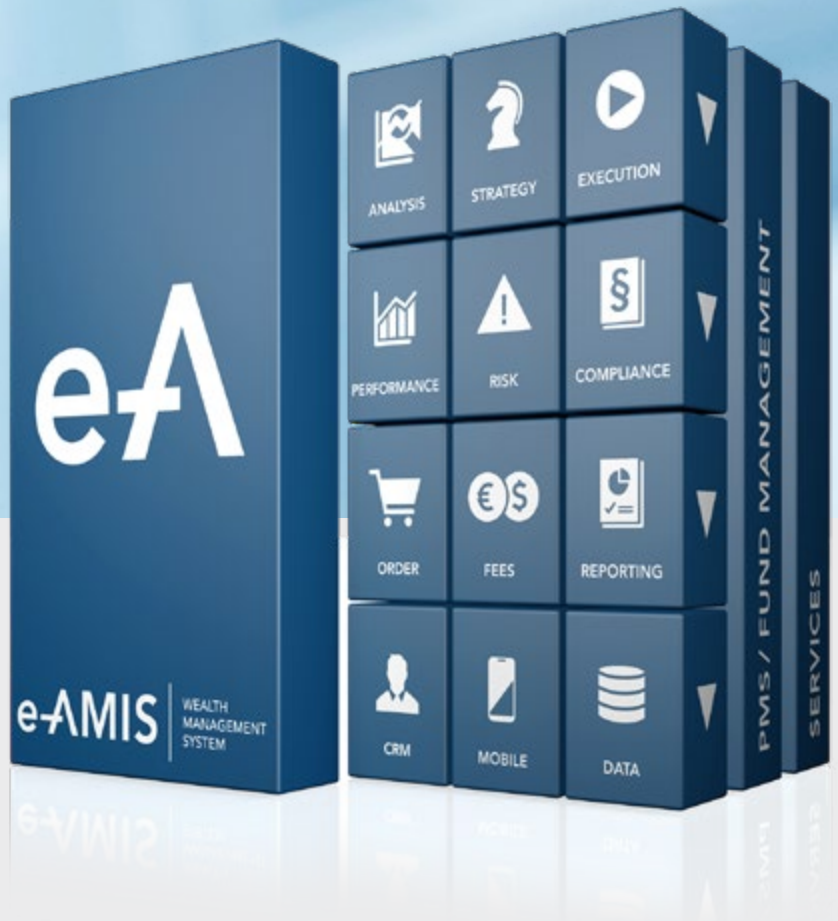e-AMIS | WEALTH MANAGEMENT SYSTEM

e-AMIS, the intuitive wealth management system that covers the entire investment process.

e-AMIS is the wealth management solution for either modular or full application from front-to-back. Asset managers, family offices and banks value the comprehensive range of functions in operating the system, which is both intuitive and straightforward. e-AMIS promotes quality and efficiency in consultation to serve customers in the best way. With e-AMIS, tasks and business transactions are structured into nine basic operating areas:

CONTENT

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Customer-focused asset management calls for a systematic design of customer relationship processes. e-AMIS offers the following functions:

·   Recording of 'potential' customers
·   On-boarding of customers, with the option to change their status from 'potential' to 'existing' at the push of a button
·   Politically exposed person (PEP) check for black listings, through an interface
·   Graphic visualisation of participations and family relations
·   Document management
·   Event management (calendar) and alerts (to do list)
·   Covering regulatory requirements such as Markets in Financial Instruments Directive (MiFID) II and the Financial Services Law (Finanzdienstleistungsgesetz, FIDLEG)

RISK PROFILING

Beside the aforementioned CRM functions, minutes of consultation and customer profiles are also recorded and stored in e-AMIS. The creation of a customer profile is based on personalised questionnaires (**Fig. 1a**) which, as a profile template, are assigned to different customer groups or selected automatically by the system, depending on the respective risk classification. Multiple types of profile templates can be prepared in order to create profiles for other purposes such as 'Know Your Customer' or 'Risk Affinity'. From the customer responses shown in the customer profile, the risk classification can be derived automatically in the form of a score using a configurable formula and thus also a proposal for the investment strategy (**Fig. 1b**). All information from the customer profiling, such as the list of assets, investment proposal, etc. is stored in the document archive and taken into account in the customer reports.

Fig. 1a
Proposal for the investment strategy

Fig. 1b
Questionnaire

MOBILE CLIENT

The mobile client enables investors to get both direct internet access to inventory data and to securely communicate electronically with the asset manager who manages the investor portfolio in e-AMIS. Furthermore, consultants can analyse the (consolidated) assets in e-AMIS, request up-to-date portfolio valuations, risk and performance indicators and present them to their customers on mobile devices. Alongside definable online views, pre-defined reports, and other documents with product information for example, are available on demand. Moreover, investors are allowed to alter their profile which is saved in e-AMIS, as well as their address and contact details (customer self-service).

PORTFOLIO ANALYSIS

The e-AMIS portfolio analysis is based on dynamic, adjustable criteria and includes all portfolio structures and asset classes. During the entire investment process, wealth managers are supported in the best way. In the portfolio analysis, the financial status is evaluated in detail and trading decisions are made.

