



BEST +

IB Services
INTERNET BANKING



BASIC FUNCTIONS**Portfolio inquiries**

Portfolio viewing is the central function in IBServices. It offers a complete presentation of all asset positions, structured by investment types: cash, stocks, bonds, funds, warrants, money market, foreign exchange, even informative positions such as physical goods in a bank vault. Assets are presented hierarchically and accessed with a mouse click. Summaries can be expanded to present the detailed positions or even further to present the single transaction.

Asset overviews

The presentation can be interactively selected by the Internet user to present different aggregations: by currency, sector, security position and more. The current asset value is displayed both in the position currency and in the reference currency selected by the user.

Positions and bookings

Directly from the asset position, key data is immediately visible, such as the relative weight in per cent of each category and each position or their total value in the reference currency. By clicking on the graphic icons, the distribution of assets by category and currency is displayed as colored pie or bar charts. New transactions generated or processed by the Banking Host system are sent in real time by IBServices. This allows the online portfolio view to be always synchronized with the current portfolio situation. To avoid repeated and unwanted screen refreshes, all updates are held back and signaled on screen by a small icon. The user can then decide to reload the latest positions by clicking the "Refresh" button.

The asset positions can be fully expanded or collapsed by a single click. When fully expanded the accounts and security positions lead to the detail of that position. The booking detail panel lists the latest movements for the selected position in chronological order, showing the balance progression. For securities, all transactions are visible. A selection screen allows searching by date and amount, selecting either debit or credit transactions. Both value date and transaction date searches are supported. The cash liquidity preview is also accessible directly from the main menu, indicating future in- and outflows on each account.

FOR PROFESSIONALS

More demanding customers can benefit from advanced functions, still with the same infrastructure and security.

Multiple portfolios per e-banking contract

Within one e-banking contract one or more customers with their portfolios can be managed. The same portfolio can also be included in different contracts, with different access rights and functions.

Online statements

This additional module allows the end-user to request online statements with various summaries and details. The statement is prepared in the background and made available on the Webserver as PDF for viewing or printing on short notice. The layout is completely flexible and can be adjusted to the corporate identity of the bank. The following statements are available:

- Statement of assets
- Account statements

Real-time market data link

A "real-time" or "delayed" market data feed can be linked. The quote panel that returns with the actual quote for a certain instrument can either be tied in with "Security Search" or "Buy/Sell" orders or a combination of both for a custom-designed e-banking page.

Link to research analysis

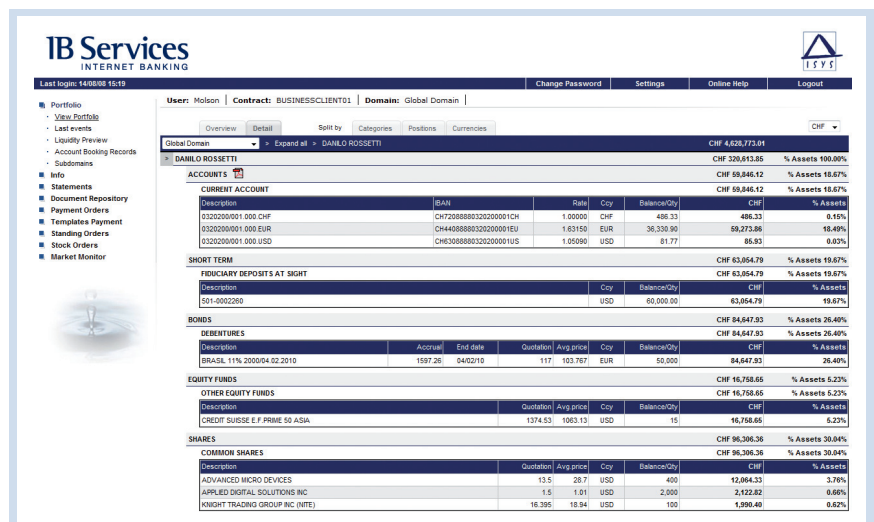
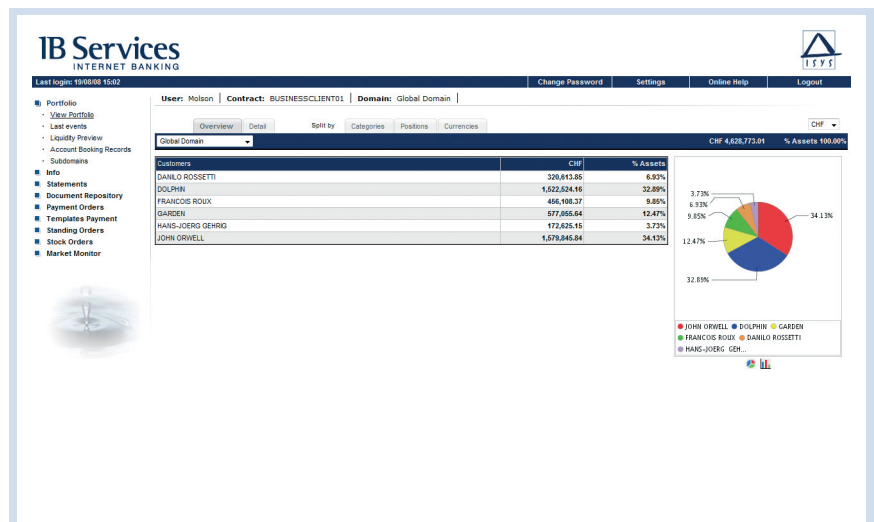
Many banks produce a wealth of research and analyst papers to be shared internally and with customers. All these documents, containing specific stock information, can be linked with icons to the related positions when searching for instruments.

