SAXO MARKETS

Portfolio Management

A fully integrated portfolio management and reporting solution

Saxo Portfolio Manager

An integrated portfolio management and trading solution for wealth managers.

Saxo Portfolio Manager (SPM) is an advanced portfolio management solution integrated with Saxo Markets' trading platform – allowing wealth managers to manage client portfolios and trade with greater efficiency.

The hosting, back up and maintenance is fully handled by Saxo Markets, which makes the solution highly cost-efficient for the asset manager and very fast to deploy.

SPM has a range of sophisticated features, allowing asset managers, wealth managers and family offices to manage portfolios effectively and provide reporting to end-clients via PDF reports and an online portal.

Rich and broad functionality supports the various needs of portfolio managers, wealth managers, relationship managers and compliance officers to service wealth management clients.

Saxo Markets offers:

- Direct access to create and manage multiple target model portfolios
- Ability to manage multi-asset portfolios
- Risk management and compliance rules across multiple portfolios
- Improved compliance management and audit trail via easy access to portfolio history
- Flexibility to adapt and comply with ever-changing regulatory requirements
- Easy generation of group analytics and management reporting
- Cutting-edge technology with hosting, backup and maintenance outsourced to Saxo Markets. No further investment required
- Online & PDF reports for end-clients and relationship managers

Saxo Portfolio Manager Features

Saxo Markets' integrated portfolio management and trading solution's key features are outlined in the table below. Read more about the details on the following pages.

Portfolio Management & analysis	Risk & Compliance Management	Client Reporting
Create & manage a variety of target model portfolios	*Manage risk effectively on multiple portfolio structures*	*Out-of-the-box PDF reports easily produced in bulk for all your clients - either ad hoc or according to predefined schedule*
Trade seamlessly from order entry to settlement	*Alert flags highlight changes in portfolios vs. models*	*Online portal access for end-clients and relationship managers*
Rebalance across multiple clients and portfolios	*View Risk Ratios*	
Pre-trade allocations and algo orders supported	*Manage pre- and post-trade compliance rules*	
Simulation model for what-if scenarios	*Gain/Loss and performance analysis*	
Portfolio consolidation to create an aggregated view	*Customised, blended or index benchmarks available*	
Easy access to client information		

Portfolio Management and Analysis

Manage portfolio characteristics, strategies and model comparisons.

SPM provides an intuitive portfolio management platform. It offers customisable and accurate portfolio analysis, block trading and bulk/ individual re-balancing capabilities.

Account aggregation allows the portfolio managers to group client accounts into consolidated views, for example, for families or multi-manager relationships.

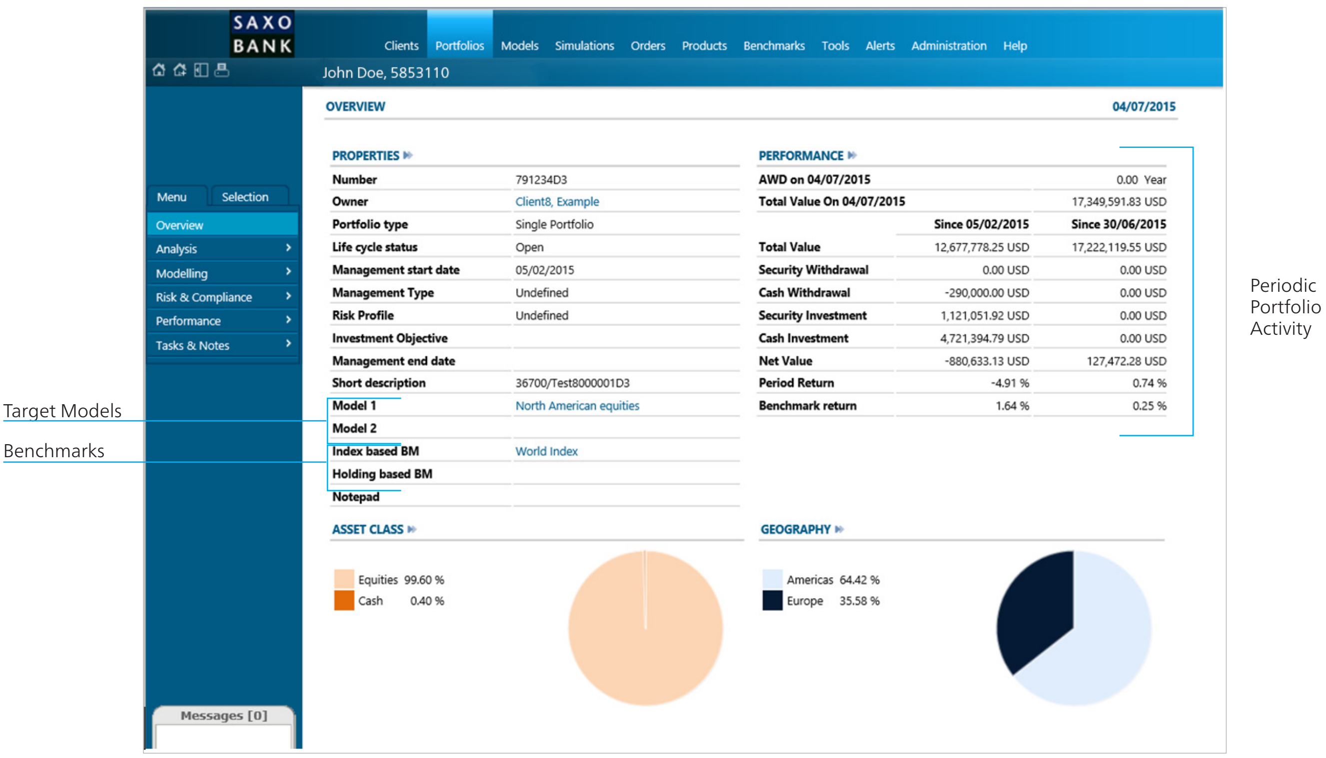
SPM allows investments to be grouped by asset class, geography, sector, currency and instrument type.

