

Regulatory Compliance through Integrated Data Management

Building a standardized platform for post-trade compliance and operations management

Effective data management is increasingly critical to financial performance in the capital markets industry. As firms strive to outpace their peers in trading alpha, risk management, and operational efficiency, data management has become a focal point, a once mundane capability through which firms can now achieve significant competitive advantage.

The data management challenge has become particularly acute in the area of regulatory compliance. Stress from globalization and regulatory requirements is breaking down fragmented compliance support operations, and diminishing returns from short-term solutions has exposed firms to increased reputation

risk, both from non-compliance and from the misallocation of resources.

Capgemini and Teradata have collaborated to create an Integrated Compliance and Operations Platform. Our solution currently encompasses accelerators for operational notification and regulatory compliance for North American equity and equity options such as OATS and RegNMS. Future extensions will include vertical expansion into data analysis beyond compliance and horizontal expansion to fixed income, FX, derivatives, and money markets.



Address governance, risk & compliance as a foundation for the future

The Integrated Compliance and Operations Platform enables clients to integrate the critical data items and informational processes necessary to meet the stringent requirements specified by regulatory compliance at the asset level.

However, regulatory compliance is just the beginning. This solution serves as a foundation that enables firms to implement future growth strategies built upon an authoritative, comprehensive environment of clean, directly accessible operational data. Strategies such as Financial Engineering and Client Value Management are easily implemented from this common platform.

In addition to OATS and RegNMS, the Integrated Compliance and Operations Platform will integrate data and

processes required for any number of Equity based reporting needs, such as MiFID, Trader Surveillance, MSI, Short Sells, and Trade Advertising. Data is captured in real-time at the transaction level, and quality checks are performed when data is received, not when it is migrated and/or enriched.

Additionally, alerts are implemented to allow for immediate processing of data once it is received. Reporting, both end of day aggregates or per-trade notifications, can then occur seamlessly with the relevant business rules and templates.

Our solution can automate a great deal of the aggregation and per-trade processing and support automated user defined calculations based on market and trading events.

	Middle Office	Chief Compliance	Equity Management	Desk Officers	Prime Brokerage
Business Pain	<ul style="list-style-type: none"> Workflow for securities trade processing Exception processing & monitoring 	<ul style="list-style-type: none"> Many firms have 20+ compliance platforms Missed compliance deadlines OATS, RegNMS, MiFID, Trade surveillance, Short Sells 	<ul style="list-style-type: none"> Lack full view of client profitability Lack of aggregate portfolio visibility Risk of client and trader fraud from inadequate controls 	<ul style="list-style-type: none"> Difficult to calculate P&L Poor visibility to cross-platform risk exposure 	<ul style="list-style-type: none"> Increased global volumes Multiple legacy platforms Increased competition Difficult to monitor fraud and risk
Business Benefits	<ul style="list-style-type: none"> Streamline operations and provide Straight-Thru-Processing support Route trade exceptions to appropriate MO personnel 	<ul style="list-style-type: none"> Reduce rejections and regulatory fines Single view of compliance across a given asset class 	<ul style="list-style-type: none"> Support trade surveillance Support client analysis Support MO streamlining 	<ul style="list-style-type: none"> Calculate Intra-Day / Near Real Time P&L Monitor Intra-Day Portfolio Risk Monitor operational risk and fraud 	<ul style="list-style-type: none"> Lower cost of operations Streamline coverage model Enhance client services: liquidity / price improvement
Results	<ul style="list-style-type: none"> Sunset overlapping systems (~\$4 million per year) Decrease outages by 70% 	<ul style="list-style-type: none"> Improve inquiry from 2 weeks to a few hours Reduce rejects from 100,000 to 100s. 	<ul style="list-style-type: none"> Reduce overhead by 25% Improve productivity by 30% 	<ul style="list-style-type: none"> Reduce trade reconciliations by 90% Improve productivity by 30% 	<ul style="list-style-type: none"> Price improvement by 0.02 Decrease cost of services by 35%

Implement quickly and lower maintenance costs

Capgemini’s Business Information Management practice, in collaboration with Teradata, has created a solution that includes project accelerators, such as an implementation plan, functional and physical data models, report templates and business process requirements. These accelerators allow us to implement a global compliance solution up to **50% faster** than a comparable ground-up implementation.