The range of features consists of:
· Analysis of consolidated, individual, and partial portfolios or individual positions
· Evaluations based on asset category, currency, industry, country, duration, key ratio, etc.
· Disclosure of individually selectable detail information such as cost value, market value w/wo accrued interest, realised and unrealised P/L on price and FX as well as key ratios such as yield, sensitivities and P/E ratio
· Breakdown of funds, indices, and structured products
· Comparison of target/actual values (**Fig. 2**)

· Cash flow projection per currency, subdivided by income (coupons and dividends) and maturities, grouped into periods (month or year)
· Investment simulations and market scenarios (changes in price, currency, and interest)
· Performance measurement and risk management including Value at Risk (VaR)

Fig. 2

Tabular and graphical display of the target/actual comparison
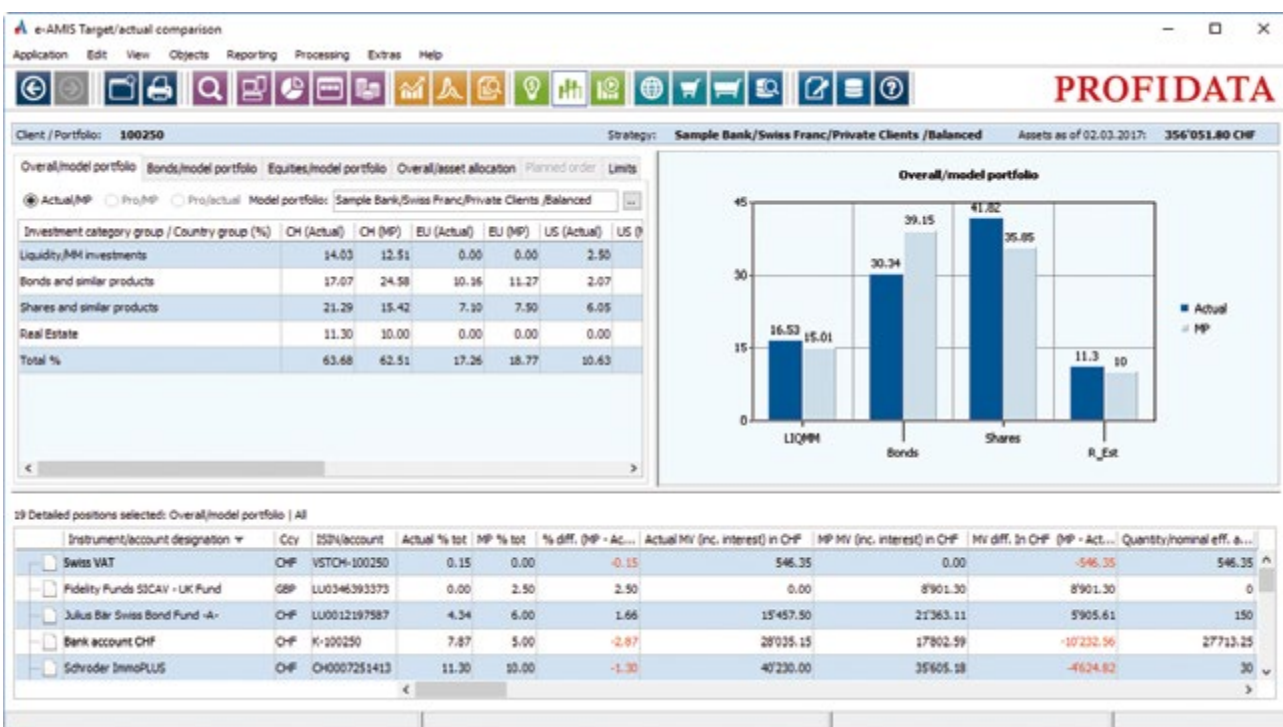
OWNERSHIP STRUCTURES

Using the ownership structures (**Fig. 3**), assets which are invested into different associated companies or trusts, and are deposited with multiple banks, can be managed individually, and evaluated on a consolidated basis. Within the ownership structures, subordinated portfolios (associated companies, trusts, etc.), can be kept in superordinated portfolios which are assigned to single family members or investors. The value of a participation is determined by the net asset values and the respective participation ratio. e-AMIS allows for the analysis of the entire ownership structure of all portfolios on every level. All portfolios held are weighted according to the shares held, and consolidated in the portfolio to be evaluated. Consolidations are carried out step by step from top to bottom and the participation ratio is transparent at every level. It is evident of each individual position, which share or portfolio it belongs to.
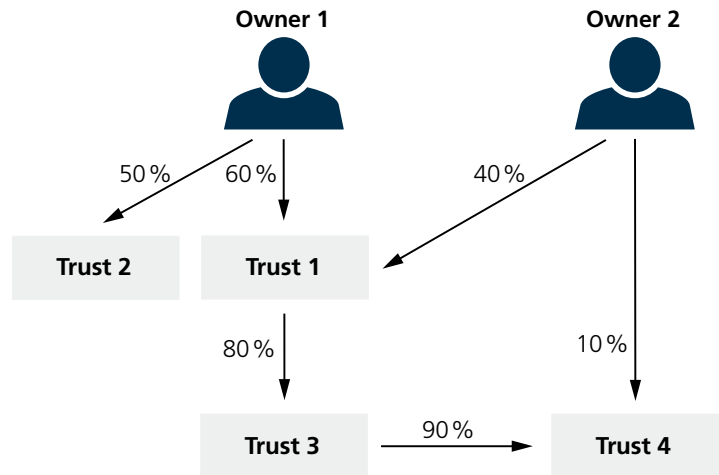
Fig. 3
Consolidated evaluation
of ownership structures

MODELLING

A specific investment strategy can be allocated to each customer profile or automatically derived by risk profiling the answered questionnaires. To begin with, strategic asset allocations (SAA) are defined in e-AMIS. An SAA is based on the combination of sectors which are characterised by various criteria such as asset categories, countries, currencies, durations, industries, etc. The individual sectors can be allocated to (combined) benchmarks which are referred to in ad-hoc evaluations when comparing actual and target performances and in reporting. Tactical asset allocations (TAA) are based on model portfolios, which reflect the absolute or relative rebalancing pre-settings of the portfolio management. In addition to SAA and TAA, recommendation lists are available from which investment advisors can extract proposals for and advice on titles of their financial institute.

