

SmartStream RDU Listed Derivatives Service



HIGH QUALITY SECURITY MASTER



AUTOMATE OPERATIONS



TRADE SUCCESSFULLY



REPORT TO REGULATORS

Reference data management that assures quality, timeliness and complete coverage

An industry solution: a new approach to data management

Capital Markets firms are looking to standardize, add reliability and gain efficiency in the way they manage their securities reference data. How to achieve a complete, accurate and timely supply of information to support trading, regulatory compliance and operations straight-through-processing? The choices up to now have been limited to reinvestment in legacy infrastructure, or significant and potentially disruptive new capital purchases.

The SmartStream Reference Data Utility (RDU) has been established as the first industry utility for reference data management. The RDU delivers a fully managed data service – IT, Operations and best practices - holistically, across security, instrument, legal entity and corporate actions data. The service model promotes common processing and common fixes to data across the instrument lifecycle.

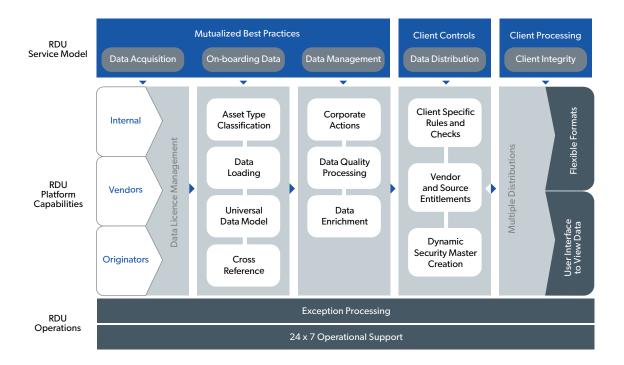
This "mutualization" of the platform and operations supporting reference data management allows firms to reduce costs. By centralizing data processing onto the RDU, common market processes can be incorporated across all participants to eliminate the effort needed by each firm to get the data right. The RDU acts as a processing agent for its participants' selected data sources, managing the

complete data lifecycle – sourcing, validation, enrichment, cross-referencing and, critically, applying cleansing best practices to deliver the highest quality data, in the formats required, at the start of the trading day.

Firms control the sources required and the commercial relationship with data vendors. The RDU enables comprehensive, high quality, cross-referenced data to the EDM platform for downstream distribution – providing complete, accurate and timely reference data at the lowest all-in cost.

The Listed Derivatives Reference Data Service

The nature of Listed Derivatives data – the instrument complexity, lack of symbology standards, the lack of critical attributes from many, or even most, exchange sources – means that firm's trading and data operations are struggling with partial sets of less-than-accurate data, delivered at the end of day. Data operations teams face a number of challenges – setting up all the instruments required by trading – whether proprietary or customer business; the time and money lost managing errors and discrepancies; errors and symbology mismatches lead to broken trades with high repair costs, affecting downstream systems and client service – to name a few.



THE SMARTSTREAM REFERENCE DATA UTILITY PLATFORM

The RDU offers a Listed Derivatives reference data service that is comprehensive in terms of both coverage and attributes, with the highest data quality, delivered at the start of the trading day.

The utility is a hosted service that acquires data from multiple sources, applies a range of data management techniques to ensure consistency, completeness and cross-referencing, and distributes a unique reference data set for integration into the customer's EDM system.

The RDU combines a sophisticated data management platform with 24 by 7 operations and best practices from participating firms.

Cost savings derive from Mutualized Best Practices – the common set of activities performed once for all utility participants – and the RDU's intensive focus on data quality.

Through Client Controls and Client Processing, the RDU provides custom rules, where required, and custom distributions to support the needs of individual firms.

Sourcing	Direct sourcing of more than 100 exchange feeds, supported by feeds from data vendors
.	 Exchange feeds that are only available to exchange members can be integrated into the RDL Exchange Traded Derivatives feed
nstrument coverage	Comprehensive coverage for Listed Options, Futures, Options on Futures and Calendar Spreads, with more complex spreads to be added
Attribute coverage	 Comprehensive attribute coverage – sourcing more than 250 attributes critical to front office and back office processing, including data enrichment from exchange websites and other sources
Data quality	Monitoring of securities data for corporate actions and Holiday Calendars with updates prior to market open
	Validation data sourced directly from exchange product specifications
	• Thousands of business rules to programmatically validate data
Cross referencing	Full cross-referencing between exchange symbology and market data symbology
	Cross referencing for underliers Support for a client's cours internal purels along.
	Support for a client's own internal symbology
Client-specific rules	• Supports individual client preferences and rules for distributions e.g. hierarchies
Distribution	Start of trading day feed – fully cleansed when markets open (region by region)
	 Flexible distribution API's – file-based, messaging, web services, request/reply, on demand requests
	Custom distributions
Round the clock operations	• 24 x 7, follow the sun operational support
	Full Help Desk and exception management – identification, research and resolution for all data sources
BPO services	A range of custom data services are available
Benefits for all groups in your	firm
Front office	Timely delivery of new product set-ups and maintenance. All the data needed, at the start of the trading day
	Comprehensive instrument and attribute coverage
	All products updated prior to market open for corporate actions events
Operations	Full attribute coverage to support the complete lifecycle of a trade
	 Accurate data – benchmarked by our clients to be 99% clean and backed by SLA's significantly reduces manual effort by operations teams
	• Symbology cross reference across vendor and exchange products eliminates inconsistencies in identifying client trade orders
Compliance	 Centralized data management bridging front office and back office, a single point of stewardship for reference data, removing what is a significant compliance issue for most firm

About SmartStream

By helping its customers through their transformative digital strategies, SmartStream provides a range of solutions for the transaction lifecycle with artificial intelligence and machine learning technologies embedded – which can also be deployed in the cloud or as

with regulations.

managed services.

As a result, more than 2,000 clients – including 70 of the world's top 100 banks, rely on SmartStream Transaction Lifecycle Management (TLM®) solutions to deliver greater efficiency to their operations.

SmartStream is a recognised leader in financial transaction management

costs, build new revenue streams, mitigate risk and comply accurately

solutions that enables firms to improve operational control, reduce

For more information visit: smartstream-stp.com