Secure messaging

This function represents a secure and cost-effective 2-way communication channel taking advantage of the already existing secure infrastructure to facilitate confidential communication between the customer and the bank. While similar in functions to the classic e-mail, such a messaging system has little in common with it, as it is immune from the confidentiality and security issues linked to the usage of public mail servers.

Downloads

To ease flow automation with in-house systems, on-demand download functions can be integrated: lists of movements, positions or orders in standardized output formats.

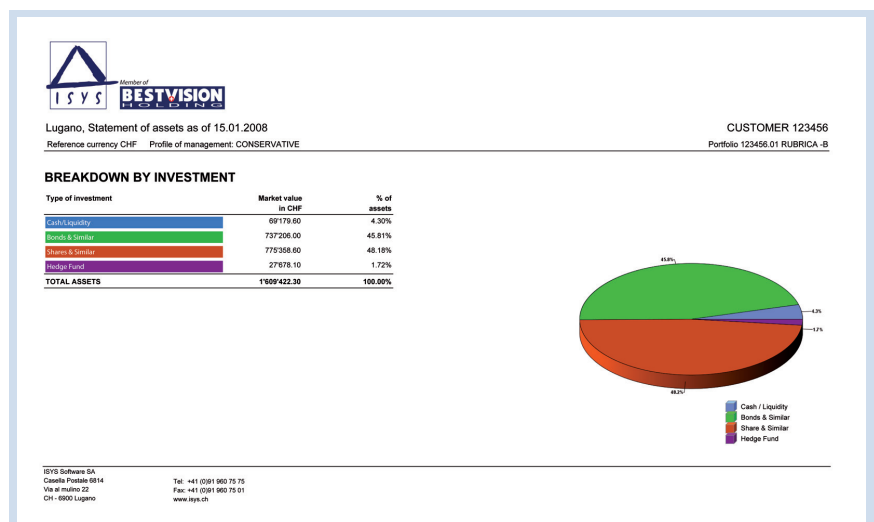


Basic Functions

- HTML Browser Based
- Various Asset Overviews
- Position Overviews
- Booking Details

For Professionals

- Multiple Portfolios per E-Banking Contract
- Online Statements
- Statement of Assets
- Cash Account Statement
- Real-Time Market Data Link
- Links to Research Analysis
- Secure Messaging
- Downloads



BASIC FUNCTIONS**Domestic payments
and international payments**

The IBServices Payment Module covers all types of domestic Swiss payments and international SWIFT transfers. For non-Swiss customers, country-specific payment slips can easily be integrated. Swiss customers will certainly appreciate the postal payments function: red and orange payment slips as well as direct domestic bank orders in CHF or EUR. In case of international transfers, the SWIFT payment orders include a practical search tool to locate the beneficiary bank's SWIFT address.

