

ALTO* Portfolio Design

Portfolio construction and optimization: from ideas to implementation

Amundi Technology provides asset managers and institutional investors with an ALTO* module to manage tailor-made portfolios, and normalize the definition of a portfolio management process. ALTO* Portfolio Design is a complete and unique solution with no competition due to the full and comprehensive coverage from investment universe to portfolio implementation.

The solution offered by Amundi Technology is integrated into ALTO* Investment, its in-house Portfolio Management System (PMS), benefiting from the latest innovations. This platform is improved with a **continuous delivery** organization, and recently a dedicated module for portfolio construction based on optimization has been implemented. ALTO* Portfolio Design stands as a Portfolio Construction platform and covers the value chain from **portfolio construction**, taking into account customized constraints and specific filters, to **portfolio rebalancing** and **trade programming**. From investment ideas to portfolio implementation, including the performance of specific **optimization**, market scenarios **back-testing**, **ex-ante risk and performance** analysis.

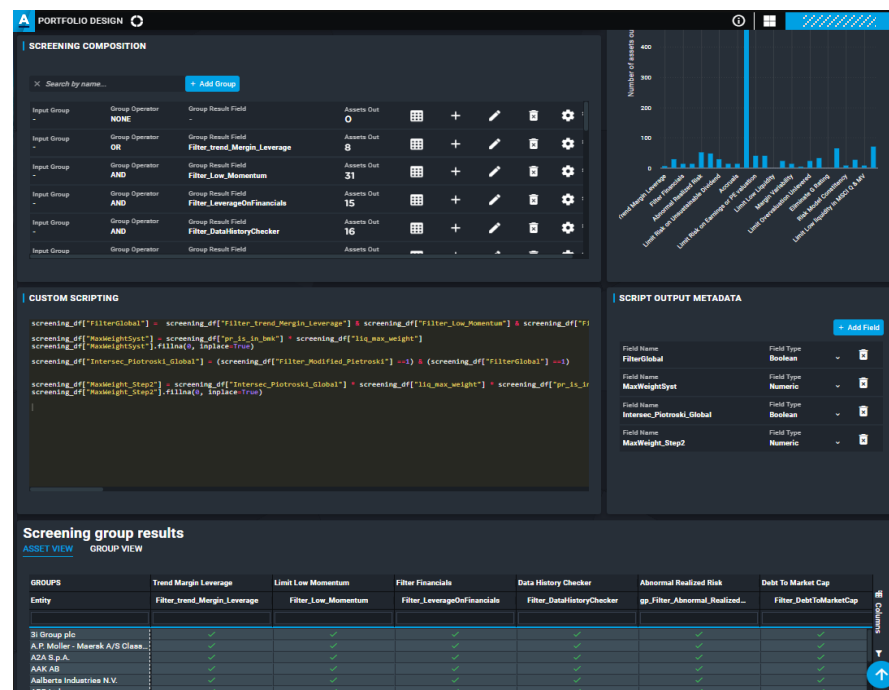
Portfolio Design management process as building blocks

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| 1 | Investment Universe | Build an investment universe, with index, portfolios, factors, custom list, etc.. |
| 2 | Universe scoring and filtering | Screen a universe with simple predefined calculation or complex custom calculations that can be used as filters for the next steps. |
| 3 | Portfolio construction | Weigh assets of the screened universe using different methodologies: equal risk contribution, Black-Litterman, factor investing, custom, etc. |
| 4 | Portfolio optimization | Perform optimizations using a profile linked to an optimization engine (MSCI Barra risk models) |
| 5 | Analysis views | Analyze each portfolio and ideas through customized widgets using risk ex-ante exposure |
| 6 | Portfolio implementation | Define your trading plan and push your order list to your PMS |



ALTO* integrates **Portfolio Design** to meet the specific needs of portfolio managers seeking innovation and robustness in designing their portfolios. It completes a wide range of functionalities for portfolio managers. This **scalable** module enables the client to **experiment**, **validate** and **deploy** its own portfolio construction chain.

ALTO* Portfolio Design relies on an **open architecture** and a **generic data model**, both designed to integrate any portfolio management process. These two features provide an **evolving and flexible solution** to improve continuous deliveries by allowing modifications, loading new optimization libraries or even adding new languages. The Excel and VBA tools are replaced by an **industrialized web-based UI** and **Python** which can integrate **shareable data** into its process and deliver **valuable insights** through customized dashboards.



Main advantages

- Normalize the management process
- Stand-alone service, open to all Portfolio Management System
- Possibility to connect ALTO* Portfolio Design with other risk model provider
- Fast and scalable optimization calculation
- Integration of any type of metrics
- Automation of any risk/optimization engines
- Elaboration of tailor-made analysis views
- Portfolio management process as building blocks, shareability across desks

ALTO* Investment

ALTO* Investment is Amundi's Portfolio Management System (PMS) covering the entire Asset Management value chain and providing a 360° portfolio view for all asset classes. Amundi Technology offers outsourced solutions for technology & operations and makes the ALTO* platform available to external asset managers and institutional investors.

ALTO* users can, for example, analyze and manage portfolios, simulate the impact of orders, make investment decisions, perform middle office operations, measure performance, monitor exposures and risks.

ALTO* Portfolio Design is a dedicated web module for portfolio construction.

*Amundi Leading Technologies & Operations

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