

### **CONTENTS**

# electra



Intelligent Integration of Cash, Transactions and Positions



**Built-in Collaboration** 



Dynamic Views of Exceptions and Investigation Research



Intraday Reconciliation



**NAV Reconciliation** 



03

Comprehensive,

**Integrated Data** 

True N-Way Reconciliation



**ETD Reconciliation** 



Month-End Reconciliation and Financial Close



An Intelligence Augmentation Approach to Al



### **INTRODUCTION**

Many buy-side investment managers reconcile in spreadsheets, on generic platforms or in silo-based environments that fall short of providing effective reconciliation support across the middle- and back-office – creating high levels of inefficiency, redundancy, risk and errors throughout the process.

As the volume of trades and the complexity of investment strategies increase, the need for a more efficient solution – one that can increase collaboration, reduce manual labor, and provide more buy-side specific automation – rises.

Here are 10 must-have capabilities for investment managers to achieve more efficient reconciliation.





# INTELLIGENT INTEGRATION OF CASH, TRANSACTIONS AND POSITIONS

Investment managers' operations teams spend an excessive amount of time investigating exceptions because they are viewed in silos across cash, transactions and positions. Often, multiple departments throughout the middle and back offices participate in the effort, leading to inefficiencies and high error rates, as well as increased transaction costs and operational risk. Much of the same work is repeated by different teams.

A reconciliation solution built specifically for the buy-side will integrate cash balances, transaction activities and/or positions onto one screen, giving operations teams the ability to see the root cause of a break regardless of where it occurred, as well as the impact of the break on other exceptions it may cause or has caused. This helps firms eliminate redundant work across people, systems and workflows.

Furthermore, firms can achieve greater cross-departmental collaboration since the solution would automatically suggest possible reasons for a break by incorporating external data sources (such as failed trades, collateral held, pending trades, securities lending and corporate actions) while eliminating the need for staff to manually access information residing in different systems when researching an exception.

The right solution should enable firms to eliminate redundant work across people, systems and workflows.





# **DYNAMIC VIEWS OF EXCEPTIONS AND INVESTIGATION RESEARCH**

Post-trade operations teams spend the majority of their time on reconciliation and researching breaks. A reconciliation solution should help firms find better ways to optimize their resources. One crucial place to focus on is improving the research function and reducing the effort spent on investigating why breaks occur.

A reconciliation solution that integrates common forms of break research data results in a more efficient investigation process. Portfolio accountants and other back-office staff can improve their ability to troubleshoot breaks related to failed trades, collateral, corporate actions, securities lending, and many others.

Reconciliation solutions need to actively participate alongside the end-users to quickly identify the reason for an exception, rather than placing the burden on end-users to uncover the root cause. This leads to improved scalability and greater visibility across the backoffice where the tentacles of an exception are far-reaching.

The impact of a failed trade can wreak havoc across the reconciliation, settlement and trading teams. Using a dynamic, synergistic view of exceptions and related investigation research will enable buy-side firms to improve operational efficiency and gain much-needed transparency throughout the entire trade lifecycle.

A reconciliation solution that integrates common forms of break research data creates a more efficient investigation process.



electra









## COMPREHENSIVE, INTEGRATED DATA

electra

Most reconciliation solutions provide some level of data normalization and matching capabilities needed to identify and categorize exceptions, streamline post-trade processing, and improve the quality of financial records. The reconciliation process can become especially cumbersome once an exception is identified and the investigation process begins. It is at this moment when different data sources (such as corporate actions, failed trades, collateral, missing funds, etc.) need to be accessed to troubleshoot a break and determine the root cause of an exception.

Yet many investment managers and service providers are still burdened by legacy workflows of inefficiently collecting client and account data from custodians, prime brokers and manually accessing many other data sources for break investigation research. The time and effort required to establish and maintain individual third-party links, open different applications and web pages, sift through the information, and then research and compare results diminishes the productivity of the operations team or IT staff, and leaves the firm exposed to operational and compliance risk.

A reconciliation solution should include a comprehensive data catalog that collects, validates, normalizes and enriches all data required for reconciliation and investigation, and delivers it automatically at any frequency or format the firm desires. It should also fully support multiple middle- or back-office teams engaging in reconciliation, exception management, and any other post-trade process or activity across the firm.

A comprehensive catalog of validated, normalized and enriched data is required for reconciliation and investigation of exceptions.





### **BUILT-IN COLLABORATION**

In a silo-based reconciliation environment, staff will find themselves duplicating much of the work that had already been performed by their colleagues. To make matters worse, the repetitive investigation work performed across different teams is often hidden from management, so the inefficiency goes undetected. As transaction volumes increase, inefficiency will become a more serious problem as the firm struggles to scale, which often leads to hiring more staff to cope with the workload.

