

SYSTEM10

Treasury, Risk, and Cash Management System





SYSTEM10 Treasury, Risk, and Cash Management

A Flexible System

SYSTEM10 is a cash flow oriented and transaction-based treasury and risk management system available on the Windows NT platform. Depending on configuration, the system can be used by small treasury operations to banks or large corporate treasuries with several sites covering multiple time zones.

Straight Through Processing

The original version of the system was released in the early eighties. Today SYSTEM10 has evolved to a straight through processing system, covering all aspects of the modern treasury operation, from front- to middle and backoffice. The system supports trading in foreign exchange and interest bearing instruments as well as equity and commodity trading.

Key Features

A high level of automation is provided in the system, coupled with reliability, comprehensive security features and real-time processing. SYSTEM10 is a turnkey solution that can be up and running without delay.

Market Coverage

SYSTEM10 offers a versatile instrument driver. Through this most instruments traded in the market can be defined, from basic instruments through exotic derivatives and structured deals. The system provides coverage for most types of markets,

such as Money Market, Foreign Exchange, Bond Market, Equities, Commodities, Options, Exotic Options, Futures, Long Term-Debt and more.

Risk Management

SYSTEM10 offers a rich selection of tools for analysing foreign exchange, interest rate risks and positions in real time as well as simulating any combination of portfolios or companys. Risks are effectively analysed and can be compared to benchmarks. The effect of variation in market prices can be examined, and changes in the market positions can be simulated. The screens and graphs are easy to interpret and provide valuable information upon which risk management decisions can be based. Tools are included for Value-at-Risk, Limit Analysis, Interest Distribution, Stressing of Market Conditions and other types of what-if analysis.

Cash Management

Cash management is an essential part of any treasury operation. SYSTEM10 provides the tools for handling payments, bank reconciliation, forecasting, cross-border cash pooling, multi-lateral netting, multi currency call-accounts and more. Cash Management involves handling of large volumes and is a time-consuming and thus error prone task. SYSTEM10 provides a high level of automation, minimising errors and reducing bank charges as well as other transaction costs.

"SYSTEM10 is unique in the treasury systems market in offering a fully integrated solution incorporating the latest technical developments in a scalable system."

Accounting

SYSTEM10 is continually updated to keep up with the development of accounting practices, for example by implementing accounting standards like FAS 133, FAS 138 and IAS 39 at an early stage. The system uses proprietary General Ledger functions, and provides standard interfaces to many popular general ledgers.

Reporting

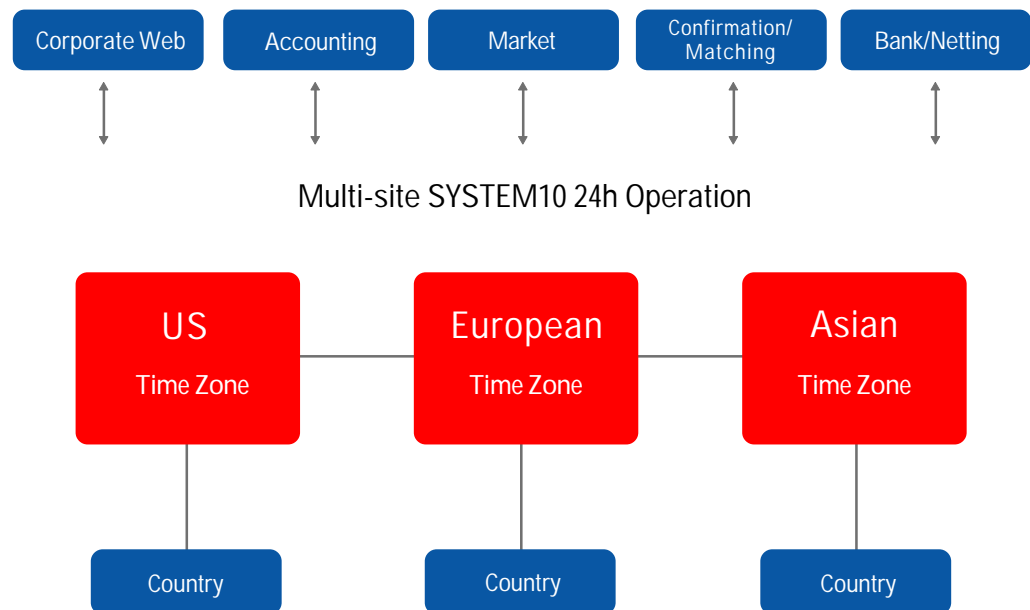
SYSTEM10 provides several tools for your reporting needs. All reports can be printed as graphs, giving you a tool for further data analysis where you can tweak the data to get the information you need.