The applied exchange rates to/from CHF or direct exchange rates can be viewed in the dedicated cross-rates panel available from the main menu. All orders can be inserted via Internet anytime for a date in the future. Orders with a future date will remain in "waiting" status and can be still modified before their execution date. Payment details of previous orders remain stored and allow creating a new order inheriting all the characteristics of the original.

Order monitor

With the order monitor the status (e.g. in preparation, waiting, pending, executed, cancelled) of all entered payments is displayed. To search for specific payments, the list can be sorted by any criteria. All transactions with the status "in preparation" and "waiting" can still be modified or deleted. All individual payments as well as payment lists can be printed in a practical A4 format.

FOR PROFESSIONALS**Payment slip reader
and DTA file transfer**

Commercial customers are generally strong users of e-payments and require additional power functions. These include the support of OCR devices like light-pens and desktop slip readers, the possibility of uploading multiple payments (for global verification and execution), and the support of standard DTA payment files. The DTA file upload function allows the direct use of the output files generated by most enterprise accounting software packages. This helps to avoid the double input of payments, if previously prepared with other systems. This tool eliminates the risk of error and streamlines the administrative work for both small and large companies.


Standing orders

Standing orders offer the repetitive execution of payments with a variety of frequencies. Regular payments are then generated automatically with a few days advance notice and stored in "waiting" status. Their verification and modification, if needed, can be made before the effective execution date.

4-eyes approval process

In most cases, especially for large outbound payments, the 4-eyes control will be required by commercial customers. IBServices offers a solution with the possibility of defining different amount limits and multiple confirmation steps for each type of payment separately (internal transfer, postal, SIC and SWIFT).

IB Services
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Last login: 14/08/08 15:19

[Change Password](#) [Settings](#) [Online Help](#) [Logout](#)

- Portfolio
- Info
- Statements
- Document Repository
- Payment Orders
 - Internal Transfer
 - Orange Slip / Blue Slip
 - Real Stop
 - Li Switzerland
 - International
 - International SEPA
 - International Bank
 - Multiple postal payment
 - Multiple Swiss payment
 - Multiple international payment
 - Multiple SEPA payment
 - CTA
 - List payments
 - Payments limits
- Templates Payment
- Standing Orders
- Stock Orders
- Market Monitor

User: [Moslon](#) | Contract: BUSINESSCLIENT01 | Domain: Global Domain |

Multiple Postal Payment 

Customer: DANILO ROSSETTI

Debit Account: ● **Execution Mode**

032020001.000 CHF - CHF Date: 19/08/08

032020001001.CHF
 Current Balance: 486.33 CHF
 IBAN: CHF7206888532030000NCH

Orange Slip Real Stop

Einzahlung Giro Post	Versement Virement Poste	Versamento Girata Posta
Einzahlung für / Versement pour / Versamento per	Zahlungszweck / Motif versement / Motivo versamento	
Zugunsten von / En faveur de / A favore di		
Konto / Compte / Conto	Erbeizahl von / Virsièr par / Versato da	
	DANILO ROSSETTI	

 Slip count: 0

1 DTA to be released

Status	Type	Account	Beneficiary	Currency	Amount

Total: 0.00 CHF

Slip count: 0

- DTA File Transfer
- Standing Orders
- Multiple Payments
- 4-Eyes Approval Process

BASIC FUNCTIONS**Online securities orders**

A variety of functions is available to the e-banking user: search for securities and other instruments by the security search tool, search by ISIN and Telekurs number, or a simple search by symbol, security name, stock exchange or security type. Once the desired security is found, its trading characteristics are displayed: round-lot, minimum-lot and tick. The market price, when available, is also presented, with date and time of update. The bank can decide which types of securities are tradable through Internet and also block the trading of individual stocks. In case of sale, the search function will allow selecting only the securities already present in the customer portfolio. Short sales are therefore blocked and cannot be executed through the IBServices securities module.

The supported order types include market, price, limit and stop loss. The time validity can also be indicated for all orders. After inserting the order quantity the approximate transaction value is displayed to fully inform the customer before accepting the final confirmation. For liquidity check, the available balance of the debit account is displayed both in account and transaction currencies. At order confirmation, the requested transaction is fully verified to ensure it is valid for execution.

The confirmed orders are transferred by the IBServices interfaces to the Host system. The status and progression of the order is monitored through the "Securities Orders List" panel. This screen contains all the past and current orders sorted by status: pending, executed (full or partial) or cancelled. The previous and current orders remain visible in all their details. Cancellation requests are possible for pending or partially executed orders (for the remaining part).