PORTFOLIO REBALANCING AND CONSTRUCTION

Immediately after an investment strategy has been allocated, the portfolio is constructed. Using personalised portfolio construction, individual portfolios are rebalanced or aligned with the target structure. By the function of the global portfolio construction, rebalancing is carried out for a large number of portfolios, particularly in periodic adaptations of portfolios to the target structures provided. Alongside the global rebalancings, other global actions, such as rebalancing or switching of sectors and security actions can be carried out. Furthermore, the global portfolio construction also includes actions such as the purchase of new issues, opening of money market contracts and FX hedging using FX forwards.

EXECUTION

INVESTMENT PROPOSAL

The result of the portfolio rebalancings are investment proposals that can be viewed in e-AMIS or are delivered to customers for verification in the form of a report. In order to comply with the MiFID II guidelines, not only these reports and all other documents delivered to customers, but also the risk profiles and minutes of consultation are stored chronologically in e-AMIS. Investment proposals can be simulated, for example, to illustrate a change in strategy. They can also be modified manually in special cases, or be accepted directly to align the respective portfolios with the target structure.

ORDER MANAGEMENT

Investment proposals are either transferred directly or after pooling from the trading desk into the customer-specific configurable order routing. In the order administration, order status can be tracked (entered, assigned, placed, executed, etc.). With the execution, an order turns into a transaction which is initially matched via a definable workflow (**Fig. 4**) and then processed. Orders and transactions which do not follow the set workflow, go through an exception handling procedure. It is possible to import and export order and transaction data. SWIFT, FIX or other (proprietary) formats are supported in this.

Fig. 4
Order workflow

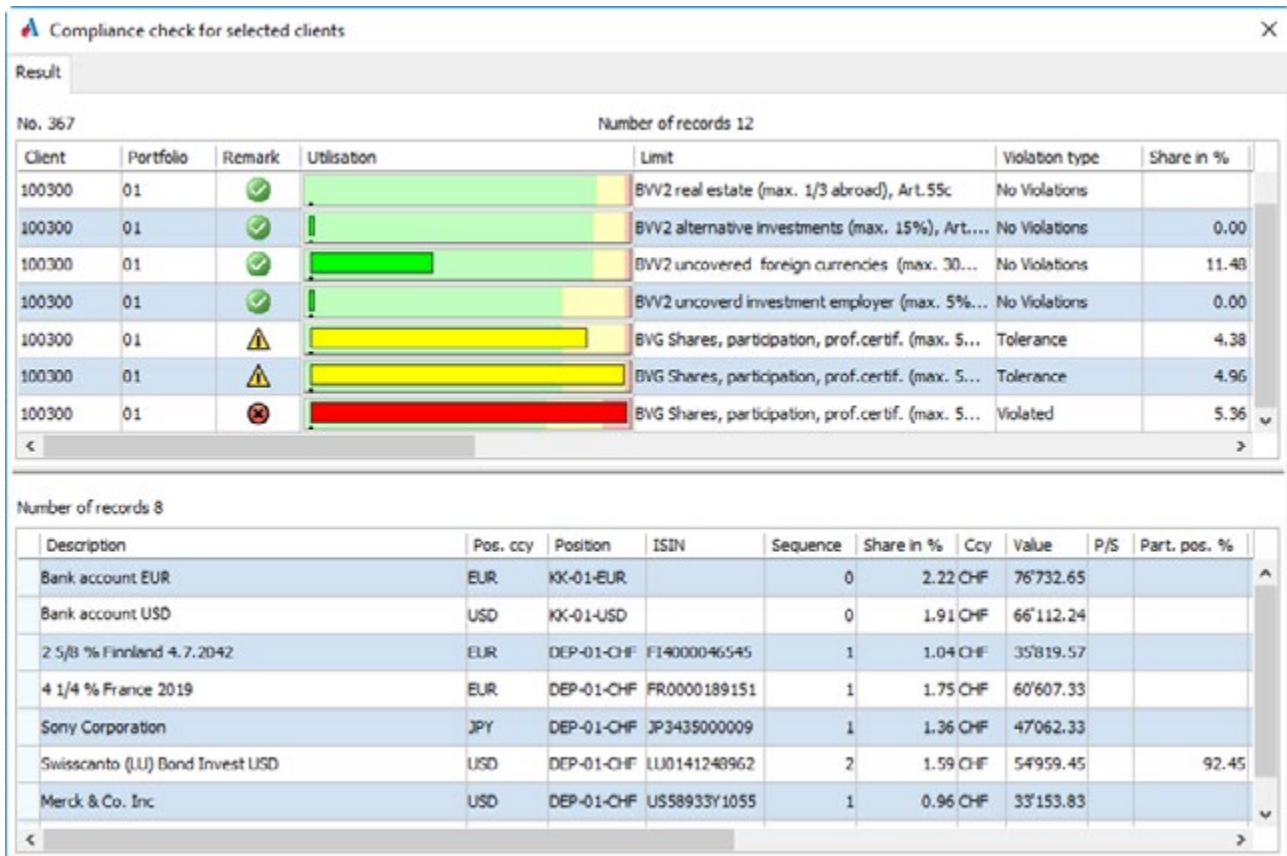| Investment Compliance		Accounting
ORDER ENTRY	**ORDER ADMINISTRATION**	**MATCHING**
– Manual/Automatic via Interface Simulation – Simulation – Modelling	– Process Management – Order History – Executions	– Manual Matching – Automatic Matching ▶▶ Import/Export ▷▷