Multi-site Operations

SYSTEM10 is a very scalable system. It can be configured for a small operation with a handful of users, as well as for a global installation allowing across several dealing rooms and with subsidiaries connected via the corporate web.

Security

The security options of SYSTEM10 are tailored to suit the demands of different types of organisations. Features may include full audit trail, separation of duties, database encryption, user configurable permissioning system and password protection.





Competent Risk Management.

Risk Management

Corporates of today face a multitude of risks in the daily activities. The use of an efficient risk management system is vital for the success of the corporation. SYSTEM10 offers a rich selection of tools that will give your company a head start in risk management. You will be provided with efficient and easy to use tools for analysing foreign exchange, interest rate risks and positions in real time.

Comprehensive Tools

SYSTEM10 provides you with a comprehensive set of on-line tools for analysing or simulating any combination of currencies, portfolios, companies or products. SYSTEM10 gives you the possibility of analysing Assets & Liabilities risk as well as Value at Risk (VaR), convexity, options strategies, limits, price sensitivity, and more. The screens and graphs are simple to interpret and provide valuable information upon which risk management decisions can be based.

Value at Risk

The VaR methodology used in SYSTEM10 is based upon the application of J.P. Morgan RiskMetrics currency coefficients, volatility, and exchange rates for Value at Risk on the net present values of all of the live contracts contained in the system. The system even gives the user the ability to include the budgeted and simulated contracts in the system.

The user can specify any combination of portfolio, currency, company or product mix that should be included in the analysis, and even specify the exchange rates that should be used to derive their respective NPVs. The risk module also gives the treasury the opportunity of selecting the base currency and time horizon of the VaR calculation. In short, this facility enables the Treasury to perform simulations, conduct stress tests, and obtain an overall better perspective from which to plan, execute, and evaluate the various hedging strategies implemented..

Interest Distribution

SYSTEM10 provides a module where you can analyse the interest risk and foreign exchange risk using non-VaR methods. In an easy and flexible way you can analyse the fixed interest distribution per currency, per yield, per instrument or per deal. You can select the type of buckets on which the distribution should be done, and how you want the information to be presented.

Stress Analysis

SYSTEM10 gives you the opportunity to examine present values and deltas per currency or per currency pair with different stress scenarios such as shifts in the yield curve, turning the yield curve with or without an anchor, altering the prices or all of the above at the same time.

MM-Position/Convexity

The MM-position module provides the Treasury with on-line position keeping facilities for money market positions, displaying maturity, notional values, rates, present values in original currency or home currency, risk in original currency or home currency, internal rate of return and duration.

Gap Analysis

The online Gap Analysis module gives a graphical overview of the net present value on a user defined selection of cash flow structure, maturity structure, interest risk, interest and currency exposure per currency.

Foreign Exchange

The Foreign Exchange position module provides you with the on-line facilities of examining your foreign exchange positions by presenting both underlying notional value, underlying present value, underlying spot positions and the hedged volumes of these per currency or currency pair.

Options Graphics

The graphical options module provides the user with the ability to simulate option and futures scenarios. It calculates the premium and pertinent Greeks for the option, as well as including a graphical representation of the option scenario.



Cash Management as you need it.

Information Retrieval

To a large extent efficient cash management means keeping track of information from sources outside the Treasury System and incorporating this with cash positions generated within the treasury operation in order to produce as true a picture as possible of the corporate cash movements. This requires a number of tools; all parts of the SYSTEM10 solution, some or all of which are used to make cash management efficient and simple.

Cash Book

The cashbook keeps track of your bank accounts and will automatically feed information to the bank of your choice. That is, when a deal is entered and has been approved, it will be sent to your bank. Within the module it is possible to view the balance on any account historically, today and as a forecast for any future date. It is also possible to “drill down” from the account level to examine what deals and cash flows make up a certain position on a certain date.

Bank Account Import

In order to get the complete picture regarding the cash position the system requires more data than what is derived from the deals input. For this reason SYSTEM10 automatically retrieves the balances from the bank(s) and make these parts of your cash position.