FOR PROFESSIONALS

For the Independent Asset Managers (IAMs) additional functions are available to simplify the handling of their customers.

Asset management

An e-banking contract for an IAM will typically contain several customer portfolios. An IAM using IBServices can then define subgroups of customers, based for example on investment profile. Securities orders for such groups will often require 4-eyes control with authorization by different users. To support the IAMs in their investment strategies, the system generates buy and sell propositions for a selected client subgroup. The bulk orders generator provides the following strategies:

- Buy or sell a fixed quantity for each customer
- Distribution proportional to the Overall Portfolio Value
- Increase/decrease an existing position by any %
- Target for the new position in % of the Overall Portfolio Value
- Target in % for a specific Investment Category

The respect of the round-lots is verified, as well as the available balance: customers with insufficient liquidity are marked in red. In such cases the order can be deleted, or reduced, the cash account can be changed or the order can also be processed unchanged. At confirmation time, depending on the overall amount, the "transaction signing" can be required: input of the Secu-ID or SMS code to ensure the legitimacy of the order.

Like all users, the IAM can always monitor the progress of the individual orders in real time.

BASIC FUNCTIONS**Contract and user management**

The contract administration functions are used by the internal e-banking administrators to define the access rights to the system. The administrator tool has been developed to manage both simple and complex contracts with speed and efficiency in mind. The contract for a standard e-banking user is a simple 1:1 relation, one contract, one user, one portfolio without restrictions. But for different types of customers, such as independent asset managers or commercial companies, the definition of the contract allows much more complex relations: more than one user can access a contract or the contract can include multiple portfolios owned by different customers.

Authorizations

Access rights to functions can be defined per user and each contract. For example, access can be limited to the portfolio inquiry function while the payment transactions can be limited by amount. It is also possible to define which type of order above a predefined amount will require further verification by a second user.

Authorization models

The models are the key to allow fast opening of both simple or complex contracts. Once defined, these authorizations models can be assigned to user profiles in multiple contracts. This approach simplifies the controls by maintaining coherent authorization policies.

Strong Authentication

The administrator tool is interfaced with the leading Strong Authentication solutions: RSA SecurIDs, Vasco, Entrust, local Grid-Cards. The assignment of the security devices is integrated with the IBServices administrator, avoiding the direct interaction with each external system.

FOR PROFESSIONALS**Outsourcing services**

ISYS Banking Services & Solutions is the specialized company of the group which offers outsourcing services to run and maintain IBServices within a modular service level agreement. The service includes the infrastructure of two highly protected data centers at different locations and the required IT systems and communication gateways. Our skilled staff is handling the entire system operation, maintaining all equipment as well as the link to the host servers of the bank.

E-banking mandate function

In addition to single-user access rights some customer portfolios could be present in more than one e-banking contract. One case could be a private individual who has given a portfolio mandate to an Independent Asset Manager. Two different contracts will be created in this case, where the external manager is authorized to execute stock buying/selling transactions and internal transfers, while external payments will not be allowed. The customer will then have access to his or her assets through a different contract, typically with unlimited rights.

4-eyes approval process

A 4-eyes control mechanism is built within the administrator tool. It can be setup to ensure that every modification of a contract will require a further verification and approval by a second administrator before the final activation. The so-called 4-eyes approval process can support up to 5 levels of verification.

Limit management

On the order level the authorization can be restricted even further including the definition of limits by transaction type and currency. A periodic limit (daily, monthly, etc.) for external payments or limits for withdrawals by account type or limits for securities trading activities can be defined. The bank can decide whether such controls will block the transaction or simply notify the user with a warning.