Portfolio managers can access portfolio valuations anytime. Managers can view past transactions, market values, portfolio returns and realised/unrealised gain/ losses.

Single client portfolio overview

SPM provides a simple and comprehensive overview of portfolio attributes and valuations.

SPM's flexibility allows portfolio managers to accommodate client-specific requirements e.g. asset class allocation ranges, restrictions on sectors, currencies and leverage ratios.



Portfolio breakdown by Asset Class & Geography

Model Portfolios

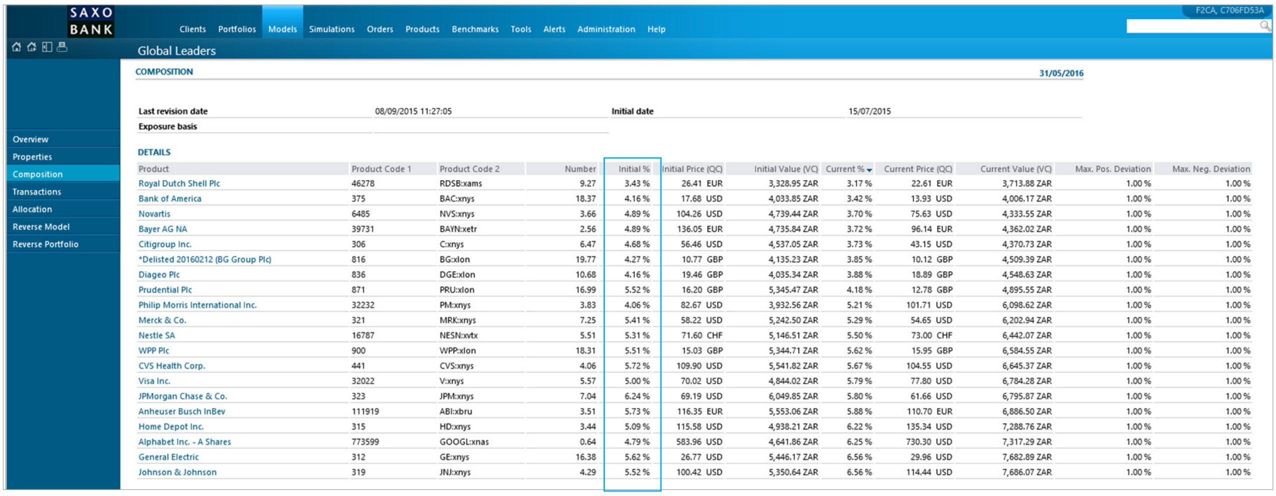
Easy management of multiple model portfolios.

Portfolio managers can create an unlimited number of different model portfolios for managing client portfolios focusing e.g. on strategic and tactical asset allocation, geographical mix or industry sector spread.

The portfolio manager can compare the performance of any portfolio with an external benchmark, which can be a market index (e.g. MSCI, EURO STOXX 50, FTSE 100) or a combination of multiple market indices.

The performance of a portfolio can be compared to a linked benchmark, any other benchmark or any other portfolio, and based on the performance history SPM calculates the tracking-error and information ratio.