Ledger Import Function

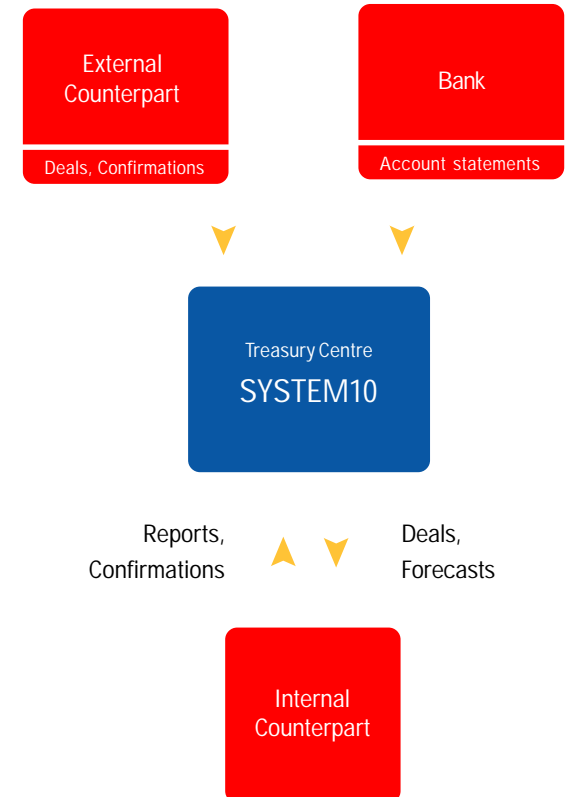
If positions reside in ledger(s) derived from commercial activities such as leasing contracts etc, these are imported into SYSTEM10 and will be part of the data used as a forecast of future cash movements.

Call Accounts

When the treasury operation acts as a central bank for the corporate, the call account function allows the subsidiaries to deposit or lend money on accounts in SYSTEM10. These accounts are handled like commercial bank accounts and are rolled with interest as defined in the system. The system can be set up so that positions and movements can be viewed via the intranet.

Liquidity Management

The Liquidity Management function will display your cash position / forecast as a table or in graphical form. By selecting different cross sections of the cash flow data that has been entered / retrieved it is possible to see the whole cash position or any combination of deals, call accounts, forecasts, imported ledgers etc.





Accounting made easy.

SYSTEM10 offers a dynamic general ledger solution, providing a system covering the needs for most types of treasury operations.

A Changing Area

Although often thought of as one of the most conservative areas within finance, accounting especially for financial instruments is today changing rapidly. The changes taking place are profound and the accounting standards are becoming increasingly international in scope, as demonstrated by the standards FAS 133 and IAS 39.

Commitment to Change

When the operation supported is truly global in nature, as is today often the case, it is necessary that the treasury system you select keep abreast of the developments of regulation as well as trends in the market. SYSTEM10 is committed to doing this as is clearly demonstrated by our early development of FAS 133 functionality within our treasury solution.

General Ledger Interface

If the treasury has a General Ledger outside the scope of the treasury system, SYSTEM10 provides the General Ledger Interface module (GLI). This module feeds information from SYSTEM10 to the external ledger system. The GLI is rule based and the accounting rules are set up so that deals can be

posted automatically in the General Ledger used depending on parameters like: instrument type, transaction type, amount sign, portfolio, cash flow type (i.e. coupon, commission, principal, premium etc.) and many more.

Flexible Interface

Standard protocol set-ups exist for major General Ledgers and additional ones are easily implemented. The interface is highly parameter driven and can usually be configured for a new Ledger supplier without programming. The GLI is able to supply the General Ledger with revaluation and accruals information, which is usually more accurately calculated within a Treasury system than by a multi purpose Ledger.

Multi Currency General Ledger

An alternative to the General Ledger Interface is the SYSTEM10 Multi-Currency General Ledger. The purpose with this is not to replace the existing Ledger which is probably a multi-purpose ledger, serving the needs of an entire company group. It is rather to supply a tool with the functionality of a General Ledger, but catering for the special needs of a treasury. The SYSTEM10 General Ledger is multi currency in the sense that all transactions are kept in their original currency. This means that all unrealised profit due to currency effects can be calculated by the Treasury solution rather than in a multi purpose ledger which may not even be multi currency.

Several Dealing Rooms

It is possible to supply the SYSTEM10 installation with several Multi Currency General Ledger for the organisation with dealing rooms in for example Frankfurt, New York and Singapore.

FAS 133 and IAS 39

The FAS 133 module within SYSTEM10 first came on line in mid year 2000 and the IAS 39 module is a variation on the same theme. The following are some key features of the FAS 133 functionality:

- Market standard mark-to-market capability
- Full treatment of fair value hedges
- Full treatment of cashflow hedges
- Full treatment of hedges of net investments in foreign subsidiaries.
- Full treatment of non-FAS 133 qualifying transactions.
- Support for inter-company transactions.
- Life cycle tracking of both the underlying positions and the hedging transactions including changes of hedging status.
- Tracking of Other Comprehensive Income and Equity Translation Adjustment.
- Hedge effectiveness measurement and reporting.
- Full support for the separation of option values into either Intrinsic Value and Time Value or Minimum Value and Volatility Value.



