GUARDIAN

Portfolio Management System

A unique asset management solution for Funds & management companies (ManCo).

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Who We Are

Swiss-Rev SA is a software house with a high degree of specialization and flexibility in the area of software solutions for the financial sector. Our team of professionals with both IT and financial expertise can provide the solution that best meets your needs.

Our drivers are **automation** and **flexibility** for your business.

Our Key Figures

100+ clients

Banks, Man.Co.s, mutual funds, SICAVs, SIFs, AIFs, hedge funds, asset and wealth management firms

€ 70 Bn

Total AuM managed with our software

7

Different client countries

2010

Foundation year

36

Average age of our team

What We Do

Guardian
Asset Management Software

We are totally committed in developing **Guardian**, a highly flexible and comprehensive **all-in-one solution** for managing **private clients' accounts** and **mutual funds.**

Why use Guardian Software?

The Guardian software is the result of twenty years of development, constantly evolving in step with the **latest technologies, highly flexible** and customizable to meet and exceed our customers' needs. All users in your company will work with the same software, the same interface, and a single database for maximum **cost reduction**, **efficiency**, **automation** and **quality**. You can monitor the performance of **your portfolios on all devices and operating systems.**

Your portfolios on all devices.

Guardian modules

Automatic connections with fund administrators

Everyday on your server the NAV for all your funds and transactions recorded by the banks in T-2.

Advanced fund management functions

Several tools to support the managers' analyses and management activities, with an intuitive, high-performance interface, and with depth of information.

Risk management functions

Real-time checks on all regulatory and discretionary limits for your funds, with advanced pre- and post-compliance tests and risk analysis.

Order routing

Electronic submission of orders directly to brokers via FIX or other procol for maximum security and speed of execution.

Back and middle office

Complete digitization of all operations for the highest level of automation and efficiency. Settlement Instructions (SSI) and automatic receipt of trading executions.

Compliance & Reporting

MiFiD II. MIFIR and EMIR compliant and reporting to banking and financial authorities, such as CSSF and MFSA.

Reports

Fact sheets, KIIDs and many other reports available up to five languages.

Automatic connections with fund administrators

More than 40 fund administrators already connected with our software:

Credit Suisse
JPMorganChase
UBS
Edmond de Rothschild
EFG
Goldman Sachs
ABN·AMRO Bank
J. Safra Sarasin
Banque Degroof
KBL European Private Bankers
Axion
State Street
UBP
Banca Zarattini & Co
Mediobanca
LGT
Banca Sella
CMB Compagnie Monégasque de Banque
RBC
ONE swiss bank
Apex Fund Services
Intesa Sanpaolo
Kairos a Julius Baer Group company
Dexia Bank
banca ifigest
Lombard Odier
caceis Investor Services
Julius Bär
Banca Finnat
BancaStato Banca dello Stato del Cantone Ticino
Northern Trust
Banca Euromobiliare
BOV Bank of Valletta
CIC
Pictet 1805
Banca Leonardo
Cornèr
Crédit Agricole
EFA
Calamatta Cuschieri Your Partner in Financial Services
Deutsche Bank
BNP Paribas
Vontobel
BIL 1856 Banque Internationale à Luxembourg
Albertini Banca Privata

Fully automated connection with fund administrators. The number always is increasing due to the requests of our clients.

The advantages of a administrator interface

By interfacing with your administrator, you can achieve the highest levels of operating process efficiency and automation. Users will be able to check every day, at their convenience, all the trades, the NAV and the commissions for each fund, as recorded by the fund admintrator, and to align and verify all portfolios in a matter of minutes.

What if your administrators are not in the list?

No problem. Every year we create new interfaces at the customers' request. One of our strengths is the ability to create a new interface via FIX, SWIFT, or other protocols in just 15 days. Of course, with Guardian you can manage and add to portfolios for which there is no interface with the administrator, by entering trades manually.

Advanced fund management functions

Advanced functions and tools to support the managers' analyses and activities

Maximum flexibility in the asset allocation window

Maximum flexibility in reclassifying the assets held in a fund according to different classification levels (asset class, type of security, currency, geographic area, industry sector, risk, credit rating, maturity, etc.), or according to the user's own classifications.

Real-time prices and all data of any security in a few seconds

Real-time valuation of any listed instrument through a link to your financial information provider (Bloomberg, Refinitiv, Six or other). **Obtain the complete data of any new security (over 100 dynamic and static fields) in a few seconds:** all you need is the Bloomberg Ticker or ISIN code. **Automatic generation** of trades related to securities' **cash flow** (coupons, dividends, redemptions, corporate actions).