Example of a Holding Based Models



Global Leaders

COMPOSITION 31/05/2016

Last revision date	08/09/2015 11:27:05	Initial date	15/07/2015
Exposure basis			

DETAILS

Product	Product Code 1	Product Code 2	Number	Initial %	Initial Price (QC)	Initial Value (VC)	Current %	Current Price (QC)	Current Value (VC)	Max. Pos. Deviation	Max. Neg. Deviation
Royal Dutch Shell Plc	46278	RDSB:xams	9.27	3.43 %	26.41 EUR	3,328.95 ZAR	3.17 %	22.61 EUR	3,713.88 ZAR	1.00 %	1.00 %
Bank of America	375	BAC:xnys	18.37	4.16 %	17.68 USD	4,033.85 ZAR	3.42 %	13.93 USD	4,006.17 ZAR	1.00 %	1.00 %
Novartis	6485	NVS:xnys	3.66	4.89 %	104.26 USD	4,739.44 ZAR	3.70 %	75.63 USD	4,333.55 ZAR	1.00 %	1.00 %
Bayer AG NA	39731	BAYN:xetr	2.56	4.89 %	136.05 EUR	4,735.84 ZAR	3.72 %	96.14 EUR	4,362.02 ZAR	1.00 %	1.00 %
Citigroup Inc.	306	C:xnys	6.47	4.68 %	56.46 USD	4,537.05 ZAR	3.73 %	43.15 USD	4,370.73 ZAR	1.00 %	1.00 %
*Delisted 20160212 (BG Group Plc)	816	BG:xlon	19.77	4.27 %	10.77 GBP	4,135.23 ZAR	3.85 %	10.12 GBP	4,509.39 ZAR	1.00 %	1.00 %
Diageo Plc	836	DGE:xlon	10.68	4.16 %	19.46 GBP	4,035.34 ZAR	3.88 %	18.89 GBP	4,548.63 ZAR	1.00 %	1.00 %
Prudential Plc	871	PRU:xlon	16.99	5.52 %	16.20 GBP	5,345.47 ZAR	4.18 %	12.78 GBP	4,895.55 ZAR	1.00 %	1.00 %
Philip Morris International Inc.	32232	PM:xnys	3.83	4.06 %	82.67 USD	3,932.56 ZAR	5.21 %	101.71 USD	6,098.62 ZAR	1.00 %	1.00 %
Merck & Co.	321	MRK:xnys	7.25	5.41 %	58.22 USD	5,242.50 ZAR	5.29 %	54.65 USD	6,202.94 ZAR	1.00 %	1.00 %
Nestle SA	16787	NESN:xvtx	5.51	5.31 %	71.60 CHF	5,146.51 ZAR	5.50 %	73.00 CHF	6,442.07 ZAR	1.00 %	1.00 %
WPP Plc	900	WPP:xlon	18.31	5.51 %	15.03 GBP	5,344.71 ZAR	5.62 %	15.95 GBP	6,584.55 ZAR	1.00 %	1.00 %
CVS Health Corp.	441	CVS:xnys	4.06	5.72 %	109.90 USD	5,541.82 ZAR	5.67 %	104.55 USD	6,645.37 ZAR	1.00 %	1.00 %
Visa Inc.	32022	V:xnys	5.57	5.00 %	70.02 USD	4,844.02 ZAR	5.79 %	77.80 USD	6,784.28 ZAR	1.00 %	1.00 %
JPMorgan Chase & Co.	323	JPM:xnys	7.04	6.24 %	69.19 USD	6,049.85 ZAR	5.80 %	61.66 USD	6,795.87 ZAR	1.00 %	1.00 %
Anheuser Busch InBev	111919	ABI:xbru	3.51	5.73 %	116.35 EUR	5,553.06 ZAR	5.88 %	110.70 EUR	6,886.50 ZAR	1.00 %	1.00 %
Home Depot Inc.	315	HD:xnys	3.44	5.09 %	115.58 USD	4,938.21 ZAR	6.22 %	135.34 USD	7,288.76 ZAR	1.00 %	1.00 %
Alphabet Inc. - A Shares	773599	GOOGL:xnas	0.64	4.79 %	583.96 USD	4,641.86 ZAR	6.25 %	730.30 USD	7,317.29 ZAR	1.00 %	1.00 %
General Electric	312	GE:xnys	16.38	5.62 %	26.77 USD	5,446.17 ZAR	6.56 %	29.96 USD	7,682.89 ZAR	1.00 %	1.00 %
Johnson & Johnson	319	JNJ:xnys	4.29	5.52 %	100.42 USD	5,350.64 ZAR	6.56 %	114.44 USD	7,686.07 ZAR	1.00 %	1.00 %

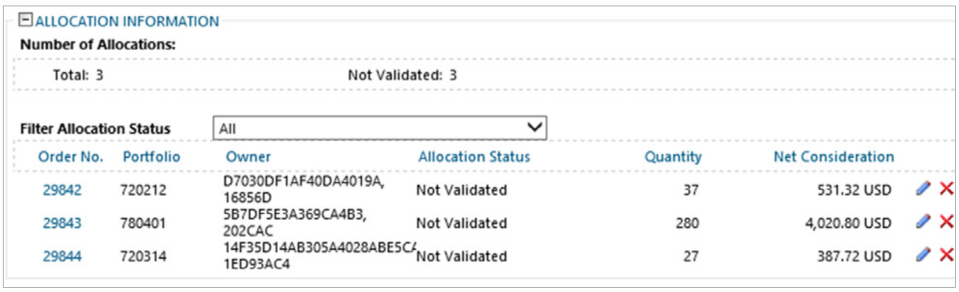
Rebalancing Across Multiple Portfolios

SPM allows seamless rebalancing of multiple portfolios to bring each portfolio back in line with their own model.

The portfolio manager can set alerts for daily monitoring of deviations beyond the allowed max positive and negative deviation to easily detect when rebalancing is required.

During the rebalancing process, the system highlights portfolio deviations from the model. Trades in the same instrument in different portfolios can easily be aggregated into bulk orders to optimise execution, with instant allocation into client portfolios.

Block trades can be executed via market, limit or algo orders and seamlessly allocated across multiple client portfolios



ALLOCATION INFORMATION

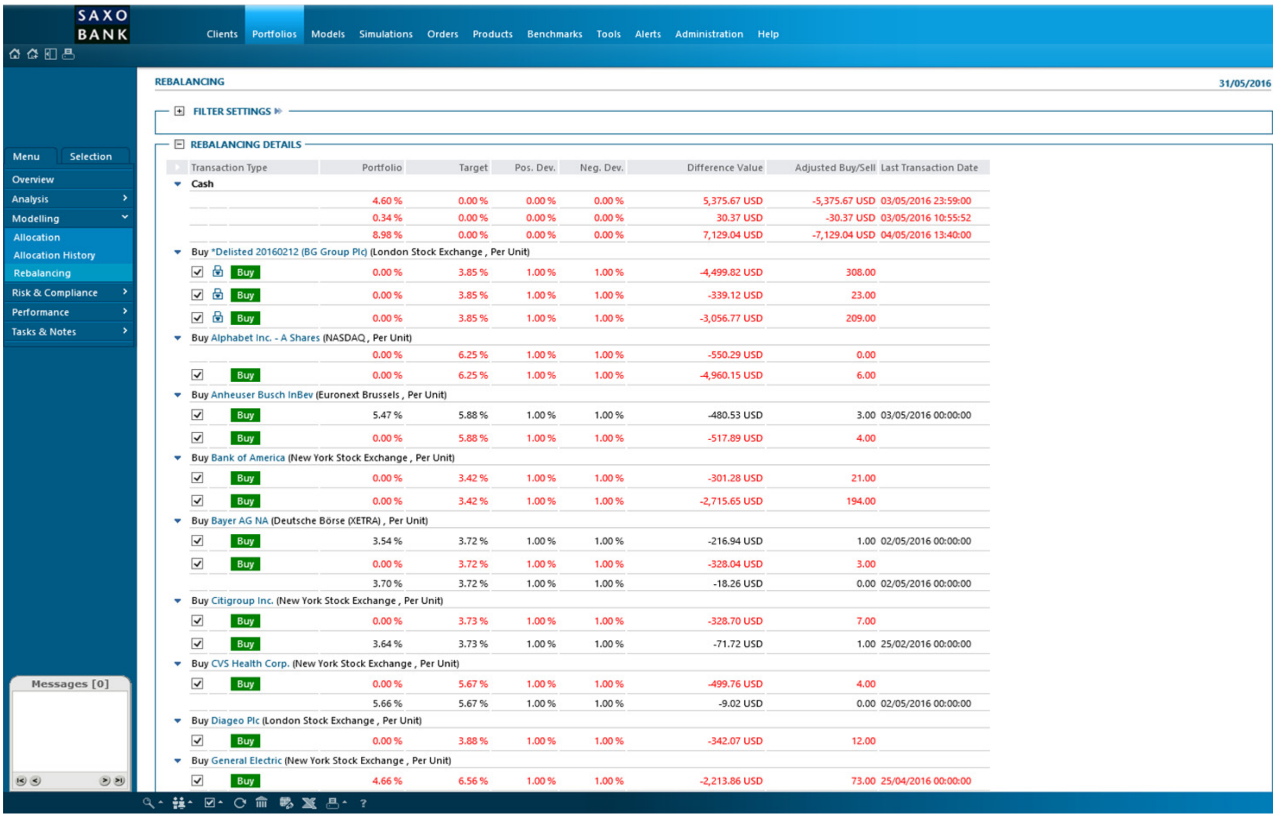
Number of Allocations:

Total: 3 Not Validated: 3

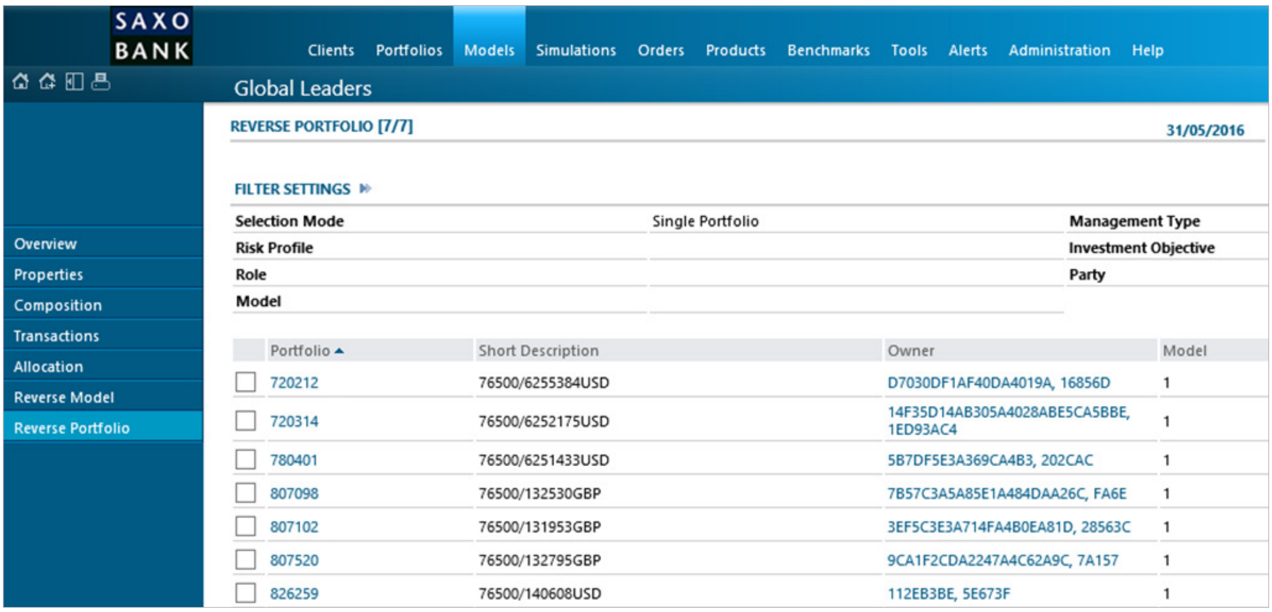
Filter Allocation Status: All

Order No.	Portfolio	Owner	Allocation Status	Quantity	Net Consideration
29842	720212	D7030DF1AF40DA4019A, 16856D	Not Validated	37	531.32 USD
29843	780401	5B7DF5E3A369CA4B3, 202CAC	Not Validated	280	4,020.80 USD
29844	720314	14F35D14AB305A4028ABE5C/ 1ED93AC4	Not Validated	27	387.72 USD

Manage multiple clients with ease.



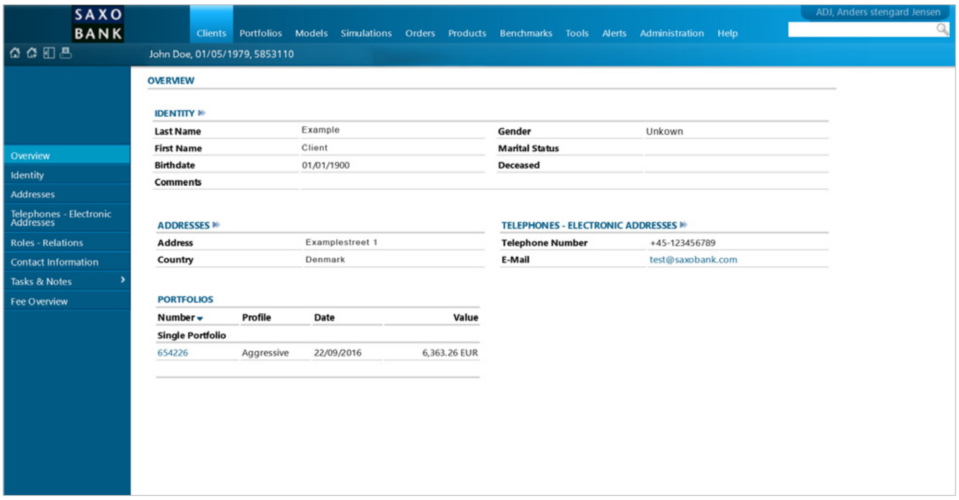
The “reverse lookup” function allows the portfolio manager to quickly find the relevant portfolios.