IB Services
INTERNET BANKING

MENU | Contract Management | Messages | System Settings | 3rd Party Devices | Logs & Statistics | ADTT

Admin: MOLSON
GroupID: HDZH

Contract List
User List
Client-Portfolios
Model List

SEARCH
Bankkey*
Holder
User*
Customer
Portfolio
Status
Reset Apply
(Wildcard = %)

Contract	Status	Type	Holder	Start date	End date	Creator	Creation date	Contribute
BECKS_A_SMT	(Active) (Edit)	Independent Asset Manager	FABIO	08/07/04		PNCO	08/07/04 7:31 PM	60
BECKS_BUSINESSCLIENT01	(Active) (Edit)	Independent Asset Manager	FABIO	08/07/04		MOLSON	03/05/07 5:16 PM	0
BECKS_CTDEMO01	(Active) (Edit)	Independent Asset Manager	FABIO	08/07/04		MOLSON	03/07/08 6:48 PM	0
BECKS_CTDEMO02	(Active) (Edit)		REBECCA	23/08/01		PNCO	23/08/01 2:34 PM	60
BECKS_CTDEMO03	(Active) (Edit)		FABIO	23/08/01		PNCO	23/08/01 2:28 PM	60
BECKS_CTDEMO09	(Active) (Edit)	type	FABIO	08/11/01		PNCO	08/11/01 9:45 AM	60
BECKS_IBSERVICES_ADMIN	(Active) (Edit)	Independent Asset Manager	JOHN	05/10/05		MOLSON	05/10/05 4:06 PM	60
BECKS_IBSERVICES_ADMINISTRATOR	(Active) (Edit)	Independent Asset Manager	JOHN	05/10/05		PNCO	05/10/05 6:39 PM	60
BECKS_PRIVATECLIENT01	(Active) (Edit)	Demo	FABIO	06/03/03		MOLSON	06/03/03 3:11 PM	60
BECKS_SSG_OTA_CTR	(Active) (Edit)	Independent Asset Manager	ROSA	27/06/05		PNCO	27/06/05 4:05 PM	60
BECKS_SUPERVISION	(Active) (Edit)		ROSA	27/06/05		MOLSON	19/04/07 9:56 AM	0
MS_CTR1	(Active) (Edit)		FABIO	23/08/01		PNCO	23/08/01 4:37 PM	60
MS_CTR1	(Active) (Edit)	Independent Asset Manager	GIANNA	08/06/07		PNCO	08/06/07 10:11 AM	60
MS_CTR1	(Active) (Edit)	Independent Asset Manager	GIANNA	08/06/07		MOLSON	28/10/08 5:53 PM	0
MS_DUE	(Active) (Edit)	Independent Asset Manager	GIANNA	08/06/07		PNCO	08/06/07 2:55 PM	60
MS_DUE	(Active) (Edit)	Independent Asset Manager	GIANNA	08/06/07		MOLSON	28/10/08 5:53 PM	0

1 2 3 (of 2)

Detail Manage Changes Delete Validate Steal New

IB Services
INTERNET BANKING

MENU | Contract Management | Messages | System Settings | 3rd Party Devices | Logs & Statistics | ADTT

Admin: MOLSON
GroupID: HDZH

Contract List
User List
Client-Portfolios
Model List

Contract detail

Bank key	Holder	Holder Reference
BECKS_BUSINESSCLIENT01	FABIO	0150000

End date	Status	Start date
	Enabled	09/07/04

Document	External reference	Description
		Contratto Demo Esterna, più di...

Type	Remarks	Creator
Independent Asset Manager		MOLSON

Contribute Level	Last change	Creation date
0	03/07/08 6:48 PM	03/07/08 6:48 PM

Detail

Users List

Bank key	Model	Full
ADRA RM-Access	STANDARD MODEL	(Y)
BLORENZ RM-Access	STANDARD MODEL	(Y)
BMESSERLI RM-Access	STANDARD MODEL	(Y)
CMICATILBETTI RM-Access	STANDARD MODEL	(Y)
DSCHWEIZER RM-Access	STANDARD MODEL	(Y)
EBONIN RM-Access	STANDARD MODEL	(Y)
FEDMARCHI RM-Access	STANDARD MODEL	(Y)
FSCHEWEIZER RM-Access	STANDARD MODEL	(Y)
GOVE RM-Access	ONLY_DOC_REP	(Y)
BSI RM-Access	DEMO IB SERVICES	(Y)

1 2 3 (of 3) Detail

Back Validate

Customers - Portfolios list

Customer/Portfolio number	Description
0150000	JOHN
0175175	REBECCA
0200200	DANLO
0400313	GIANNA
0425126	HANG-JOENG
0509115	FRANCOIS

1 (of 1) Detail

Validate

Basic Functions

- Contract and User Management
- Authorization with amount limits
- Authorization Models