INVESTMENT COMPLIANCE

e-AMIS supports the daily monitoring of investment limits in accordance with legal guidelines, internal company directives and investor-specific requirements. Through the integration of customer profiling, strategy definition, and portfolio construction as well as order and transaction management (pre and post trade investment compliance), e-AMIS fully covers the entire investment process. Deviations are displayed online (**Fig. 5**) and/or recorded in a detailed report.

Fig. 5
Online overview of investment compliance checks

RISK MANAGEMENT

To make an adequate assessment on the investment success, beside the performance, it is also necessary to consider the associated risk, which is measured according to Value at Risk (VaR), the standard approach established in the financial industry. To calculate the absolute and relative VaR, the variance/ covariance approach (delta normal method) and Historical Simulation are available in e-AMIS. The risk key ratios to be calculated (target performance resp. shortfall risk, conditional VaR, etc.) can be flexibly adjusted using parameters such as risk model, holding period, confidence level). The risk key ratios are calculated on individual, sector or category, and portfolio levels (single or consolidated portfolios). During stress testing, the positions for a due date are subject to a market scenario, i. e. the VaR can be simulated using particular or combined changes of risk factors. Performing regular back-

Client	Portfolio	Remark	Utilisation	Limit	Violation type	Share in %
100300	01	✓		BVV2 real estate (max. 1/3 abroad), Art.55c	No Violations	
100300	01	✓		BVV2 alternative investments (max. 15%), Art....	No Violations	0.00
100300	01	✓		BVV2 uncovered foreign currencies (max. 30...	No Violations	11.48
100300	01	✓		BVV2 uncoverd investment employer (max. 5%...	No Violations	0.00
100300	01	⚠		BVG Shares, participation, prof.certif. (max. 5...	Tolerance	4.38
100300	01	⚠		BVG Shares, participation, prof.certif. (max. 5...	Tolerance	4.96
100300	01	⊗		BVG Shares, participation, prof.certif. (max. 5...	Violated	5.36

Number of records 8

| Description	Pos. ccy	Position	ISIN	Sequence	Share in %	Ccy	Value	P/S	Part. pos. %
Bank account EUR	EUR	KK-01-EUR		0	2.22	CHF	76'732.65		
Bank account USD	USD	KK-01-USD		0	1.91	CHF	66'112.24		
2 5/8 % Finnland 4.7.2042	EUR	DEP-01-CHF	FI4000046545	1	1.04	CHF	35'819.57		
4 1/4 % France 2019	EUR	DEP-01-CHF	FR0000189151	1	1.75	CHF	60'607.33		
Sony Corporation	JPY	DEP-01-CHF	JP3435000009	1	1.36	CHF	47'062.33		
Swisscanto (LU) Bond Invest USD	USD	DEP-01-CHF	LU0141248962	2	1.59	CHF	54'959.45		92.45
Merck & Co. Inc	USD	DEP-01-CHF	US58933Y1055	1	0.96	CHF	33'153.83		

testing (**Fig. 6**) is necessary to verify the forecast quality of the risk model used. For backtesting, the two usual methods, clean and dirty backtesting, can be selected in e-AMIS.

PERFORMANCE MEASUREMENT

As a position keeping system, e-AMIS captures all the information required for performance calculation, including all transactions such as corporate actions, historical (FX-) prices and benchmark data. Benchmarks can be managed as indices and benchmark portfolios down to the individual title level as well as combined benchmarks. e-AMIS calculates the MWR and TWR and supports users both in the absolute and relative performance measurement of consolidated portfolios down to single position level and to different reference currencies. The gross and net performance is provided. Furthermore, contribution and classic attribution as well as risk adjusted and annualised key ratios

such as information, sharpe and treynor ratio as well as maximum drawdown and tracking error, are also calculated. The performance measurement follows the international Global Investment Presentation Standards (GIPS 2010).

