



MAPLES
GROUP

MIDDLE OFFICE

Bespoke operational processes
and technology solutions

maples.com



MIDDLE OFFICE SERVICES

The Maples Group's team of middle office professionals delivers bespoke operational processes and technology solutions recognising each client's unique needs and individual nuances of their business processes.

Purpose-built technology solutions differentiate our service delivery capabilities and extend intuitive analytical tools directly to our clients.

Key Offerings

Alternative investment operations: We offer a range of outsourcing capabilities that provide the systems, processes and professional expertise to support hedge fund managers in the maintenance of their books and records and meet the information requirements of investment strategies.

Consolidated portfolio reporting and analytics: Our systems can aggregate information from both our internally maintained accounting systems and third parties, including custodians, administrators and managers. This information is distilled into intuitive analytical reports that provide insight into portfolio positions, exposure, risk and performance to support investment decision-making and reporting processes.

Benefits of Outsourcing

Outsourcing daily operational processes and information systems allows managers and investors to focus their resources on making good investment decisions, managing risks and generating alpha.

For institutional investors or asset managers at any size or stage in their growth, there are four key

reasons to consider middle office outsourcing:

Focus on core competency: With a competent, professional and reliable outsourcing partner, investment managers are able to focus on core differentiators, such as investment decision-making and investor relations.

Potential cost savings: Instead of incurring the expense of hiring high-calibre information technology and operational staff and building out a complex technology platform to meet reporting and transparency requirements, institutional investors and investment managers can leverage the scalable infrastructure at the Maples Group at an attractive price point.

Reduced operational risk: With operational risk and systems integrity drawing closer scrutiny from both regulators and investors, it makes sense to take advantage of an outside provider who can demonstrate best practices and an infrastructure that is tested and proven reliable. By choosing an administrator with sufficient scale to ensure shared knowledge among operations and information technology staff, key person risk can also be eliminated.

Access to industry expertise: Our professionals have exposure to leading practices across the financial industry and can lend their insight to help institutional investors and managers implement best practices and operate more efficiently.

ALTERNATIVE INVESTMENT OPERATIONS

Assisting with Operational and Technological Infrastructure

Outsourcing routine operational processes allows investment teams to focus on constructing portfolios, working with managers, and managing risks.

The Maples Group offers a wide range of consulting, processing and analytical reporting services that allows investors and managers to selectively outsource all or part of their operations and leverage the extensive reporting capabilities of our proprietary systems. Working with the Maples Group can also help supplement governance practices and enhance stakeholder reporting.

Our professionals are both industry experts and technologists and apply a consultative approach to helping our clients maximise the value of technology without the cost, risk and effort in creating and maintaining an in-house infrastructure.

Consulting

- Upfront consulting on portfolio structures and operating models;
- Process design and re-engineering;
- Specifications of custom reporting and information systems solutions; and
- Commentary on industry leading practices.

Trade Capture

- Automated connectivity and capture of trades in portfolio accounting system.
- Security Master Maintenance
- Capture of terms and conditions of each individual investment.

Pricing

- Capture of pricing for each investment.

Corporate Actions

- Corporate action monitoring and capture; and
- Corporate action reporting.

Reconciliations

- Trade, position and cash reconciliations.

Portfolio / Shadow Accounting

- Independent maintenance of a portfolio's books and records.

Portfolio Reporting

- Exposure reporting;
- Leverage reporting;
- Profit and loss reporting;
- Expense reporting; and
- Trial balance reporting.

Post Trade Compliance

- Reporting of breaches of pre-defined portfolio rules.

Derivative Lifecycle Management

- Trade capture;
- Over-the-counter ("OTC") document review;
- Security master maintenance;
- Reconciliation;
- Accounting; and
- Reporting.

OTC Derivative Pricing

- Pricing of OTC derivatives leveraging multiple market data vendors.

Counterparty Management

- Trade capture;
- OTC document review;
- Security master maintenance;
- Reconciliation;
- Accounting;
- Reporting;
- Exposure monitoring; and
- Ratings monitoring.