For Professionals

- Outsourcing Services
- Data Center and IT-Infrastructure
- System Operation
- Handling of Strong Authentication devices
- E-Banking Mandate Function
- 4-Eyes Approval Process
- Limits Management

IB Services
INTERNET BANKING

MENU | Contract Management | Messages | System Settings | 3rd Party Devices | Logs & Statistics | ADTT

Admin: MOLSON
GroupID: HDZH

Contract List
User List
Client-Portfolios
Model List

Model detail

Model Name: DEMO IB SERVICES Status: Edit

Contribute Level: 0 Creator: MOLSON

Creation date: 20 / 8 / 2008 11:57 AM Last change: 20 / 8 / 2008 11:57 AM

Functions Available

Functions	Assigned	Authorization
GROUP STOCK EXCHANGE ORDER		
GROUP SWITCH ORDER		
GROUP OPTIONS ORDER		
SINGLE FOREIGN ORDER	In CHF	10000 10000 2000
SINGLE BLUE SLIP PAYMENT ORDER	In CHF	10000 10000 2000
SINGLE STOCK EXCHANGE ORDER	In CHF	10000 10000 2000
MULTIPLE PAYMENT		
BASE_VIEW		
TREE TABLE VIEW		
OTA UPLOAD		
SINGLE PERMANENT ORDER		
MULTIPLE PERMANENT ORDER		
EXTENDED_VIEW		
BOOKING_VIEW		
ASSET_STHT_REG		
ASSET_STHT_LIGHT		
SINGLE INTERBANK CH PAYMENT ORDER	In CHF	10000 10000 2000
SINGLE INTERNATIONAL PAYMENT ORDER	In CHF	10000 10000 2000
SINGLE RED SLIP PAYMENT ORDER	In CHF	10000 10000 2000
SINGLE INTERNAL TRANSFER ORDER	In CHF	10000 10000 2000
CANCEL SECURITY ORDER		

Cancel Validate

TECHNICAL REQUIREMENTS

IBServices, including all its security components, must be installed on a "fault-tolerant" platform to ensure a 24/7 resilient service. All hardware setups should be mirrored or available in standby, preferably in separate physical locations. The database resides on Oracle Enterprise Edition, one of the most reliable and capable database management systems with extended security features and dependable replication technology.

TAS-traveling assistant

A special version of IBServices is available for offshore customers and traveling consultants. IBServices TAS contains neither logos nor customer identification information.

SECURITY FEATURES**Browser compliant**

IBServices can run with any Web browser on Windows, Mac or Linux PCs. The application is optimized for a screen definition of 1280 x 1024.

IBServices relies on strong two-factor authentication solutions developed by industry leaders as RSA Security, VASCO or Entrust. Alternatively, a basic cost-effective scratch list solution has been developed internally. To use the scratch list, every user receives a list with alphanumeric codes that upon entering are matched against the value stored on the IBServices internal database. The communication among all IBServices components is encrypted by implementing SSL V3 (128 bits) and using Verisign-signed certificates or other CA's.

The IBServices security layer has been reviewed and certified by various independent counterparts. Tests were performed adopting both black-box and white-box approaches to penetrate the system security (all attempts were unsuccessful). The source code has also been audited.

**ADDITIONAL
SECURITY FEATURES****RSA SecurID authentication**

RSA SecurID is the most commonly accepted and secure solution for Strong Authentication, with around 20 million users all over the world. This small device generates a dynamic numeric code (6 digits) that changes every minute. To log on to the system, the user name and password are needed. In addition, the Internet user is required to input the numeric code displayed at that particular moment by his or her personal SecurID device. A server, installed in the banks protected environment, is synchronized with all SecurID devices distributed by the bank and will instantly check the validity of the numeric code just entered. The physical possession of this device is therefore mandatory to access the e-banking system. Even if the password is stolen, no abusive access will be possible. SecurID tokens are an efficient protection against phishing attacks.

RSA OnDemand SMS

RSA has recently introduced an alternative system to obtain Strong Authentication without the need of an additional physical device (such as SecurID). This solution replaces the dedicated device with the personal mobile phone. To login to the e-banking system with this mobile-based solution, a user name and password are needed in a first step, then the user receives an SMS containing the security code via his or her personal mobile phone.

The user inserts this code on the login page and access is granted. Therefore, only the physical possession of a mobile phone is needed to access the e-banking system, ensuring the full protection from phishing and identity theft.