Fig. 6
Backtesting of
historical simulation
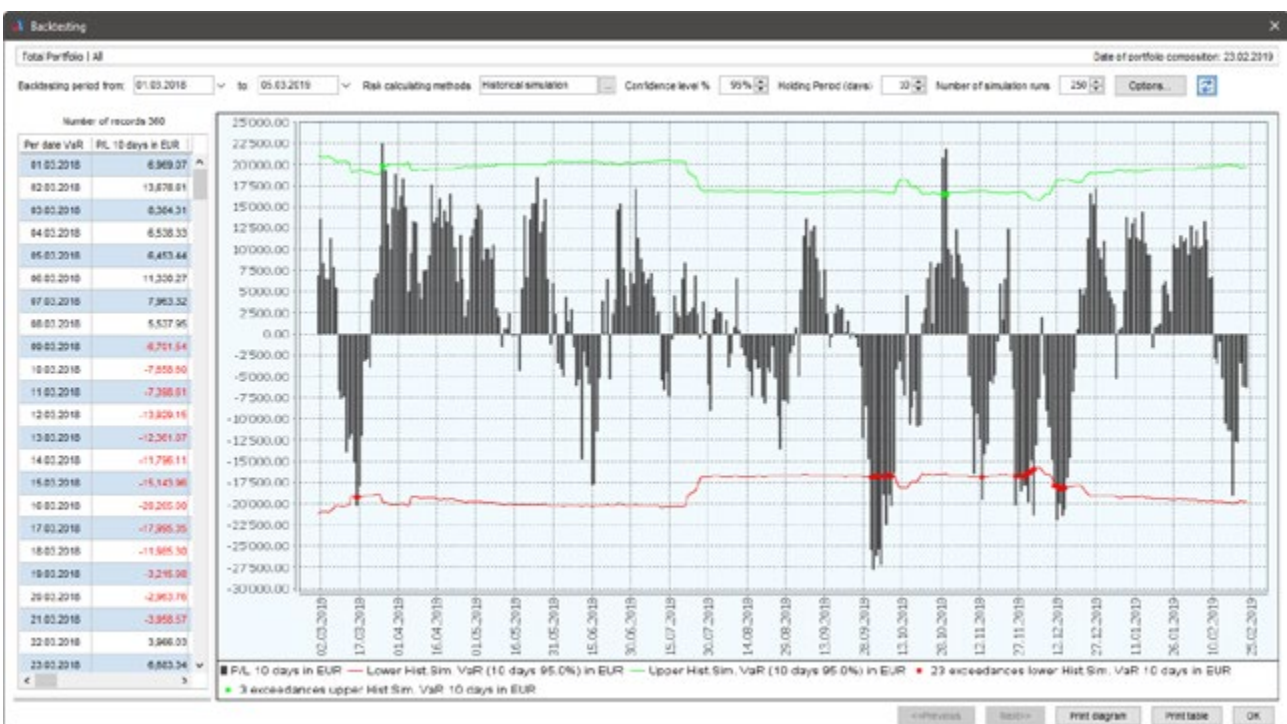
REPORTING

Reporting in e-AMIS is based on the system-imminent FINancial Analysis Language (FINAL), by which any financial-analytical enquiries are prepared on a standardised or customer-specific basis. The report generator offers over 100 modules for standardised creation of management and customer reports. Font, colours, layout (displayed in graphics and tables, headers and footers, numbering, etc.), structure (cover sheet, contents, etc.) and logo as well as the language of the report, can be selected ad-hoc. In addition, third party information (fact sheets, minutes, etc.) can be added to the reporting.

Extract of the standard reports available:
· Target/actual comparison, including investment proposal
· List of assets
· Transaction and position list
· Risk and performance analysis (**Fig. 7**)
· List of fees and cost transparency report
· Investment Compliance
· Maturity analysis
· Regulatory and fiscal reporting

Besides using the standardised reporting, users can formulate their own data retrievals with the query module through simple point-and-click. Information which is otherwise not included in the standard reports can be assembled individually and quickly. Query results are output as Excel, Word, PDF or HTML file.