Collateral Management

- Collateral monitoring;
- Capture of all collateral movement; and
- Collateral reporting.

Cash Forecasting / Management

- Standard or bespoke tools to illustrate projected cash balances;
- Capture of all cash transactions;
- Cash reconciliations;
- Cash reporting; and
- Liquidity management.

Performance Analytics

- Standard and bespoke performance reporting using a multitude of performance calculations at multiple levels of abstraction;
- Performance attribution; and
- Performance contribution.

Risk Reporting

- Exposure reporting;
- Limits monitoring;
- Risk metrics such as sharpe, sortino information;
- Efficient frontier;
- Risk contribution;
- Scenario analysis;
- Stress testing; and
- Value at risk.

Regulatory Reporting

- AIFMD risk reporting;
- AIFMD Annex IV reporting;
- Form PF reporting;
- OPERA reporting;
- CPO-PQR reporting; and
- EMIR reporting.



CONSOLIDATED PORTFOLIO REPORTING AND ANALYTICS

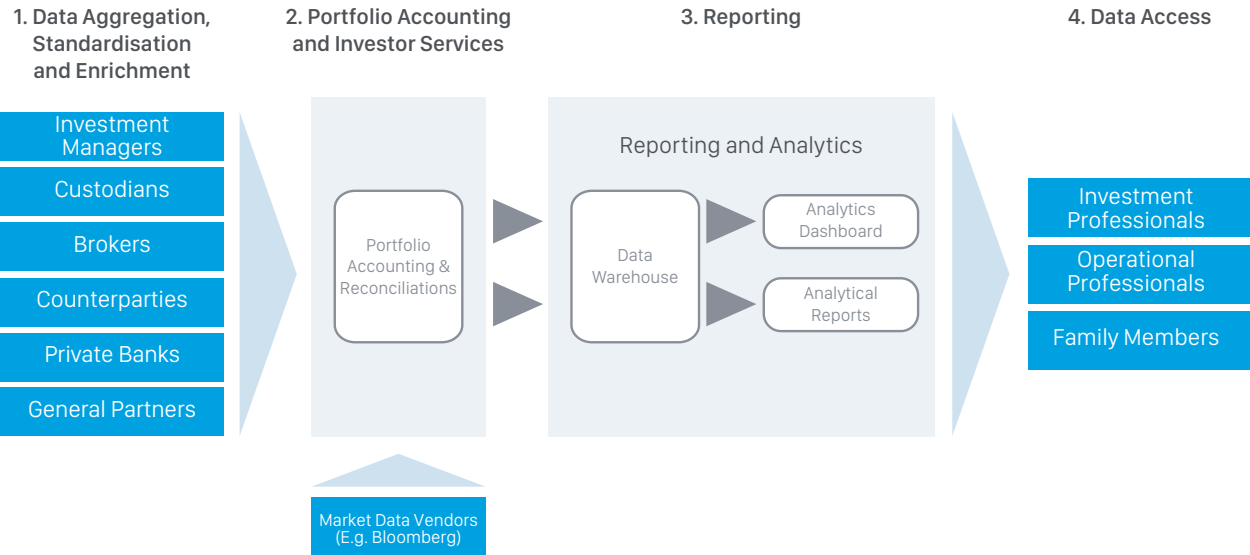
Intuitive and Contextualised Portfolio Insight

Institutional investors are obtaining greater transparency and data from their investment managers. While this data can be extremely valuable, properly aggregating, distilling and interpreting it requires robust systems and data management capabilities. The Maples Group offers an end-to-end consolidated reporting solution for institutional investors that can transform data into portfolio insights.

We recognise that a “one-size-fits-all” approach to analytics may not work for all institutional investors. As such, we take a flexible approach to customising reporting formats to the needs of each client.