Capgemini’s accelerators come from our experience implementing similar systems and include:

- **A proven architectural framework** that includes a real-time ETL process flow, a Common File Format for reconciling data feeds from multiple trade platforms, operational and analytic data stores, and distribution approaches for common downstream feeds.
- **A data model** that addresses necessary trade and referential entities, relationships, and attributes.
- Methods for **linking orders and fills** across desks or systems.
- **ETL templates** for extracting common trade types from trade platforms.
- **An OATS data mart**, including both logical and physical models.
- Stored procedures for creating OATS reports such as Daily OATS Statistics, Audit reports, and NASD Transmission reports
- Custom workflow and event management module for managing the OATS reject and repair process.
- **RegNMS data mart** and **supervisory reports** such as Trade Reporting Flag report, Trade-Through Exception report, Orphaned Riskless Principal Transactions report, and Independent Test of TOB Sweeps report.

- **Management analytics data mart** for reporting on orders, fills, and volume across various dimensions.

Capgemini and Teradata provide the following as part of our solution:

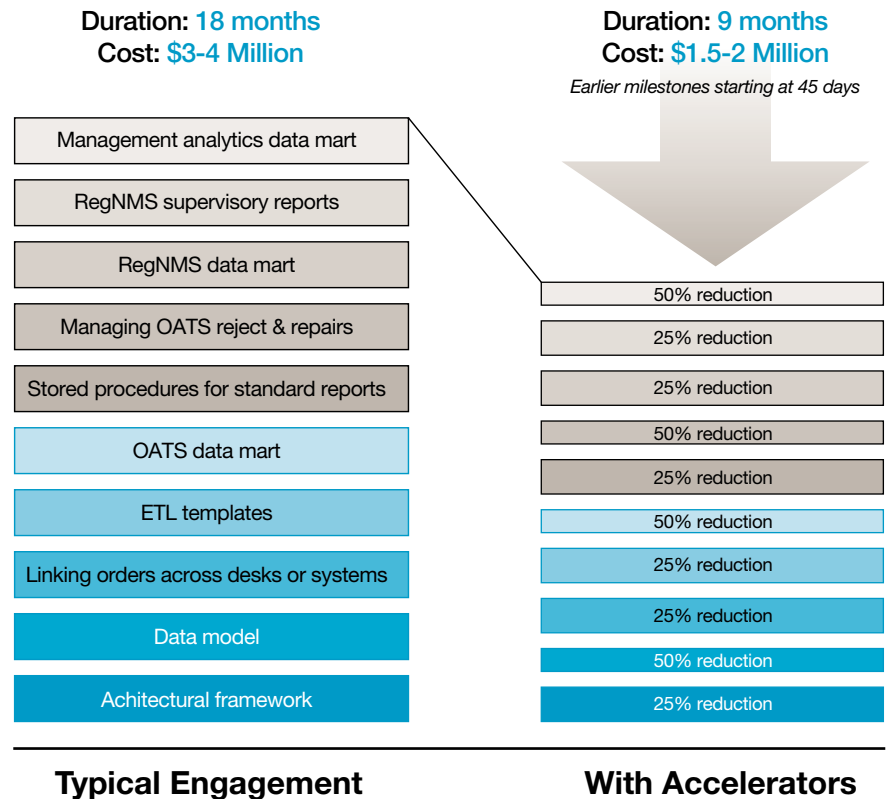
- Pre-captured business and data rules and models
- Pre-loaded warehouse with the physical models
- Expertise in data migration and consolidation
- Expertise in compliance business process and data requirements
- A rapid, realistic 120-day initial implementation plan that maximizes early wins

In addition, Teradata provides an industry-leading warehousing and delivery platform that allows firms to focus maximum effort on the business requirements by reducing many standard RDMS tasks.

Benefits include:

- Automation or elimination of routine administrative tasks
- Cost-based optimization and an unconditionally parallel platform that significantly reduces database tuning requirements
- Strong workload management facilities
- Highly fault-resistant architecture minimizing the impact of individual component failures.

Capgemini’s proven accelerators trim costs and duration



Path forward

The roadmap for data management in your organization should not be limited to what a platform can do, how much data it can hold or which business units and processes can benefit.

For more information, contact us at capitalmarkets@capgemini.com

By combining the tools, accelerators and approach of Capgemini's data management solution with the technical benefits of the Teradata platform, we can help you build an integrated system for the future.

About Teradata

Teradata Corporation (NYSE: TDC) is the global leader in data warehousing and analytic technologies that make smart companies smarter. Teradata provides the most knowledgeable and experienced consulting professionals, highest performing technology, industry-leading innovation, and a world-class network of customers and partners to make faster, smarter decisions that give our customers a decided competitive advantage.



About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

Backed by over three decades of industry and service experience, the Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and collaboration-

focused methods and tools. Capgemini utilizes a global delivery model called Rightshore® which aims to offer the right resources in the right location at competitive cost, helping businesses thrive through the power of collaboration.

Capgemini employs approximately 92,000 people worldwide and reported 2008 global revenues of 8.7 billion euros.

More information about our services, offices and research is available at www.capgemini.com.