

Syn~Developer

Syn~Developer is a new type of software product designed to meet transaction-processing requirements, primarily for participants in the Global Capital Markets.

What is Syn~Developer?

The key technology role fulfilled by **Syn~Developer** is as an execution engine for:

- ~ Business processes
- ~ Business rules
- ~ Business components

This approach is unusual in that individual solutions are delivered as 'data' and not 'code'. Furthermore the processes and rules that together define a particular solution are usually captured without the need to write computer code. **Syn~Developer** therefore does not impose the disadvantages (vendor dependence and inflexibility) associated with traditional packaged solutions. It also avoids the costs and maintenance challenges faced by organisations undertaking bespoke solution development.

Syn~Developer contains a rich library of industry standard models for all relevant business objects and their lifecycles in the Global Capital Markets. These can be easily extended without conventional coding, using embedded graphical configuration management, version control and deployment tools.

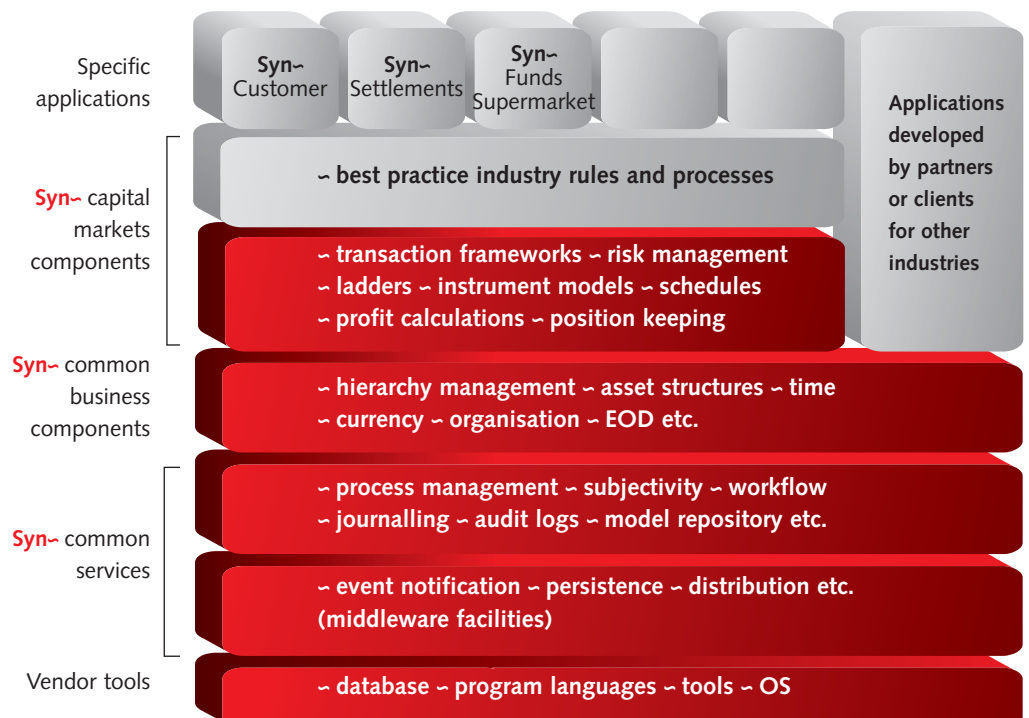
Benefits

- ~ Faster time to solution deployment
- ~ Focus is on the business solution and not the technology
- ~ Enterprise class capabilities come out of the box
- ~ Coherent, highly adaptable, solution and model base
- ~ Integrated development, testing, deployment and operation environment
- ~ Incremental hardware scalability
- ~ Designed to support in-sourced multi-client business

What does Syn~Developer do?

Syn~Developer provides banks with:

- ~ An environment for creating enterprise strength, distributed core transaction processing applications
- ~ Out of the box industry-wide multi-product processing components
- ~ A repository for proprietary business knowledge
- ~ Radical strategies for change management to meet the demands of a volatile market place



Workflow

The solution includes a full-featured workflow engine:

- ↪ Alerts through GUI in-tray, e-mail etc.
- ↪ Priority and routing assignment with user-controlled natural English rules
- ↪ Workload management with shared queues and assignment based on workload
- ↪ Temporary assignment of roles and responsibilities for replacement staff
- ↪ Escalation rules specified in natural English for re-prioritization and manager alerts
- ↪ Metric analysis – full millisecond audit of exceptions and actions taken
- ↪ Can push exceptions and actions to other workflow packages via Web Services or JMX

Rules

The business rules are enhanced or added for an organisation and can be created by means of a natural easy-to-use language. Details of processes to be automated are captured as graphical charts that can be understood by operational staff. These advantages ensure business knowledge is preserved over time and end users can be involved with the definition and on-going change and maintenance of the system.

Data Segregation

Data access is controlled through namespaces not just the database. This allows controlled access to all aspects of the solution including:

- ↪ Reporting
- ↪ Workflow
- ↪ Configuration

Different sets of users can see the same data in differing ways by applying filters and transformations e.g. domestic security, non-domestic security. Data access, validation and behaviour can be controlled down to individual user and individual field.

The solution supports full segregation of data, for example by:

- ↪ Company
- ↪ Branch
- ↪ Client
- ↪ Department
- ↪ Individual

Integration

The solution supports schema-defined XML interfaces over JMS.

No code is required for creating an interface and mapping to an XML-based API.

Mapping facilities are also provided using integrated XSLT capabilities.

Supported interaction models:

- ↪ Synchronous/asynchronous request/reply
- ↪ Publish/subscribe
- ↪ Batch file generation and import (including MS Excel)

Technology

The solution is built using core standards-based technology adopted by most major financial institutions e.g. XML, Java, JMS (e.g. IBM WebSphere MQ), JMX etc. These technologies facilitate integration within existing infrastructures. The underlying **Syn-Developer** transaction processing engine is written in 100% Java making use of J2EE technology. It uses an Oracle 9i/10g database as its primary means of persistence, but data can be integrated from other sources. Internal communication within the system uses the Java Messaging Service API.

The solution supports key enterprise system standards including:

- ↪ Fine grained distribution implemented as an N-tier architecture
- ↪ Web-based delivery via TOMCAT and Apache
- ↪ Thin client via Swing/standard browser
- ↪ XML/XSLT (as a core technology)
- ↪ Java/J2EE components
- ↪ JMS for messaging
- ↪ Eclipse development environment
- ↪ JMX interfaces for metrics and monitoring (including BAM)
- ↪ CORBA compliant ORB
- ↪ Oracle 9i/10g
- ↪ Integrated enterprise-capable reporting and OLAP capabilities using embedded Crystal Enterprise XI

Scalability

Syn-Developer provides linear scalability using parallel processing on a wide range of architectures and processor sets.

On a recent test of back-office processing with a major European broker/dealer, **Syn-Developer** processed more than 60,000 trades per hour on a sustained test over 5 hours. This processing included trade capture, validation and enrichment, confirmation, settlement, books & records and took place on a 20 way SUN Solaris server.

London

Coexis Limited

Victoria House
Second Floor
64 Paul Street
London EC2A 4NG
Tel: +44 (0) 20 7613 8800
Fax: +44 (0) 20 7033 1965

New York

Coexis Inc

75 Broad Street
New York
NY 10004
USA
Tel: +1 646 649 9380
Fax: +1 646 649 9381
www.syn.com
Email: syn@coexis.com

Partner

Serisys Solutions Ltd

1201 Jubilee Centre
18 Fenwick Street
Wanchai
Hong Kong
Tel: +852 (2376) 3232
Fax: +852 (2376) 3030
www.serisys.com