**Fig. 7**
Performance report
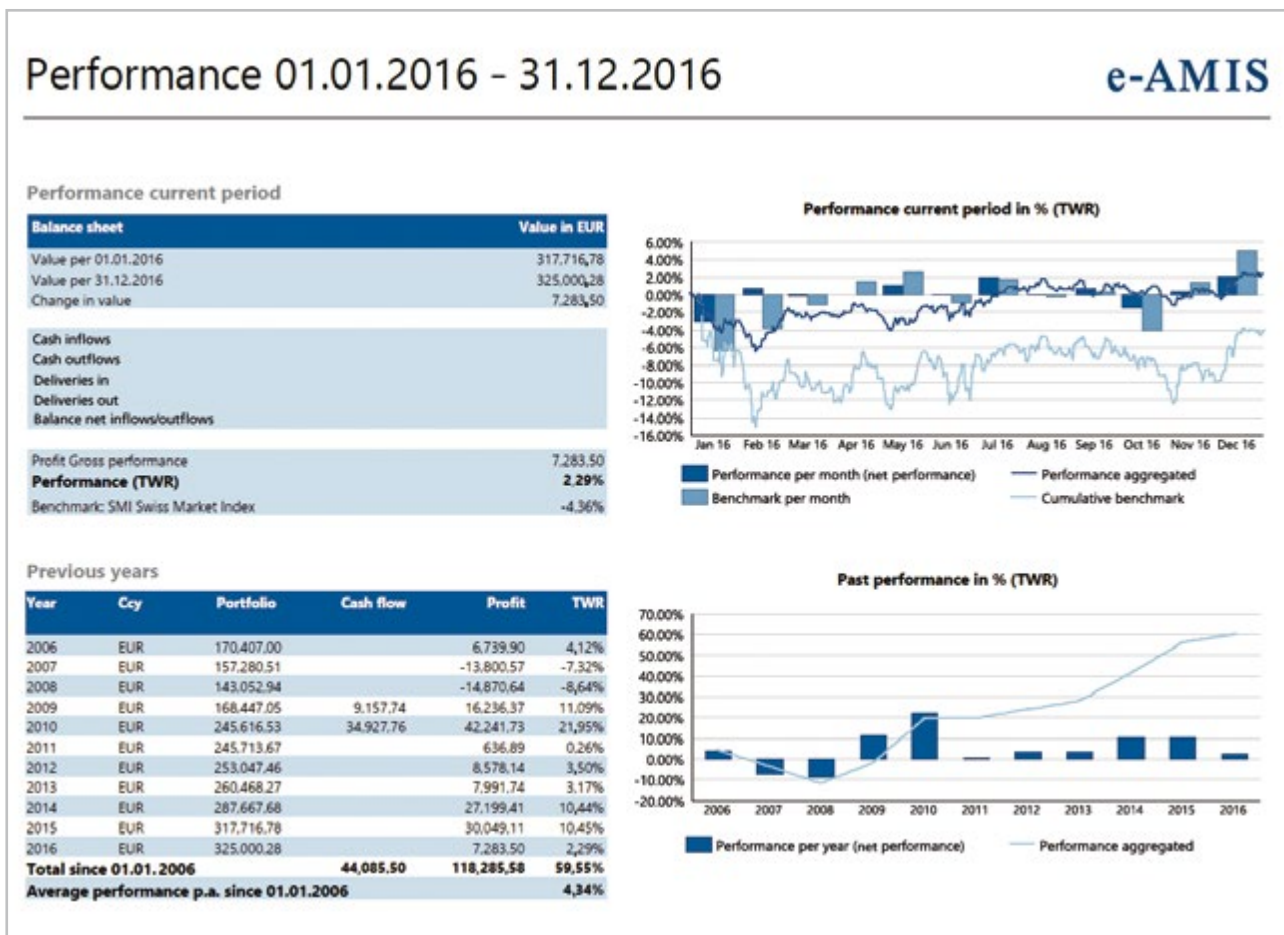
DASHBOARD

With the e-AMIS dashboards (**Fig. 8**), individually designed overviews of asset data of one or more portfolios can be created. For instance, the most important information, from a management perspective, can be combined and provided at a glance.

The user can select views which are positioned in the dashboard as portlets so that information on asset structure, position overview, target/actual value comparison, investment limit testing or any other enquiries can be presented as a graphic or as a table.

Fig. 8
e-AMIS dashboard
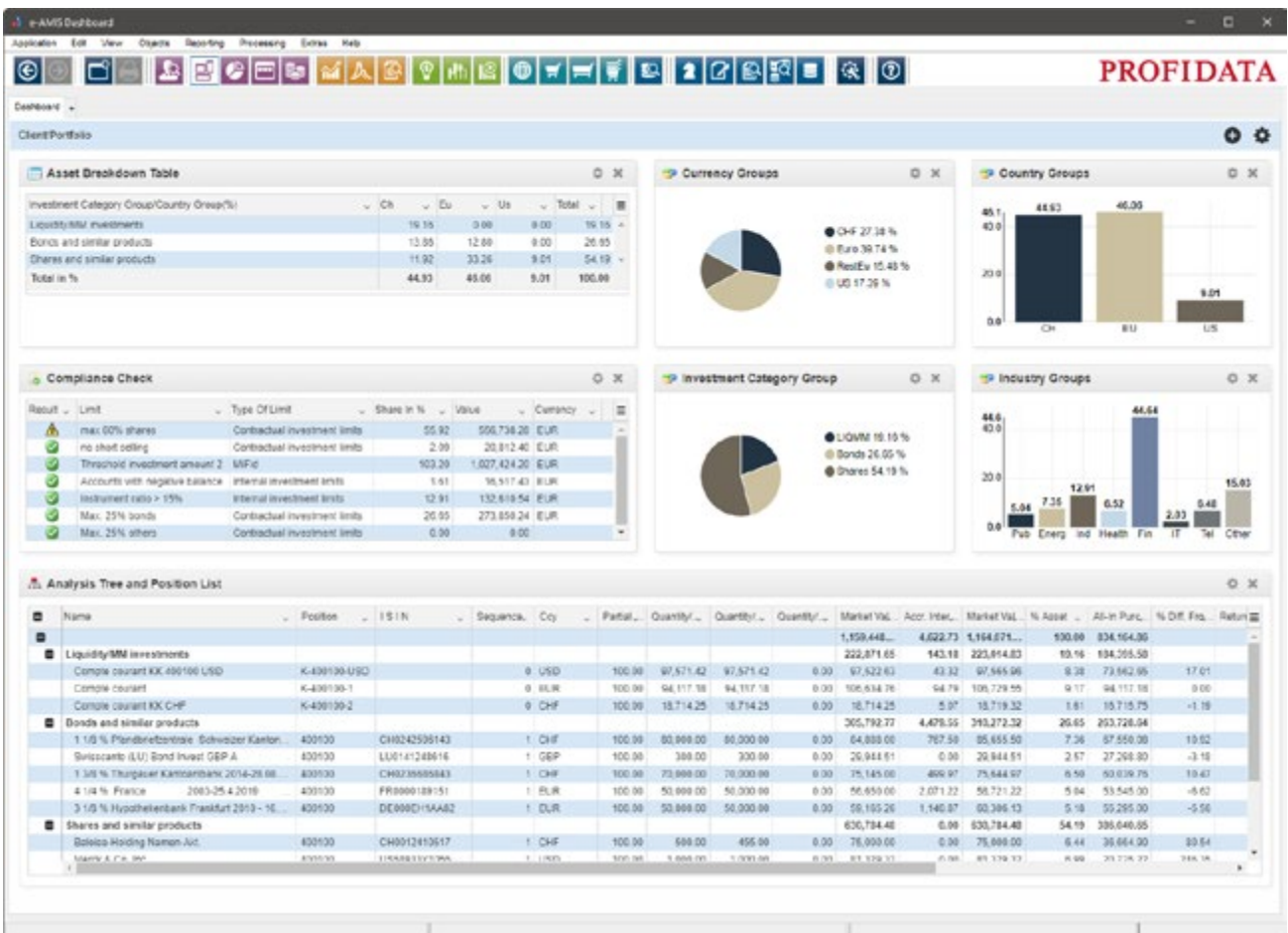
TRANSACTIONS AND POSITIONS