Aggregation of all orders from fund managers

High performing and full of information platform, totally integrated in order to digitize and automate the connections with all Investment Managers/Advisors. The Man.Co receives all the trades inserted by the fund managers that pass the pre-compliance check, can check them again and decide whether to send them to the brokers accordingly to the Risk Management rules

Perfomance contribution in detail

Performance contribution and attribution analysis according to different levels of aggregation (asset classes, types of securities, product category, industry sector, currency etc.), **even versus a bechmark, down to the exact contribution of each security. Calculation of all the key risk indicators (st. dev., volatility, max drawdown, Sortino, Sharpe, etc.).**

Model portfolio and massive simulations of trades

Creation of ideal portfolios and groups of portfolios, investment lines, with automatic creation of all adjustment trades. **Generation of cumulative purchase, sale, or currency exchange orders**, or simulations to rebalance the weight of a security contained in more than one fund, all from a simple processing window. Trade Blotter to **check the status of orders** placed on the market and/or recorded in Guardian. Possibility to set more strategies on one sector (**multistrategy**).

Pre-compliance check of all trades

Enter trades quickly and see the pre-compliance check of all trades entered and **real-time verification of regulatory limits** in accordance with the prospectus.

Search past trades and positions and export every data of your funds

Quick search for historical trades, current account or fund movements at any past date.
All funds, processed data and reports **can** always **be exported to Excel and Pdf**, also according to specific layouts (e.g.: **Bloomberg Port**).

Real-time NAV and creation of secondary classes

Guardian is able to calculate the NAV per share of your fund real-time, without waiting for the banking flow at T+2. Possibility to create **up to 12 different secondary classes (retail, institutional, etc.)** with the details of the number of shares, the total assets for each class and the NAV per share.

Management, transaction and perfomance fees

Automatic calculation of management, transaction and performance fees and any other type of cost for an accurate calculation of the estimated NAV and effective monitoring of the fees charged by the custodian.

Risk management functions

Real-time checks on all limits for your funds, with advanced pre- and post-compliance testing reports and risk analysis

Maximum flexibility in creating your limits

Real-time monitoring of all limits on all funds, from a single window. Possibility for the user to **set any type of limit** to ensure maximum safety of all trades and to **monitor in real-time the exposure for each limit**, even in passive breach case. For each limit there is a check section with details of all the securities included in the calculation.
Two kinds of limits: **regulatory and discretionary** limits. The first ones are required by the national banking and financial authorities, the second ones derive from your investment committee decisions. The user can create alerts (**warnings**) in case of approaching the limits already set, according to an editable tolerance range, and a recap file can be sent to the risk manager periodically, or each time a warning and/or a limit is exceeded.

Automatic setting of UCITS and AIFMD limits

Quick and simple upload of all **UCITS and AIFMD regulatory limits**, updated **in accordance with the latest regulatory requirements**. Setup of all prospectus limits for each fund and each type of limit can be set with different levels of complexity and depth, such as the calculation according to the committed approach and VaR approach.
For each order entered, a document is created and saved in a digital database, non-editable by the user, which summarizes all the data relating to the entered trade and the outcome of the pre-compliance check.

1

The transaction is entered by the front office
When a transaction is entered, **the user is immediately informed whether the transaction is compliant** according to all the limits and restrictions set for that fund.

2

Pre-compliance check and example of check report
Check on all regulatory, prospectus, or discretionary limits set for the fund. Possibility for the user to set any type of limit to ensure maximum safety of all trades and to monitor in real time the exposure for each limit.

3

Outcome of the pre-compliance check
The customer can define **each user's permissions if the trade is found to be "not compliant"**. Automatic jobs can be created so that, in case of non-compliant transaction, a notice is sent immediately to the risk manager who may authorize trade execution.

4

Post-compliance check and risk reports
Check on all the limits set to all funds from a simple viewing window, in real-time or at a past date. Specific **portfolio risk analysis reports** (**concentration risk, liquidity risk, normal VaR vs empirical VaR, Backtesting and specific Stress Tests**) and key synthetic risk indicators (**volatility, Sharpe ratio, Sortino ratio, alpha, skewness, kurtosis**, etc.). The normal VaR calculation has been **certified by an important Luxembourg consulting firm**.

Order routing

Some of our interfaced brokers:

Credit Suisse
Bloomberg EMSX
UBS
JPMorganChase
Goldman Sachs
Banca Sella

Electronic submission of orders directly to brokers via FIX or other protocols

With **Guardian FIX Blotter** you can trade in equities, bonds, options, futures, CFDs and Forex directly to the market with maximum security and speed, **with any broker in the world**.
Orders are sent electronically through a specific connection to your brokers via FIX, SWIFT, XML or other protocol, and they contain price, date, quantity and all the main parameters of the order.
Quick entry of trades and **automatic completion of transaction fees**.
Real-time verification of all limits, blocks and restrictions set on a fund and/or security, to guarantee total safety in executing the order.