To address this issue, a reconciliation and exception management solution must be comprehensive enough to support all the reconciliation processes found across the middle- and back-office functions while also fostering collaboration across these areas. Greater collaboration results in higher productivity and scalability since work is not repeated across teams. It also ensures management and operations staff can access a single point of reference to gain the transparency they need throughout the investigation workflow.

Greater collaboration results in higher productivity and scalability since work is not repeated across teams.





### **INTRADAY RECONCILIATION**

🤣 electra

Intraday reconciliation has become increasingly important as investment managers accelerate the frequency of processing reconciliation data and move away from overnight file processing. Intraday reconciliation addresses the risks associated with waiting until tomorrow to resolve exceptions that can be identified and resolved today. A solution that provides an intraday reconciliation process will eliminate many of the risks associated with waiting for an overnight upload to identify and clear the breaks, as well as the need to revisit exceptions that have already been investigated and corrected in their core systems.

Technology improvements throughout the middle and back offices have allowed operations teams to address breaks faster than ever before. A reconciliation solution should be capable of processing data throughout the day without fear of duplicating data, creating erroneous exceptions, and introducing redundant work into the reconciliation process.

By identifying and excluding duplicate data, while allowing true reconciliation updates to enter the workflow and safeguard the integrity of the investigation audit trail, the right solution can help firms eliminate the importing of erroneous exceptions and the time lost investigating them.

A reconciliation solution should eliminate risks associated with waiting overnight to identify and clear breaks.





### TRUE N-WAY RECONCILIATION



Reconciliation traditionally existed as a process to verify a buy-side firm's investment activity against their custodians. This changed as investment managers began to deal with additional external players, such as fund administrators and prime brokers, as well as more regulations such as MiFID II requiring three or more sources of data from trade repositories, approved reporting mechanisms (ARMs), and the firm's books and records system. With true N-way reconciliation supporting the verification of an increasing number and complexity of internal and external data sources, the capability is becoming more of a necessity.

From an internal data standpoint, many of the in-house systems firms have in place consume data extracted from central data repositories, making it essential for investment managers to verify accuracy across systems such as order management, portfolio accounting, risk analytics, performance measurement, and other client reporting applications. This has been conventionally tackled by employing multiple two-way reconciliations where the multiple source comparisons are viewed separately, which can slow down the process and cause errors.

In contrast, a reconciliation solution that provides true N-way reconciliation to compare multiple unique data sets within the same view, and compare large volumes of data quickly and seamlessly, is more efficient and reduces the risk of errors.

True N-way reconcilliation is more efficient and reduces the risk of errors.

N-way comparison would typically include aging, commenting, auditing, routing and reporting of breaks found in the N-way reconciliation workspace. If the solution is able to intelligently integrate cash, transactions and positions, then this workspace would be able to expedite root-cause analysis between two reconciliation sources. When any two sources are highlighted, the intelligent integration would be invoked to identify potential position, transaction or research records that may help to explain the origin of an exception. In addition, true N-way reconciliation can be further used to create a golden source for both security master and corporate actions data scrubbing.



Electra Reconciliation—Tackling Your Complicated Recon Needs











# MONTH-END RECONCILIATION AND FINANCIAL CLOSE

Investment managers typically close out their month-end processing during the first two weeks of the month following the statement period.

Items such as dividends and interest accruals may apply to a previous period, requiring managers to be able to back-date them in their accounting systems to ensure clean month-end books and records, and correct net asset value (NAV) calculation for client statements, fee billing and other processes.

This can only occur once all information has been obtained and recorded. Because it is common for additional items to be reported by prime brokers and custodians after month end, a reconciliation solution should offer features to identify late-reported items and back-dated transactions, and apply them to the previous period's reconciliation.

Once the month-end reconciliation process has been completed, investment managers must certify those reconciliations among various participants involved (such as the portfolio accountant, team supervisor, operations manager, chief operating officer), in a specific order of approval. The firm's reconciliation system must support this process, and be highly flexible in defining a "four eyes" approval workflow that reflects the investment manager's unique financial close process at month end.

A system should support month-end reconciliation as well as define a "four eyes" approval workflow.





### **NAV RECONCILIATION**

electra

Investment managers that continue to use spreadsheets struggle with the reconciliation of a portfolio's net asset value (NAV), a critical component of fund pricing, client billing and reporting.

Historically, the NAV reconciliation process has involved manually gathering and populating NAV data into multiple spreadsheets containing complex formulas. These spreadsheets, which are commonly maintained and understood by just a few individuals within an organization, are prone to data entry errors, security and control risk, and inefficiencies due to the lack of an exception management workflow.