Easy Access To Client Information

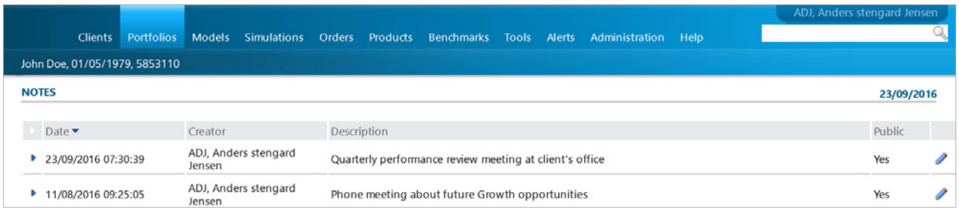
Contact information

- Personal details
- Addresses
- Telephone numbers
- Roles/relations for clients belonging to the same family
- Details of meetings



Meeting Notes

- Keep track of client meetings and follow-up requirements.



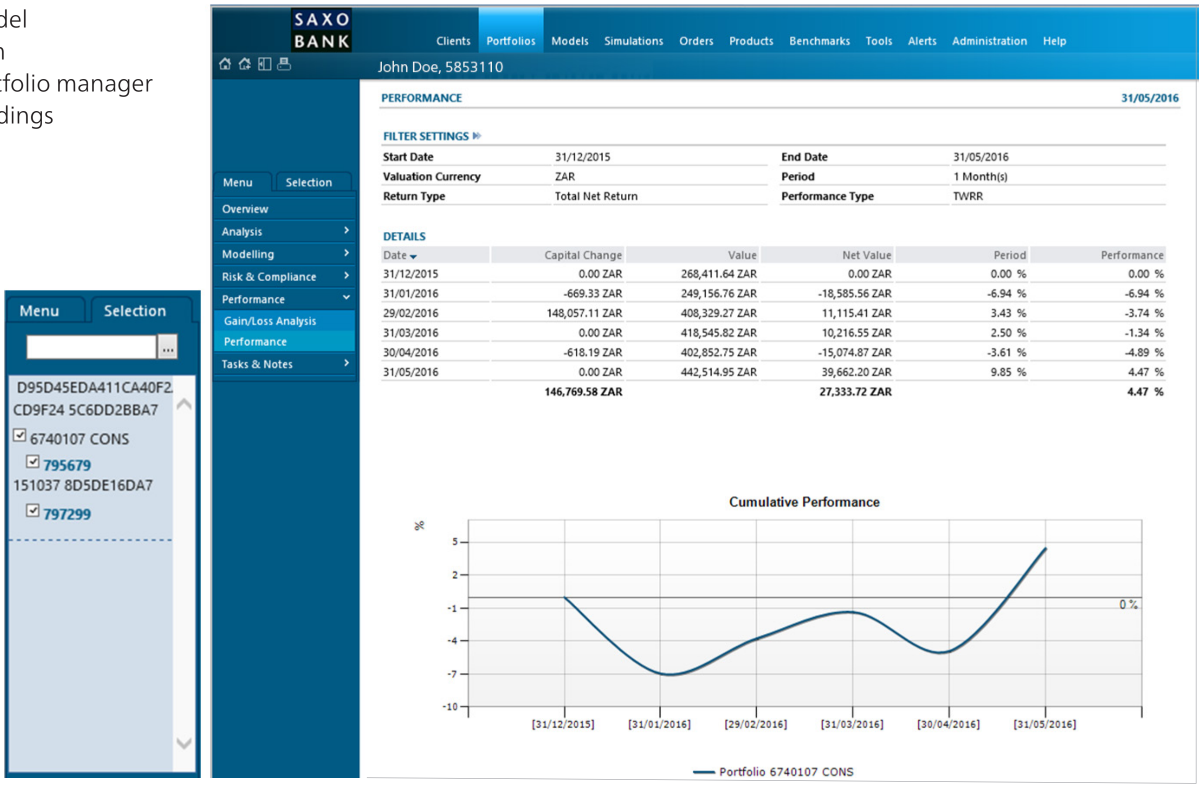
Consolidation of Portfolios

Consolidation of portfolios can be used to integrate holdings held in custody away from Saxo's account structure (e.g. mutual funds, alternative funds, bespoke valued items such as art, property, etc.) with the holdings held with Saxo. This allows the client to view full valuations, performance analytics and allocation splits at the consolidated portfolio level either in the online portal or the PDF reports.

It can also be used to view multiple portfolios' aggregate performance.

Aggregate views by:

- Client
- Model
- Firm
- Portfolio manager
- Holdings



Management Reporting

All data in SPM can be accessed through a set of pre-configured dashboards linked to the different roles that are defined in the system. The data can also be exported as an Excel file for further analysis.

Risk and Compliance

Manage Compliance & Risk

Effective risk management is dependent on knowing a portfolio's structure and its breakdown across different categories.

SPM enables portfolio managers to analyse the exposure at different levels and provide historical risk/return analysis and risk-adjusted performance.

SPM can support management of pension money, which typically requires configuration of a multitude of compliance and reporting rules.