We can build your global operations.

Increased Efficiency

The advent of the internet has greatly increased the ability to decentralise organisations as well as centralize functionality. By keeping the core functionality within the treasury centre, and using the internet to let other sites and subsidiaries to work against the same system, a great leap forward can be taken in the efficiency of the treasury operation.

Information Benefits

One of the greatest advantages of the internet is the possibility to share information in a quick and easy way across the globe. For a treasury operation this can mean several things; sites in different countries can work in the same system sharing business information, subsidiaries can use the web to greatly increase the information flow with the treasury centre, information can be distributed to mobile devices, giving the opportunity for people in the organization to receive information where and when requested.

Multi-site Connections

It is not uncommon that an organisation needs to run SYSTEM10 in several dealing rooms. It may be desirable to maintain continuous operation by being located in several time zones, for example to connect one dealing room in New York and one in London. This can be achieved by using the SYSTEM10 hosting solution, where the system is hosted on

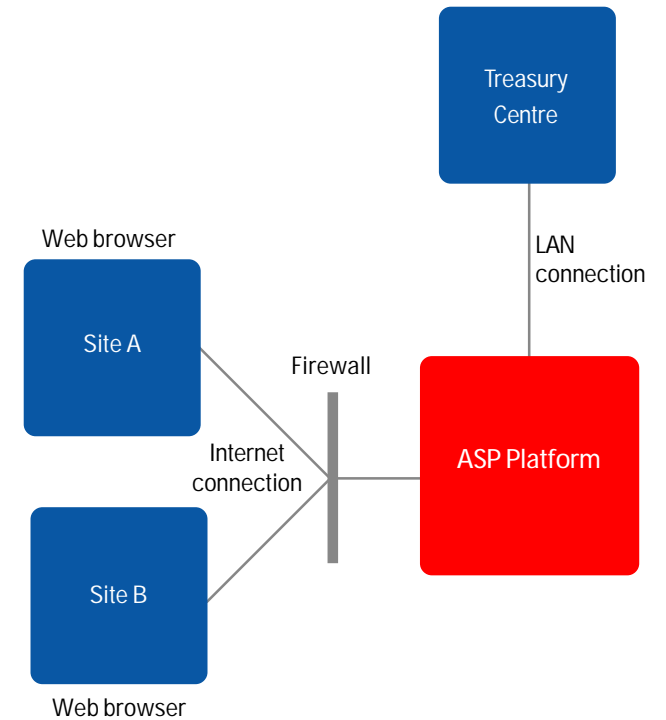
our ASP platform. Users can connect to SYSTEM10 by use of a normal web browser and use the system in the same manner as a network connected user.

Information Sharing

This way several sites can be connected to the treasury centre, all sharing certain specified data. Deal data and other critical information can be separated, in order to enable each site to be run as a separate entity. By using the SYSTEM10 hosting solution, the organisation can really take advantage of the geographical locations of the sites, not being limited by the system. The treasury centre has full control and direct access to all information in the treasury operation.

Hosting

We provide several solutions for hosting, where the key concepts are ASP, e-Hosting and outsourcing. ASP is a standardised system with shared data resources without the possibility for customised modules. e-Hosting offers the possibility for full customisation of the system, with private data resources. Outsourcing means that we act as your IT-resource, handling all your IT-needs from our solution platform.



TietoEnator Oy
Financial Solutions

SWEDEN
TietoEnator Financial Solutions AB
P.O. Box 4557, SE-203 20 Malmö
Phone: +46 40 664 40 80
Fax: +46 40 23 75 93
Email: system10.sales@tietoanator.com

Please visit **www.system10.com** for more information about SYSTEM10.

TietoEnator Financial Solutions has offices in

DENMARK
ESTONIA
FINLAND
GERMANY
LATVIA
LUXEMBOURG
NETHERLANDS
NORWAY
RUSSIA
UKRAINE
UNITED KINGDOM
USA

Search for address and contact information by countries at **www.tietoanator.com**.

TietoEnator is a leading supplier of high value-added IT services in Europe. TietoEnator provides consulting, systems development and integration, operation and support, product development services for Customers, and software services. TietoEnator aims to be a strategic IT partner to its Customer. The Group has in-depth knowledge of its Customers' businesses in areas such as banking and finance, telecommunications, the public sector and the forest and energy industries.

www.tietoanator.com

TietoEnator 
Building the Information Society