Charles River's IBOR Solution

A Fully Integrated Investment Book of Record

Charles River's Investment Book of Record (IBOR) is a multi-asset, multi-currency solution that helps improve timeliness and integrity of data for portfolio managers and traders by integrating real-time positions, corporate actions, and reconciliation from back-office systems, fund administrators and custodians with front-office activities.

Serving as the Investment Book of Record, the solution feeds the Charles River Investment Management Solution (Charles River IMS) with beginning-of-day positions and can distribute position keeping data to other systems, including those for performance and risk. By eliminating dependency on daily feeds from back-office systems for investment operations and consolidating multiple sources of position-related data onto one platform, clients can eliminate position errors, streamline operations, and reduce costs. Although tightly integrated with Charles River IMS, the IBOR solution can be configured to operate on a standalone basis.

Charles River's IBOR is ideal for organizations that do not have an accounting system and rely solely on feeds from prime brokers and custodians. It also benefits wealth managers who need to consolidate positions from multiple accounting systems, or manage tax lot tagging for newer multi-sleeve or multi-strategy products, such as Unified Managed Accounts (UMA).

Charles River IMS delivers tight integration between trading activities and position maintenance, and is designed to avert problems associated with older accounting systems that struggle to support more complex instruments, such as mortgages and derivatives. Highly-flexible and self-sufficient, Charles River's IBOR combines trade and non-trade transactions for accurate management of current/historical positions and tax lots. Corporate action processing functionality, and the ability to handle scheduled cash flow and security lifecycle events, helps ensure more accurate overnight position maintenance. The flexible, rules-based reconciliation engine and exception management dashboard offers exception-driven workflows for consistent positions between Charles River IMS and the external systems of record, and delivers an audit history of transactions and positions.

Key Capabilities

- Eliminate dependency on back-office data
- Support self-sufficient, position maintenance workflows
- Eliminate need for multiple systems
- Cover all asset types, including complex derivatives such as swaps
- Gain increased transparency and more detailed recordkeeping
- Reduce end-of-day processing time
- Handle non-trade transactions
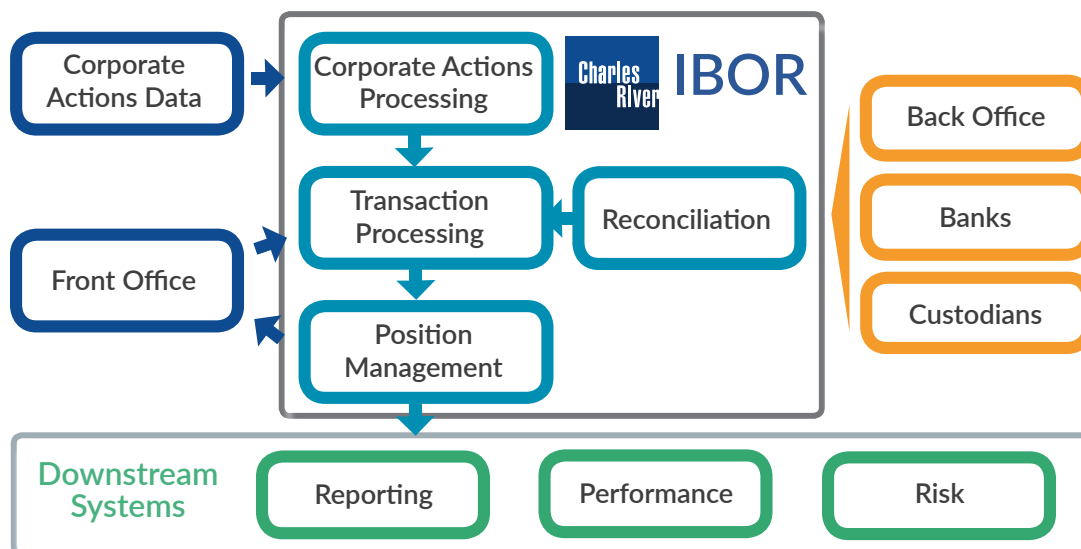
Self-sufficient position maintenance, corporate action processing, and exception-based reconciliation within Charles River IMS.