Bloomberg ESMX certification

Guardian is an official **Bloomberg ESMX Staging and ESMX NET platform** certified software. Automatic receipt of trade executions from brokers flow and/or via **Bloomberg Dropcopy**, even in the case of orders placed by telephone, through passive feeding of your Guardian server.
Algorithmic trading strategies have been developed for several customers, based on the customer's specifications, to allow the automatic submission of trades to the market in response to signals generated by the strategy.

Back and middle office

Complete digitization of all operations to ensure the highest level of automation and efficiency

Automatic receipt of banking flows for daily reconciliation of the positions of securities, current accounts, transactions, commissions and cash flow. Guardian will highlight the trades and the positions that are mismatched compared to the data received from the bank, in order to identify unjustified differences between Guardian's and the bank's position.

Automatic sending of SSI and subscriptions/redemptions monitoring

Guardian calculates the NAV of funds and the value per share for each class, and then compares it to the official NAV and checks any unjustified difference.
Automatic receipt of trade executions through Bloomberg Dropcopy or other broker to automatically update the details of executed transactions (commissions, execution price etc.). The **end-of-day trade summary file** is structured and sent automatically to the custodian bank in accordance with the specifications requested by the counterparty (email, FTP, SFTP, encrypted file, etc.).
The **Standard Settlement Instructions (SSI)** of all executed trades entered in the software are automatically generated and sent according to counterparty, market, currency, etc.
Daily calculation of **management and performance fees** (absolute, percentage, HWM, hurdle rate), **and any other costs charged to the funds**.
Automatic calculation of **commissions to be paid back according to investors' subscriptions and redemptions.** Transfers of shares can be automatically associated with each investor through automatic flow with the transfer agent.

Automatic update of all securities' data and generation of trades

Automatic update of the securities database through your financial provider (Bloomberg, Reuters, Six Financial Information, other), so as to always have a securities and portfolio valuation calculated independently by Guardian for comparison against the bank's valuation. For each portfolio, **automatic generation of trades relating to dividends, coupons, redemptions, corporate actions, option exercises** and assignments according to market specifications (cash delivery, future delivery, out/in the money).

Fully outsourced back office service

You have the **opportunity to outsource to Swiss-Rev all of your company's back&middle office activities**: we guarantee highly professional services and a partner who will effectively support your business.
Thanks to investments in process automation and digitization, Swiss-Rev can provide this service at a very competitive price.

Compliance & Reporting

Compliance with MiFiD II, MIFIR, EMIR and the latest regulamentary requirements

Guardian software is constantly updated according to the latest regulamentary requirements issued by the regulators.

Automatic reporting for banking and financial authorities

Automatic elaboration and sending of **Transaction Reporting** and other reporting to supervisory bodies according to the specific formats required (**CSSF, MFSA, FINMA, Bank of Italy, Consob,** etc.).

esma European Securities and Markets Authority

cssf Commission de Surveillance du Secteur Financier

MFSA MALTA FINANCIAL SERVICES AUTHORITY

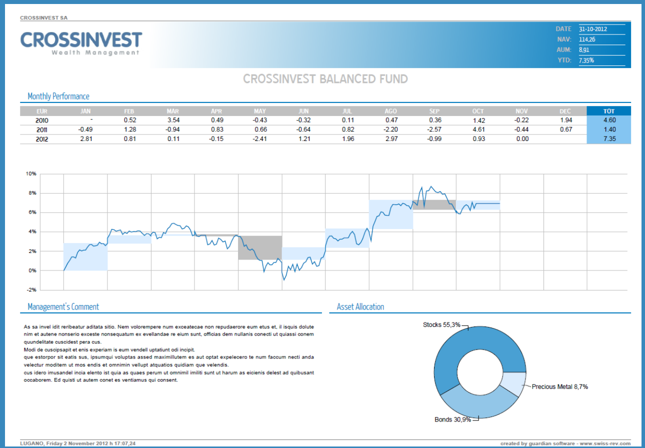
CONSOB Commissione Nazionale per le Società e la Borsa
Autorità italiana per la vigilanza dei mercati finanziari

