



Sinara's Reconciliation Engine (RE) is a powerful and configurable tool which assists in the management of work related to the reconciliation of records arriving on two or more data sources. For example, a trading organisation needs to take action when a trade it believes it has carried out is reported differently or not at all by the counterparty. The RE workflow highlights this situation on screen until it is resolved.

## **Key Functions**

- Real-time monitoring of pairs of incoming record-based data sources
- Maintain real-time view of which records are unmatched or unreconciled
- Highlight abnormal delays in the reconciliation of individual records
- Handle corrections and deletions to previously received records
- Role-specific workflow 'to-do' lists related to unmatched or unreconciled records
- Displays summary statistics relating to record flows and outstanding issues
- Database audit of raw records and reconciliation statuses.

# **Typical Usage Scenarios**

- a broking organisation wishes to ensure that there is a consistent view of trades completed between functions such as: front office trade capture, risk approval, matching/confirmation, clearing, compliance etc.
- a market data consumer wishes to cross check two feeds of trades from different data suppliers.
- a buy side firm needs to reconcile its Investment Manager's portfolio view with that of its Custodian function.

## **Project Approach**

A typical project starts with Sinara conducting a high-level review of a client's reconciliation requirements. This allows us to determine which requirements are met by the core functionality or existing versions of the peripheral components, and what extra modules may need to be written or reworked to meet specific client needs. Sinara and the client then agree a project plan for the design and deployment of a RE based system including any configuration and bespoke work.

#### **Architecture**

The Sinara Reconciliation Engine (RE) comprises a generic core and configurable/extensible peripheral components such as feed handlers, comparison algorithms, display screens, alert filters and statistics generators.

- Modular design allows new business rules to be easily integrated into the overall system
- Configurability and extensibility allow:
  - Handling of any input source through switchable feed handling modules
  - Rule-based matching and reconciliation logic
  - Configurable statistics, alert filters and to-do lists.
  - Any type of field-based record can be handled; Trades/Quotes are typical examples
- Complete audit of all data received using open database technology
- Scalable architecture
- · High volume throughput





## **Company Background**

Sinara is a London-based software house delivering innovative and reliable solutions to leading organisations in the financial and market data sectors. Founded in 1989 by the current directors, Sinara has grown steadily and remained successful over a long period. All development work is still overseen by the directors, and is carried out by full-time Sinara staff in London.

We have built up a successful track record as a financial systems developer – working for banks, exchanges and financial institutions. Our speciality is in developing systems that are considered to be technically difficult – for example, real-time systems, complex database requirements, interfaces to other systems, etc. We also offer consultancy and development services in financial MIS/workflow systems, where we can combine our business and analysis skills with the ability to build browser-based systems linked to corporate or dedicated databases.

Sinara's strong software development background, and our focus on delivering reliable systems, has meant that we can continually include new technologies in our client work without compromising on quality. Equally, we recognise that system lifespans are getting longer, so our systems are designed to be enhanced and adapted, providing our clients with greater value for money over the lifetime of the system.

Sinara has developed its own range of technology and products for the distribution and management of financial market data. These enable clients to fast-track the integration of real-time market data into many applications (e.g. algo trading, mobile apps, online trading, web sites, portfolio management). These products can be customised, and Sinara provides integration services to build complete solutions based upon our products

#### **Clients**

We build and maintain effective long-term relationships with our clients and business partners, by being reliable and responsive as their needs change and develop over time.

Sinara are experts in systems for financial market data – our clients and partners include the world's leading market data providers. Major financial institutions throughout the world depend upon our products and IT systems:

Data Providers: Interactive Data, Dow

Jones, S&P

Exchanges: London Stock Exchange,

London Metal Exchange

**Financial Institutions**: American Express, UBS, Boursorama, Bourse Direct, Marex, Ahorro, Montepio Geral, Interactive Brokers

## **Technology**

Sinara works with a wide range of both established and leading-edge technologies. Our choice of technology for a specific project will always be based upon the most appropriate and reliable tools that will meet our clients' needs. Our current skills include the following:

**Platforms**: Windows (2008/2010,XP); UNIX (Linux, Solaris), Mobile (Android, iOS, J2ME,

Blackberry)

**Web**: HTML/DHTML/XHTML, ASP.Net, ADO.Net, Entity Framework, Ajax, Javascript, JQuery, JSON, XML, CSS, IIS, Apache

Languages: C++, C#, Java, C Databases: SQL Server, Oracle

Communications: TCP/IP, UDP, IP Multicast,

FIX, FTP, HTTP, SMTP, SSL

#### For more information, contact

Sinara Consultants Ltd 63 Tanner Street London SE1 3PL tel: +44 (0) 20 7940 7950 www.sinara.com