Multiple compliance rules

- Hard and soft compliance warnings
- Client-level restrictions supported
- Post-trade compliance reports
- Support of Reg 28 rules for the South African market
- Daily alerts on portfolio manager dashboards

John Doe, 01/05/1979, 5853110

COMPLIANCE 04/07/2015

Restriction	Comments	Warning Type	Status
Allocation Range [1]	Validates if the order will not bring the portfolio in breach with a portfolio specific allocation range that has been specified, for example: not more than 15% cash.	Soft	Failed
Allocation Restriction [10]	Validates if the order will not bring the portfolio in breach with a portfolio specific allocation restriction that has been specified, for example: no 'tobacco' stocks.	Soft	Failed
Product Exclude	Validates if the order is not in an asset that has been 'excluded' from the portfolio, for example: no 'IBM'.	Soft	Passed
REG28: 01.1/p - Cash		Soft	Passed
REG28: 01.1a - Cash		Soft	Passed
REG28: 01.1b - Money Market Instruments		Soft	Passed
REG28: 01.2 - Cash		Soft	Passed
REG28: 01.2 - Money Market Instruments		Soft	Passed
REG28: 02 - Debt instr. incl. islamic debt instr.		Soft	Passed
REG28: 02.1a - DBT - Inside Rep & Foreign Asset		Soft	Passed

Risk Ratios

- Turnover Indicators
- Cost Ratios

John Doe, 5853110

RISK RATIOS

FILTER SETTINGS

Turnover - Start Date	01/01/2016
Turnover - End Date	04/06/2016
Cost Ratio - End Date	04/06/2016

AWD & AWY 04/06/2016

Portfolio	AWD	AWY
612700	6.22 Years	9.19 %
Core Equity	0.00 Years	0.00 %
Difference	-6.22 Years	9.19 %

TURNOVER INDICATORS 01/01/2016 - 04/06/2016

Ratio	Value
Turnover Ratio	0.0202
Annualized Turnover Ratio	0.0475
Break-Even Ratio	0.2508 %
Annualized Break-Even Ratio	0.5906 %

COST RATIOS 04/06/2015 - 04/06/2016

Ratio	Value
Direct Cost %	0.8458 %
• Portfolio Cost %	0.7756 %
• Taxes %	0.0702 %
Indirect Cost %	0.0000 %
Total Cost %	0.8458 %
Average Market Value in VC	114,643.51 ZAR

Risk vs Return

- VAR at the 95% and 99% level of confidence
- Performance vs. Risk-Free return
- Performance vs. the Benchmark

John Doe, 5853110

RISK VS. RETURN

FILTER SETTINGS

Start Date	23/01/2013	**End Date**	31/05/2016
Benchmark	Linked Benchmark		

BENCHMARK HISTORY

Benchmark	Linked Date	End Date
Default Benchmark for Risk Free Return	23/01/2013	

HISTORICAL VAR & EXPECTED SHORTFALL

VaR Period	95 %	99 %
1 Month	2,465.23 ZAR	3,481.20 ZAR
1 Year	8,539.80 ZAR	12,059.24 ZAR
Expected Shortfall	95 %	99 %
ES %	-4.04 %	-5.48 %
ES Amount	-4,500.10 ZAR	-6,103.19 ZAR

PERFORMANCE VS. RISK FREE

Since	Ptf	BM	Risk Free BM
Return			
1 Month	-0.66 %	0.00 %	0.00 %
1 Year	-0.95 %	1.04 %	1.04 %
Start	18.33 %	0.54 %	0.59 %
Variance			
1 Year	0.22 %	0.01 %	0.01 %
Start	6.18 %	0.01 %	0.00 %
Return Volatility			
1 Year	4.65 %	1.03 %	1.03 %
Start	24.85 %	0.76 %	0.62 %
Sharpe Ratio			
1 Year	-0.43	0.00	
Start	0.71	-0.07	

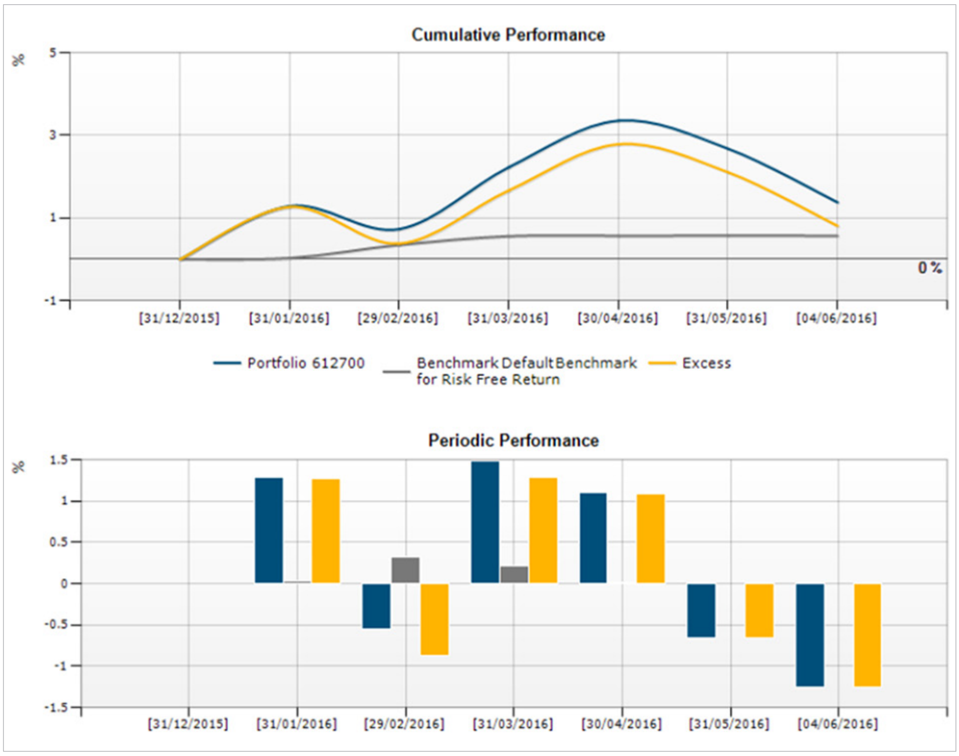
PERFORMANCE VS. BM: RISK ANALYSIS

	Value
Regression vs. Benchmark (Since Start Date)	
Beta	4.70
Alpha	1.39
Epsilon	7.28
R-Squared	14.31 %
Tracking Error	
1 Year	4.73 %
Start	25.34 %
Up-Market Capture Ratio	
1 Year	-1.42 %
Start	28.31 %
Down-Market Capture Ratio	
1 Year	0.00 %
Start	-8.84 %
Treynor Ratio	
1 Year	-0.07 %
Start	0.04 %
Information Ratio	
1 Year	-0.42
Start	0.70