Our services include:

- Flexible reporting for monitoring exposures by different categories, including asset class, geography, industry, manager and strategy;
- Position-level detail and a granular breakdown of the funds’ underlying assets;
- Cash management reporting;
- Performance calculations, including contribution, attribution analysis and comparisons against benchmarks;
- Risk measurements, including value at risk, what-if scenarios, factor analysis and correlation analysis; and
- Fee monitoring and recalculations.



GENERATING "TECHNOLOGICAL ALPHA"

Build What You Can't Buy

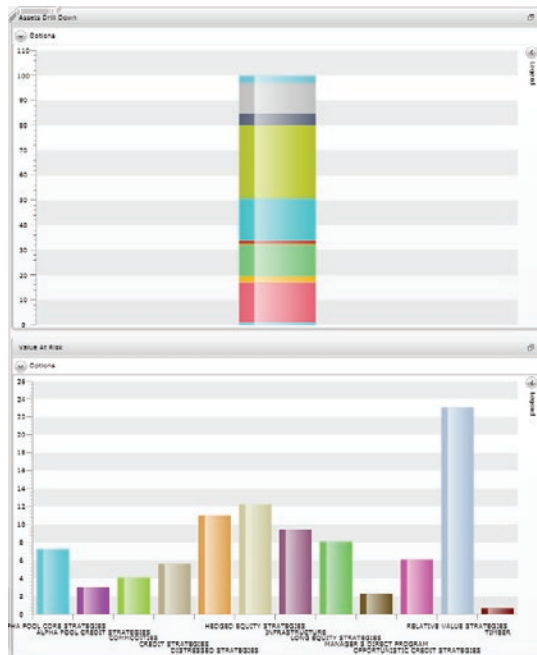
Through continuous innovation, the Maples Group has developed an optimal balance of best-of-breed core systems with bespoke proprietary systems, allowing us to be dynamic in responding to our clients' needs as they evolve in response to regulatory and investor demands. Our proprietary solutions differentiate both the Maples Group and our clients. Best-of-breed core systems provide "beta", allowing our internal resources to concentrate on the generation of "technological alpha".

Forging strategic partnerships with leading technology vendors assists in keeping pace in a rapidly and continuously changing environment. Leveraging the resources and investments that these organisations commit to the evolution and enhancement of systems

that set the benchmark of excellence ensures that we, and our clients, are always ahead of the curve.

Customised Portals and Dashboards

The Maples Group offers both customised solutions and packaged systems for clients to choose from. We have developed a suite of intuitive and customisable online dashboards, Manager Portal, that are fully integrated with Advent's Geneva® portfolio accounting system and can bring in third party data to enrich data visualisation. The proprietary technology platforms developed by the Maples Group aggregate portfolio and market data from multiple sources, render resultant risk metrics on an online dashboard and can be customised to clients' specific needs.



GLOBAL OPERATING MODEL

Maximising Responsiveness and Optimising Efficiency

The Maples Group staffs operations from multiple time zones enabling around-the-clock processing and support.

Operations Handled by Our Global Offices

	1. Our team commences work on T+0 allowing deliverable completion on T+1. Our staff specialise in data processing, documentation review and data consolidation received from a variety of sources.	2. Our team continues the process with data review, data reconciliation, and technology preparation.	3. Our team conducts final review and quality assurance to ensure that all client deliverables are validated prior to release. The team also handles ad hoc queries, investigates differences and manages client service.
For North America Clients:	1. Serviced in Hong Kong	2. Serviced in Dublin	3. Serviced in Montreal
For Europe Clients:	1. Serviced in Montreal	2. Serviced in Hong Kong	3. Serviced in Dublin
For Asia Clients:	1. Serviced in Dublin	2. Serviced in Montreal	3. Serviced in Hong Kong

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The Maples Group is a leading independent global fund services provider operating in key financial centres across the Americas, Asia, Europe and the Middle East. Working within these jurisdictions, the Maples Group offers a wide range of services and operational support to alternative investment funds and institutional investors. The Maples Group's expert teams and innovative technology provide clients with high-quality service and adaptable solutions that create value and enhance effective management.



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