Position Maintenance

Charles River's IBOR solution provides accurate trade-date and settle-date positions for a user-specified point in time, based on transactions and adjustments.

Transaction Management: Position maintenance is managed by transactions that record all position changes, based on trade and settlement dates. Transactions are automatically generated for trades, as well as regularly- scheduled cash flow and security lifecycle events.

Users can import any transactions that are generated and maintained outside of Charles River IMS, such as bank or custodial FX transactions. Users also have the flexibility to edit, cancel and re-book transactions or resolve exceptions. For changes occurring on previous days, the system allows for backdating transactions, automatically updating any subsequent position records. To help ensure better internal controls, "four-eye" authorization can be used before transactions are posted. Approvers can also be assigned based on transaction attributes.

Position Update: Replaces the daily batch import of external positions, and can be run nightly or intraday. Users can update trading positions in segments based on accounts, exchange lists or investment classes. This creates efficiencies for firms that operate 24x7 by reducing the time required for position update processing.

Historical Positions: Retrieve historical positions, including valuation, based on any as-of date for reporting and performance analysis. Users can store historical positions in the database as daily, monthly or quarterly snapshots and export for holdings reports. Historical positions can also be retrieved for backdated changes.

Valuation: Calculates valuation for each position based on the latest pricing data available in Charles River IMS. While position valuation generally runs end-of-day, it can also be run/re-run intra-day. For OTC derivatives, fair value is based on internal Charles River IMS analytics, or imported by the user.

Cash Flows: Calculates cash flow events on a nightly basis, generating and posting appropriate transactions with Charles River IMS. If preferred, users can import cash flow events.

Security Lifecycle: Handles maturity and expiration of securities, including bond maturity, option expiry and currency forward settlement, through end-of-day processing. As appropriate, the system closes out positions and creates cash transactions.

Charles River's IBOR dashboard allows users to review and manage positions and tax lots using transactions maintained by the system.
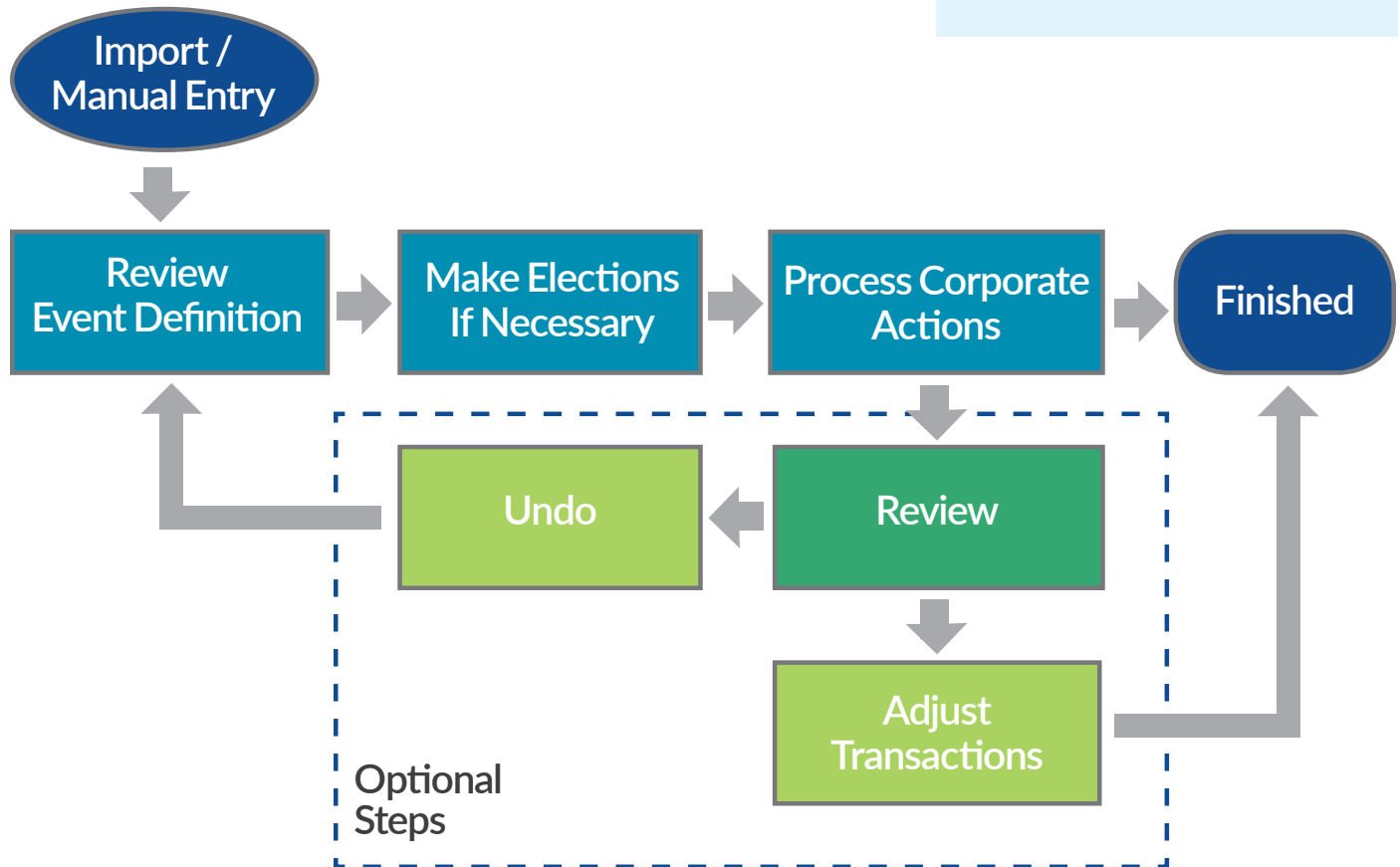
Corporate Actions