Performance & Gain/Loss Analysis

Performance

- Cumulative performance of portfolio vs. benchmark and excess return
- Periodic performance of portfolio vs. benchmark and periodic excess return



Gain/Loss analysis and performance

- Gain and loss across different components
- Create blended benchmarks using different indices
- GIPS-compliant TWRR performance analysis
- Performance analysis against benchmarks

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GAIN/LOSS ANALYSIS 04/07/2015

	Unrealised	Realised	Total
HIST P/L VC			
Price	2,190,756.84 USD	43,713.71 USD	2,234,470.55 USD
Exchange Rate	0.00 USD	-72.84 USD	-72.84 USD
Income	1,125,458.33 USD	6,430,000.00 USD	7,555,458.33 USD
Total	3,316,215.17 USD	6,473,640.87 USD	9,789,856.04 USD
YTD P/L VC			
Price	941,200.00 USD	0.00 USD	941,200.00 USD
Exchange Rate	0.00 USD	0.00 USD	0.00 USD
Income	1,125,458.33 USD	508,833.33 USD	1,634,291.67 USD
Total	2,066,658.33 USD	508,833.33 USD	2,575,491.67 USD

Client Reporting

Professional out-of-the-box client reporting tools

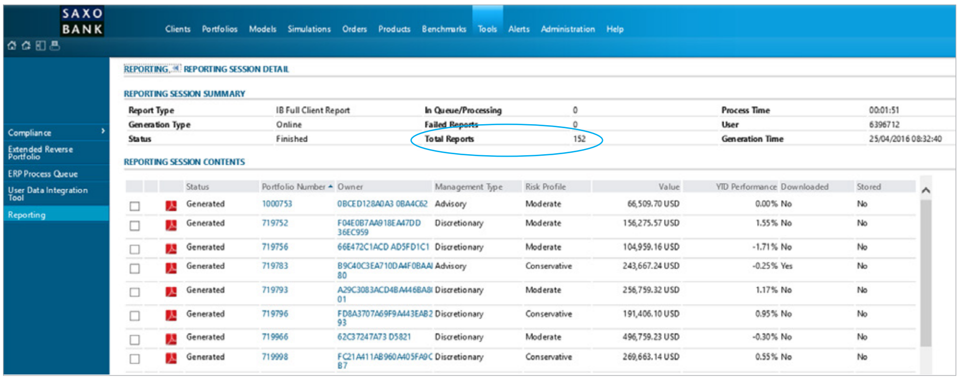
SPM offers out-of-the-box client reports allowing the portfolio and relationship managers to easily provide transparency on portfolio performance to clients.

The PDF reports are predefined full-colour graphic presentations that communicate clearly and accurately. The portfolio managers can produce them ad hoc for a single or multiple clients, or automatically in bulk according to a predefined schedule.

Online access to portfolio information is also possible via a client portal where the client can generate their own PDF reports and free up the portfolio manager to focus on their core business.

Bulk Reporting

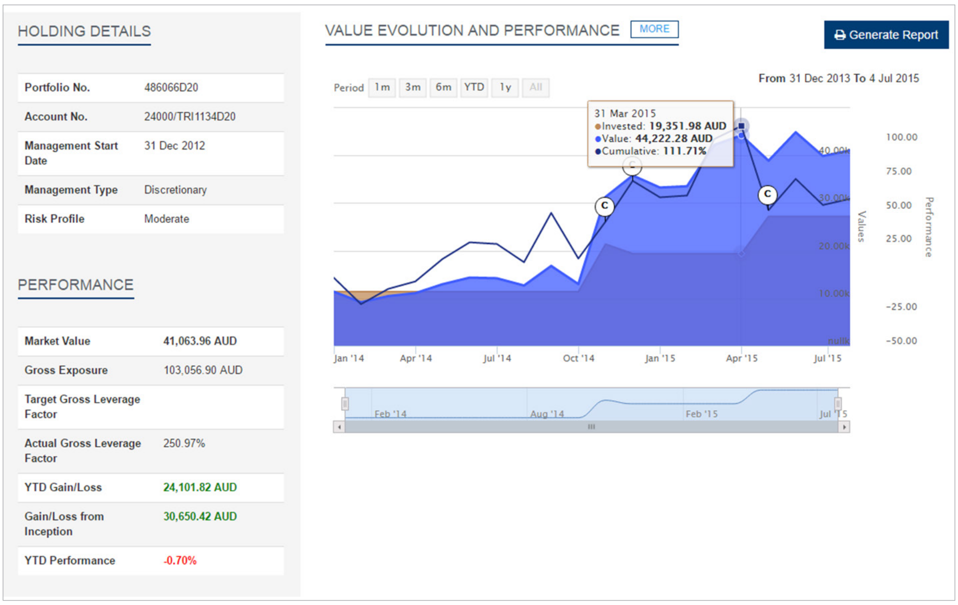
SPM lets you pull reports for multiple clients



