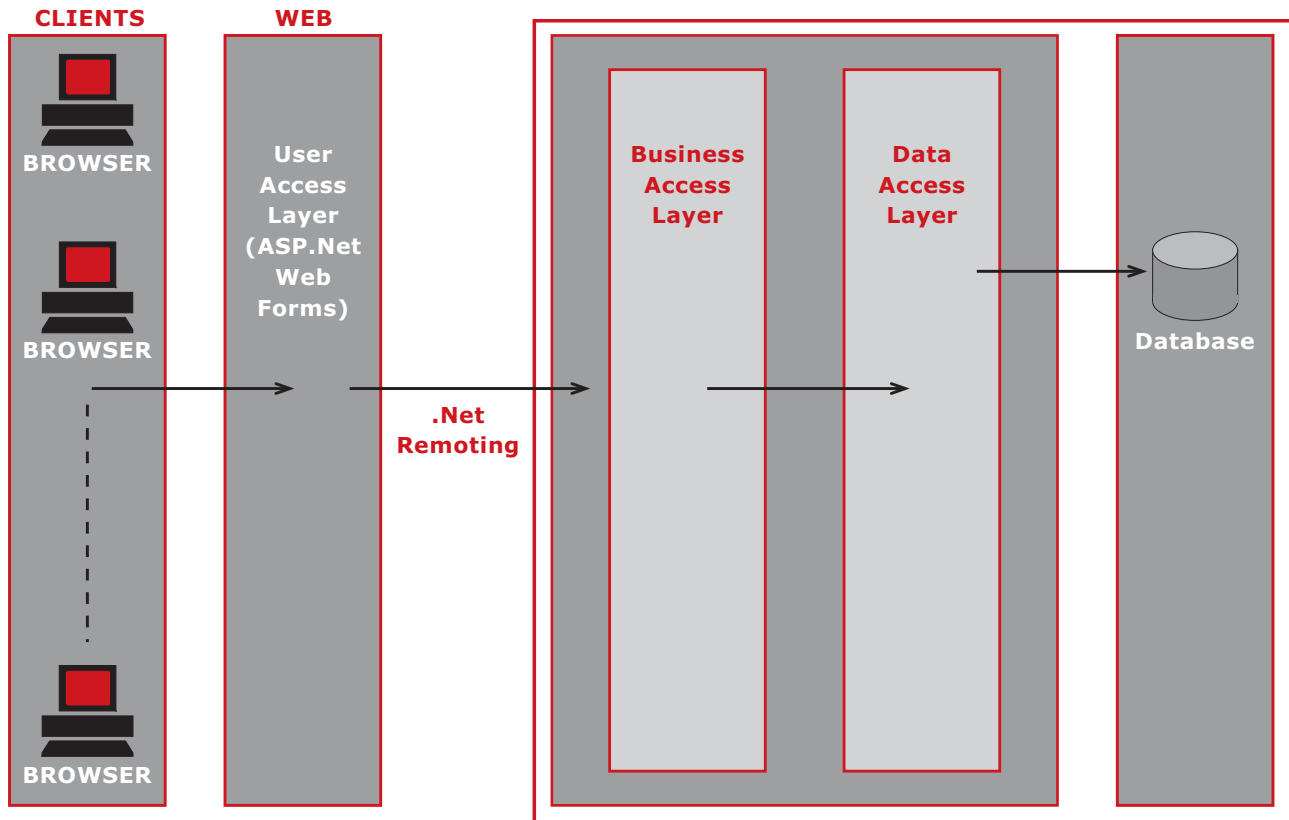
KEY FEATURES

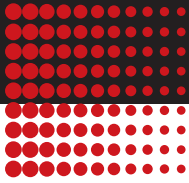
- ▶ **MICROSOFT.NET**
- ▶ **MULTI TIER DESIGN**
- ▶ **WEB BASED**
- ▶ **EFFICIENT BANDWIDTH USAGE**
- ▶ **MULTI-USER**
- ▶ **REMOTE ACCESSIBILITY**
- ▶ **ABILITY TO RUN ON LOW-BANDWIDTH**
- ▶ **OPTIMIZED DATA FETCHING**
- ▶ **POWERFUL SECURITY WITH AUDIT TRAIL**
- ▶ **EXPORTING OPTIONS ON REPORT**
- ▶ **INTEGRATION WITH SIDAT HYDER - FINANCIALS**

The multi-tier architecture makes changes easy, i.e. changes in the business logic are programmed only at the business server, and the client application remains unaffected. Moreover, the third tier adds to improved security.