Charles River's IBOR can automatically handle mandatory and voluntary corporate actions as an overnight process, as well as directly from the graphical user interface (GUI). The basic workflow includes: importing/entering corporate action data; calculating entitlements; processing corporate actions; and generating and posting resulting transactions. The flexible corporate action engine offers undo/redo functionality and allows users to manually intervene anytime during the process. Users can also update open orders/security master with impacts from corporate actions.

In addition to processing mandatory corporate actions, the system can also manage voluntary corporate actions based on user-elected position changes. Users can backdate corporate actions and properly update any subsequent position records.

Advanced Capabilities

- Reconcile position and lot levels with multiple sources, such as custodians
- Store final reconciliation snapshots in Charles River IMS
- Receive holdings, valuations, and NAV input files daily
- Receive multiple holdings and valuations files for prior days against backdated trades
- Export data downstream easily
- Integrate seamlessly with other systems

Import / Manual Entry

Review Event Definition → Make Elections If Necessary → Process Corporate Actions → Finished

Undo ← Review

Review → Adjust Transactions

Optional Steps

Reconciliation

The IBOR solution is designed to ensure accurate reconciliation of positions against accounting systems, custodians and fund administrators. The system is highly-automated, making it easy to build flexible, user-defined matching rules for exception-based workflows. Resolution maximizes productivity by reconciling both position and tax lot levels against multiple data sources. Users can also determine the scope of each reconciliation — running across all positions, or a set of positions, at specified times to prepare for next-day trading in different regions.

The system identifies any positions that are missing, or outside of user-defined tolerances. Users only need to manage exceptions, since Charles River IMS automatically adjusts positions matched to user-defined rules.

Users can reconcile exceptions by either modifying positions maintained in Charles River IMS, or rejecting the external positions. Accepting external positions automatically creates adjustment transactions that modify positions and records. Users can tag these adjustments with a customized list of reason codes as well as remarks and undo any reconciled record to bring back previous results.

A State Street Company

ABOUT CHARLES RIVER

Charles River Development, a State Street Company, enables sound and efficient investing across all asset classes. Investment firms in more than 40 countries use Charles River IMS to manage more than US$25 Trillion in assets in the institutional investment, wealth management and hedge fund industries. Our Software as a Service-based solution (SaaS) is designed to automate and simplify investment management on a single platform – from portfolio management and risk analytics through trading and post-trade settlement, with integrated compliance and managed data throughout. Headquartered in Burlington, Massachusetts, we support clients globally with more than 750 employees in 11 regional offices.