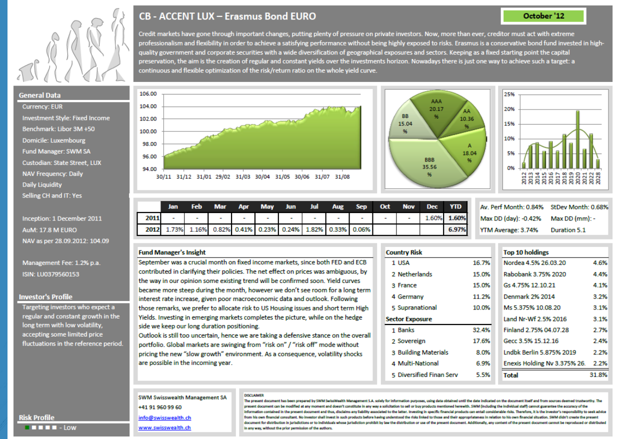
finma

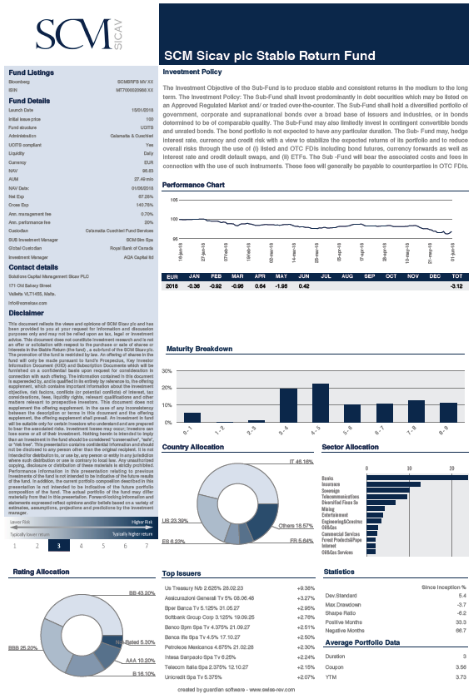
Reports

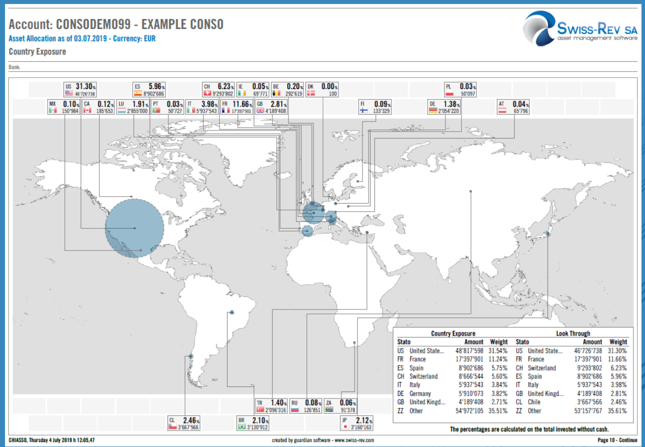
Fact sheets, KIIDs and many other reports available up to five different languages

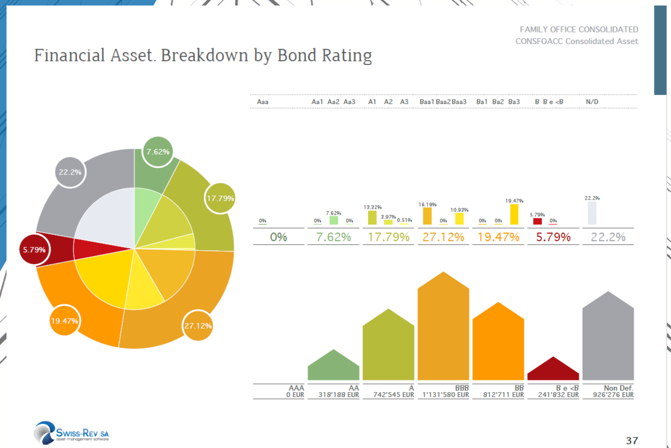
Wide range of reports available to the user, such as performance contribution reports, newsletters, market overviews, fact sheets, KIIDs. All these reports are generated automatically and they can be sent to a mailing list up to five different languages, with the possibility to customize them according to specific needs.











Technical specifications

Software architecture

Client/server architecture for the management of individual portfolios and of funds, in **Java** language and based on **SQL database**. Option to add a **Web interface** for front office users (managers, promoters, end clients) in order to access the application via HTML. Guardian can be installed on **Windows, iOs**, and **Linux** systems, on physical, virtual and hosted servers.

Automatic updates

New versions of the software are released automatically under maximum security conditions thanks to nightly scheduled jobs on the server which update the database to the most recent release, through **SFTP protocol**, without the intervention of an operator.

Encrypted database

The sensitive information contained in the Guardian database is encrypted for a **high level of security.**

User profiling

Possibility to determine **permission levels depending on the role**: fund manager, back officer, risk manager, advisor, end customer, other.

Audited and certified by EY

Guardian has been audited by **Ernst & Young**, who verified and certified its compliance with the principles of good asset management for the purpose of obtaining the authorization required by the **Swiss LiCol law** (Collective Capital Investment Law) **from the SFBC** (Swiss Federal Banking Commission).

User interconnection

Guardian has been developed to be used **both in Intranet and Internet networks,** and it is suitable for **Geographical Distributed Environments** (GDE), to allow **users from all over the world to be connected and operate in real-time.**

Multi-language application

Guardian can be used in Italian, English, French, German and Spanish.

ASK FOR A DEMO

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