Client Portal

End-clients or relationship managers log on to the client portal from the web or a tablet to view reports:

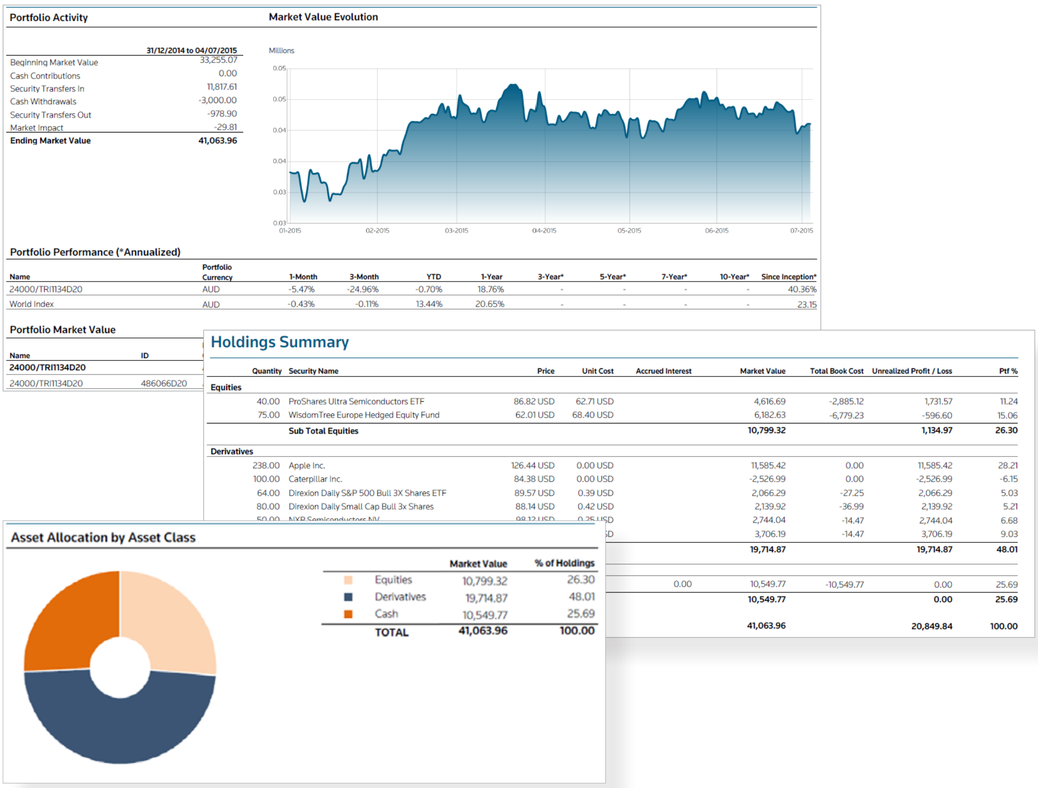
- View performance over any period
- View asset distribution from any perspective
- Drill down in holdings



PDF Reports

Standard out-of-the-box PDF reports summarising:

- Performance
- Asset Allocation
- Holdings Summary
- Transactions
- Cash movements



Why Saxo Market

- Cloud-based award-winning portfolio trading and risk management technology
- Financial strength $680m in equity capital, $12.4bn in customer deposits
- Global presence - offices in 26 countries
- Reg 28 support for institutional clients in South Africa

Leverage integration of portfolio management system and trading engine

A holistic approach
Saxo Markets' solution for wealth managers is based on a holistic approach that supports clients' needs across the entire value chain of a business.

The award-winning platform forms the foundation of the offering and is supplemented by a wide range of asset classes, value-adding tools and services.

Multiple integration points allow Saxo Markets' clients easy integration with their own systems and processes to present a single face and seamless experience to their end-clients.

Branding and customization
SPM allows client-specific branding on reporting and client portals, along with the option to extend ad hoc booking fees and the ability to add languages.

Integrated portfolio management and trading – ready from day one
Saxo Markets has already integrated the trading and back-office platforms seamlessly into our portfolio management offering.

Wealth Managers can benefit from Saxo Market's cash management, end of day reporting, trading infrastructure and back office systems to automatically deduct agreed fees from the end clients' accounts.

Fully supported IT solution
The solution allows wealth managers to manage client portfolios and trade seamlessly at minimal cost. No IT implementation or investment is required. The solution is fully hosted, supported and maintained by Saxo Markets.

Continue working with a licensed European bank

Saxo Markets is the institutional division of Saxo Bank Group. Saxo Markets serves institutional clients through four main hubs in the UK, Denmark, Switzerland and Singapore where most institutional clients are also on-boarded.

Each of the licensed entities in the Saxo Bank Group are subject to the supervision of their local regulator.

Saxo Bank A/S is a fully licensed Danish bank under the supervision of Finanstilsynet (the Danish FSA). Saxo Capital Markets UK Limited is regulated by the UK Financial Conduct Authority ("FCA"). Saxo Bank (Switzerland) Ltd. is regulated by the Swiss Financial Market Supervisory Authority ("FINMA") as a bank and securities dealer.

Saxo Capital Markets Pte Limited is regulated by the Monetary Authority of Singapore ("MAS") as a capital markets services license holder. Saxo Capital Markets (HK) Limited is licensed and regulated by Securities & Futures Commission of Hong Kong.

Saxo Capital Markets (Australia) Pty Ltd holds an Australian Financial Services License and is regulated by ASIC.

Saxo Capital Markets South Africa (PTY) Ltd is regulated by the South Africa Financial Services Board.

See all regulatory details at http://www.markets.saxo/about/.

Our clients benefit from working with a counterparty operating under strong regulatory framework.

- Founded 1992
- 1450 employees in 26 offices
- $680m equity capital
- $12.4bn customer deposits

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