Transactions are recorded using standard-ised transaction types (trades, interest and dividend payments, corporate actions, etc.), which reflect the life cycles of the financial instruments managed in e-AMIS. Each transaction type is characterised by book-able transaction items (cost value, P/L, fees, etc.). Transactions immediately result in positions. By means of drill down functionality, the chronological transaction history can be retrieved for each position. Characteristics which separate positions enable the differentiation between blocked and unblocked holdings or between positions that are identical but kept with multiple depositary banks.

BALANCING

Transaction items are posted according to standardised or customer-specific charts of accounts. It is also possible to specifically define charts of accounts, e.g. for the balance sheet, the income statement or even the performance statement. The level of detail of these calculations is determined by the trans-action items which have been used or the accounts which have been allocated. As a result, the net and gross performance, and/or the performance before and after fees and/or taxes, is presented. The accounting is affected as at the trade or value date. Along-side the presentation of accounting indicators in the portfolio analysis, e-AMIS accounting includes the processing of cancellations, depreciations and period closings.

FEES CALCULATION

e-AMIS supports asset- and performance-dependent as well as combinable fee models which are accrued in specified periods and are due or paid at any given time. Via an automated process, all transaction fees (brokerage, own and third-party expenses, commissions, custody fees, etc.), tax deductions (VAT and turnover tax, (refundable) withholding tax, capital income tax, etc.), retrocessions, etc. of depositary banks and other financial institutions are transferred to and posted in e-AMIS. Furthermore, it is possible to manually adjust fee calculations.
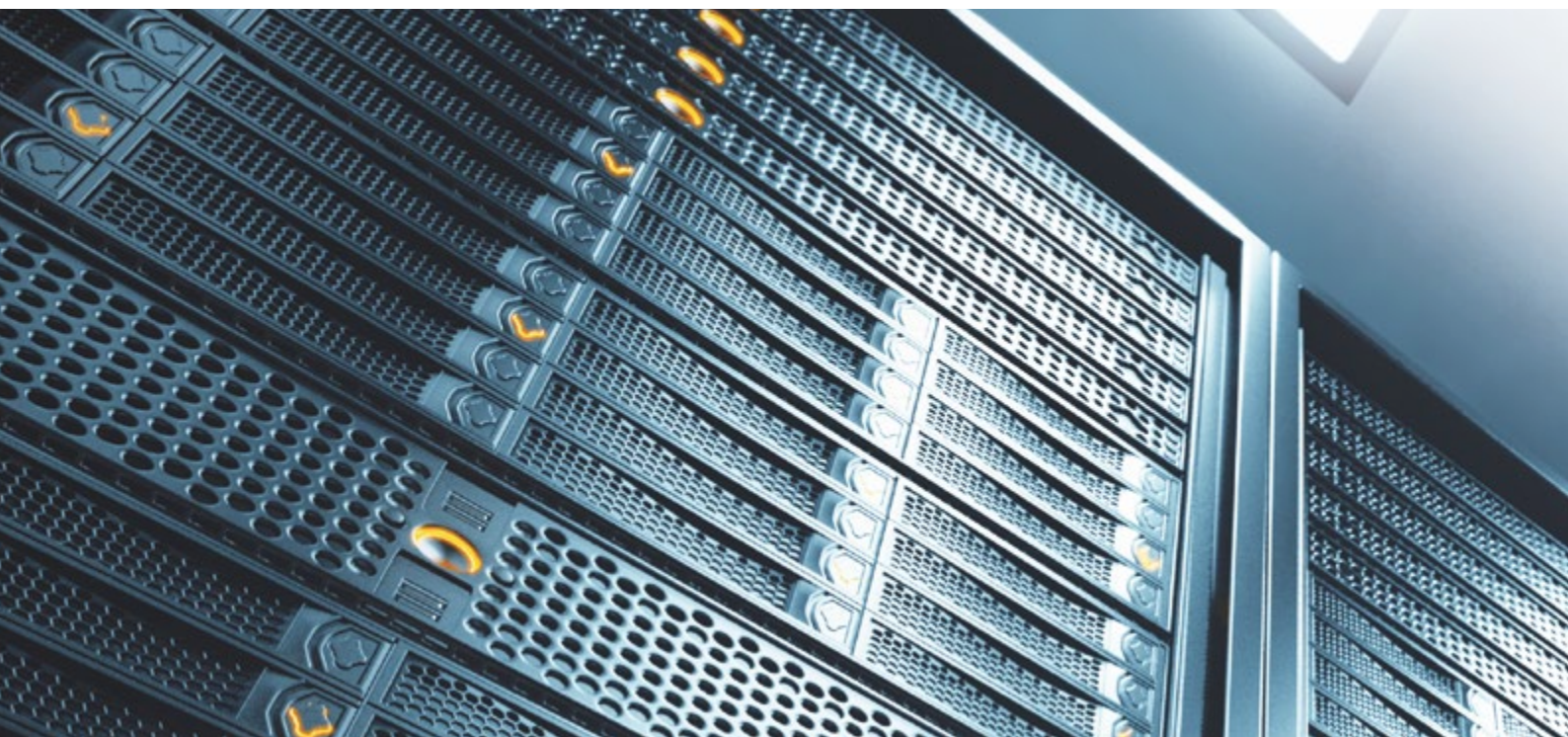
Portfolio management is data management. e-AMIS provides all relevant functions:

- Flexible data structures for replicating the respective company organisation
- Data fields for master and market data
- Automatic and manual data alterations
- Auditing
- Historicisation
- Granular authorisation concept for accessing data and functions
- Multilingualism
- Multi-client capability

INTEGRATION

On account of the flexible interface concept, e-AMIS can be integrated quickly into existing system landscapes. Thus, diverse input and output connectors can be used:

- Standard interface for linking third party applications, core banking systems, etc.
- Generic depositary bank interface
- Master and market data interfaces (SIX Financial Information, Bloomberg, Reuters, etc.)
- Staging Area
- Standardised export functions
- MS Excel integration
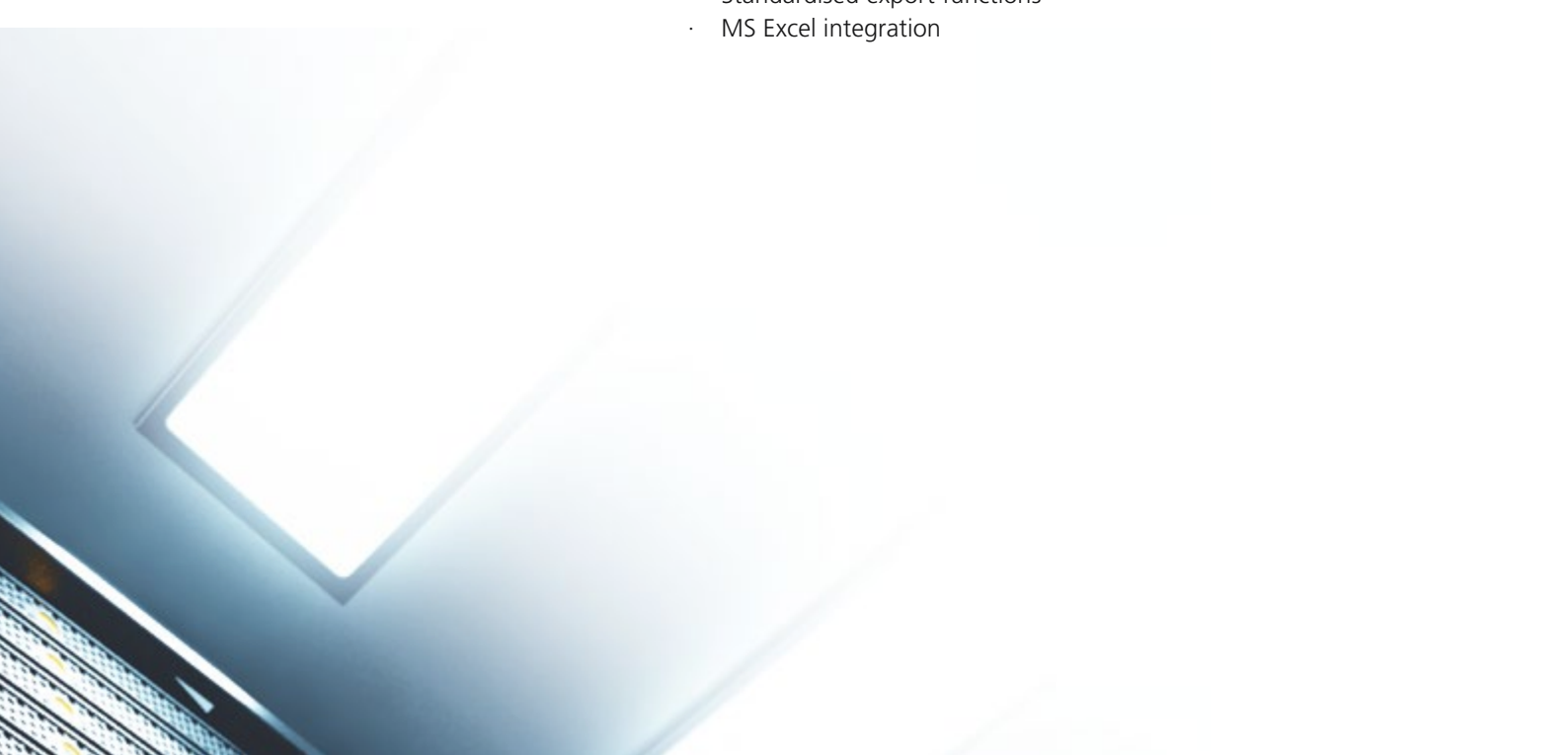
PROFIDATA GROUP

Profidata Group is a Swiss provider of investment and wealth management software solutions and services for the financial industry, founded in 1985. The headquarters are located in Zurich/Switzerland and the subsidiaries and representative offices are situated in Europe and in Asia.

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