A solution that aggregates and normalizes both external and internal NAV-related data can allow firms to group together various NAV buckets such as securities transactions, positions, receivables, liabilities and other cash balances, to gain greater visibility into the makeup of a fund's total net assets.

The solution should enable overall NAV values to be derived dynamically from the underlying positions, transactions and cash values based on the investment manager's unique requirements. Identifying the materiality of each bucket's variance, as it relates to the overall NAV of a fund, allows users to focus immediately on those holding the largest exposure.

NAV should be derived dynamically from underlying positions, transactions and cash values.





### **ETD RECONCILIATION**

MiFID regulation has increased the volume of exchange-traded derivatives (ETDs) as more over-the-counter instruments are traded on exchanges. The result is an increased need to reconcile ETD efficiently in order to mitigate the risk associated with the underlying value of the contracts.

For firms active in these markets, it is essential to have a solution that supports ETD reconciliation including the integration of positions, transactions, open trade equity (OTE) and cash balances in order to establish a net liquidation value (NLV). The solution should enable the OTE value to be populated as a line item from either a cash/trial balance feed, or derive the OTE by summing all mark-to-market values on underlying futures or options positions.

When there is a difference in the overall NLV, the solution should highlight issues with both transaction differences (such as pending, commissions, margin calls, etc.) and OTE outages attributed to pricing differences.

It is essential for a solution to support ETD reconciliation and highlight details tied to overall NLV differences.





## AN INTELLIGENCE AUGMENTATION APPROACH TO AI



The goal of any reconciliation solution is to reduce the number of failed trades and exceptions the operations team needs to review while increasing exception management efficiency. However, artificial intelligence (AI) and machine learning (ML) still have not reached critical mass in its ability to solve problems or reduce workloads in financial services and other industries.

ML and AI can recognize behaviors and patterns, and integrate them into the reconciliation workflow to help increase effectiveness and productivity. But AI and ML algorithms cannot autonomously fix every problem— especially complex problems investment managers face every day. Therefore, a more effective approach to AI and ML is intelligence augmentation (IA), which leverages AI and ML to supplement human intelligence while allowing people to play a crucial role in the decision-making process.

A reconciliation solution's Al capabilities should go beyond typical "vanilla" routines to improve the overall post-trade experience, with Al/ML components always taking into account the valuable role of human knowledge to yield a true advantage:

A reconciliation solution's Al capabilities should go beyond typical "vanilla" routines.

#### **Data Mapping and Normalization:**

Interpreting new reconciliation data sources, and determining file formats and layouts while leveraging access to bank and broker reconciliation data

Matching: Semantic-based fuzzy matching combined with standard, pre-configured matching logic for a wide range of simple and complex asset and transaction types —including esoteric asset classes lacking exchange-traded identifiers

Investigations: Automatically suggesting the root cause of breaks by accessing relevant data sources, in addition to intelligently integrating cash, transactions, positions and research information to expedite the investigations process

With an IA approach, all the knowledge gained from years of experience across many individuals and firms can be put into practice to make AI/ML smarter, make a complicated landscape simpler, and maximize the impact and return on investment from AI/ML.



Why Intelligence Augmentation is the Buy-Side's Al Answer to Solving Persistent Reconciliation Challenges







### **EFFICIENT BUY-SIDE RECONCILIATION**

In short, managing buy-side reconciliation can be inefficient, especially when trade volumes increase and investment strategies become more complex. As investment management firms evaluate their options for managing their reconciliation process, consideration should be given to the level of operational efficiency needed and what tool would best manage the specific needs of buy-side reconciliation.

#### Firms should assess their needs for a solution that:

- Provides scalability and transparency across the firm
- Expedites exception management and research processes
- Accelerates investigations and improves transparency
- Reduces risk with immediate exception resolution
- Enhances speed and accuracy regardless of volume and complexity
- Improves team productivity, cross-team collaboration and efficiency



### **ABOUT ELECTRA**

Electra provides award-winning post-trade operations workflow solutions and data services for reconciliation, trade matching, settlement notification and wire processing, and fee billing to global institutional buy-side firms. Asset managers, hedge funds, fund administrators and outsourced service providers use Electra solutions across their middle and back offices to reduce and manage risk, improve operational efficiencies, accelerate fee billing and revenues, and enhance counterparty and investor experiences. Firms can quickly scale to business demands and gain value from Electra's innovative, patented technology across the post-trade process.

Visit electrainfo.com to learn more.







381 Park Avenue South, New York, NY 10016
US +1 212.696.1595 \ UK +44 (0) 203 983 4300
info@electrainfo.com