ISYS SOFTWARE- TO BE YOUR DEVELOPMENT PARTNER

ISYS offers a complete range of banking products and services. With more than 20 years of expertise, service excellence and a profound knowledge of banking, our software and banking services fulfill the highest demands. We guarantee quality and reliability as the foundation of optimized services and flexibility.

IBSERVICES - THE INDEPENDENT INTERNET BANKING SYSTEM

A state-of-the-art Internet banking implementing latest technology that allows you to cater to a wide variety of customers, including independent asset managers. It runs autonomous of your existing core banking system and offers a variety of interfaces to guarantee rapid time-to-profit.

Portfolio

Easy and secure access from anywhere to client portfolio and data. Expand from total assets overview to positions, down to booking details with single clicks.

- Assets, Position Overviews to Booking Details
- Integration of Real-Time Financial Information
- Online Request of Asset Statement, Account Statement

Payments

Combines the simple input of payment details with search and library functions for repetitive payments, electronic payment readers or automated file upload. 4-eyes approval is also available.

- Domestic and International Payments
- Account Transfer, Standing Orders
- Payment Reader and File Upload

Securities

Trade securities in all major markets. When connected with a dealing system the execution process can be monitored in real time. Supports rule-based automated order generation.

- Buy and Sell Orders
- Order Execution Monitor
- Order Generation for Professionals

Administration

Create and manage e-banking contracts fastly and efficiently. Define your client structure; standard to professional with respective access rights and limitations.

- Contract and User Management
- Access Rights, Withdrawal Limits
- Mandate Functions for Professionals

Outsourcing

If the system operation and administration are not your core competence, outsourcing is a worthwhile consideration. We are the experts for modular outsourcing services.

- System Operation and Administration
- IT-Infrastructure at Multiple Sites
- Network and Host connections

Technology

The installation of an open fault-tolerant platform ensures a 24/7 resilient service. Our wealth of experience in integration of banking systems ensures continuous reliability.

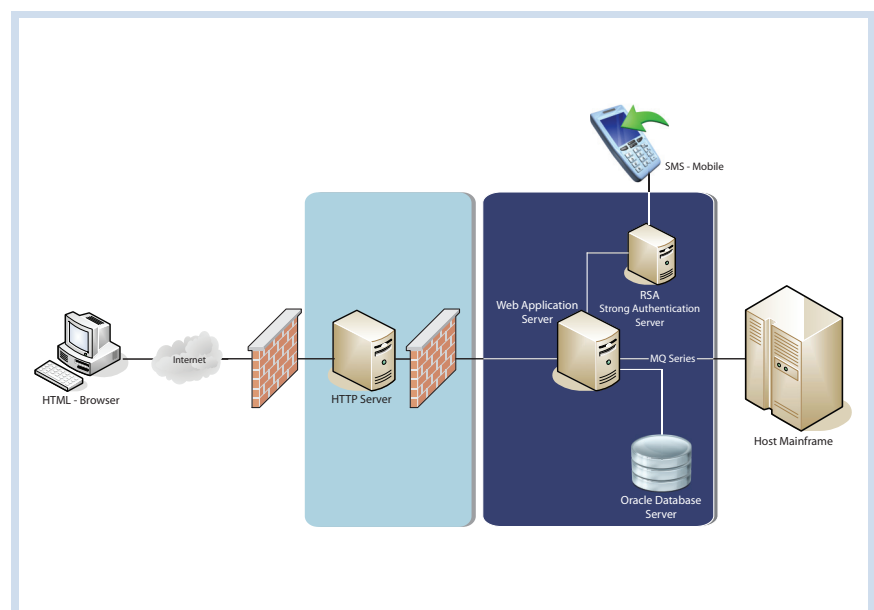
- HTML compatible with common browsers
- Secure Connection with SecurID / Mobile Phone
- Open Interfaces to Host Systems

Technology

- Linux OS
- IBM WebSphere Application Server
- Fault-Tolerant Platform
- 24/7 availability
- Open System
- Relational Database (Oracle Enterprise)

Security

- Session Management
- User name /Password
- Strong Authentication:
 - Grid Card
 - RSA AM with SecurID tokens
 - RSA or Vasco OneTimePassword by SMS
- 128 bits encryption



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