APPLICATION ARCHITECTURE





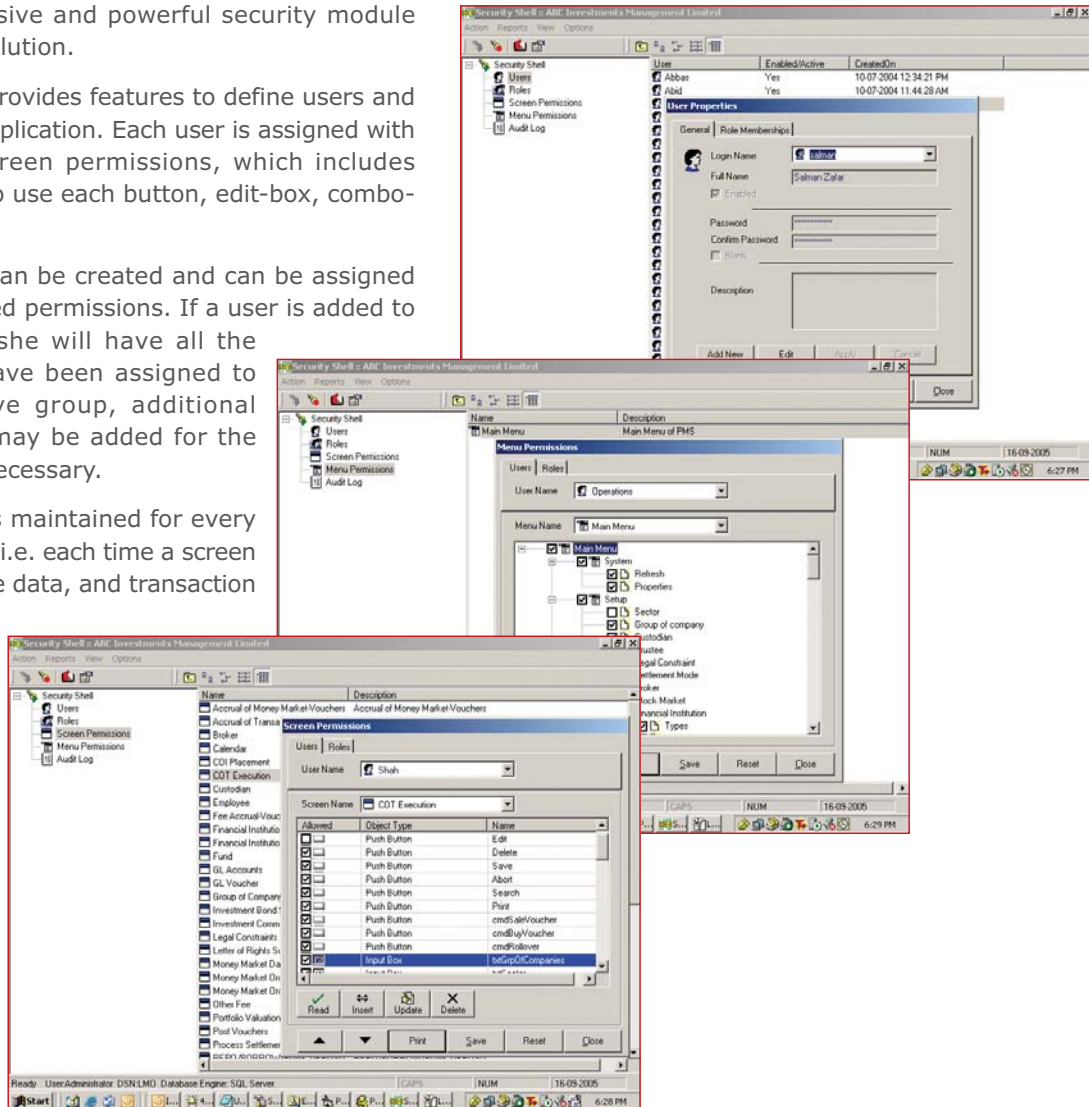
SECURE ACCESS, PROCESSING & AUDIT TRAIL

A comprehensive and powerful security module powers the solution.

This module provides features to define users and roles in the application. Each user is assigned with menu and screen permissions, which includes permissions to use each button, edit-box, combo-box etc.

User groups can be created and can be assigned with predefined permissions. If a user is added to a group, he/she will have all the rights that have been assigned to the respective group, additional permissions may be added for the individual if necessary.

Security log is maintained for every screen action, i.e. each time a screen is used to save data, and transaction detail, users name and other related information is recorded in the log file.



RESOURCE REQUIREMENTS

HARDWARE: Intel Pentium III or above, Minimum 64 MB RAM

SOFTWARE: Windows 9x/2000/XP, SQL Server 2000, Oracle 8i

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