



Care Data Components ^(TM)

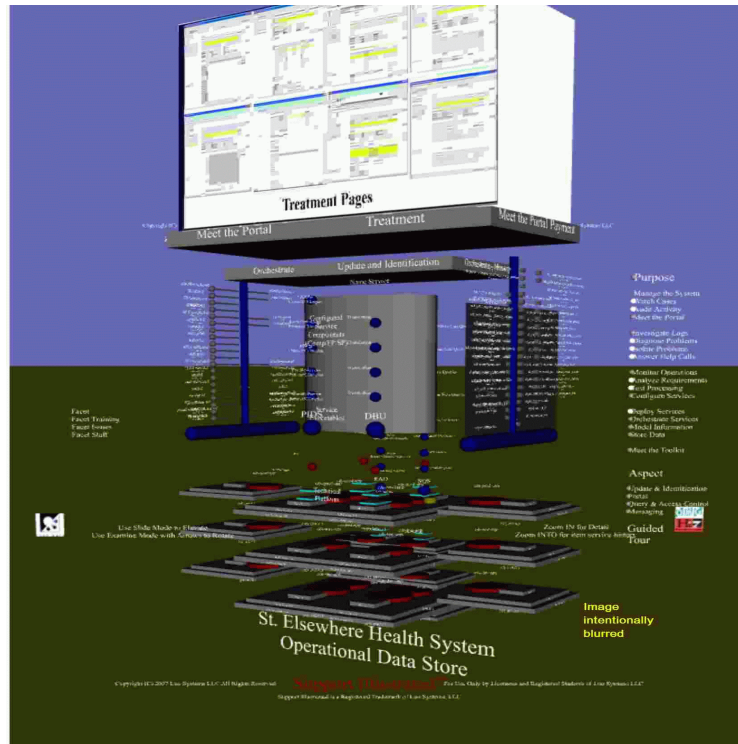
A suite of coarse grained service-oriented components for managing large-scale enterprise data repositories and web portals with advanced matching, access control, and auditing capabilities

How it Works

Graphically configure these powerful integration components to accommodate the data movements of your enterprise while centralizing the management and enforcement of your key business rules. Write no code! Monitor and audit your operations at all critical touchpoints.

Deployment Modes

- The components have been heavily used in large healthcare environments for "operational data store (ODS)" architectures to provide for flexible reuse and rapid partnering
- They may also be used in a "registry" and hybrid architectures utilizing distributed-queries and an information locator service.
- They may be embedded as core functionality in shrink-wrapped applications.



The Care Data Components enable you to produce and maintain a robust, manageable, and extensible integration architecture in any provider/consumer industry.

Care Data SOA Components

The Web Access Channel ^(TM)

A SOA-oriented rapid-development facility for generating robust portlets for a JSR-168-compliant enterprise portal, using a secure query service and integrated report generator

The Correlation Channel ^(TM)

A software component to probabilistically detect and link identities, such as patients and providers in healthcare, customers in commerce, or suspects in public safety.

Resource Access Decision Service ^(TM)

A SOA component that centralizes all access decisions for portal query data, based on a broad variety of access control policy structures

The Secure Query Service ^(TM)

A software component that executes pre-configured relational queries but filters raw results based on a RAD service before returning final results to the requesting application, such as an enterprise web portal

Care Data Subsystems

Log-Monitor-Audit Subsystem

A robust management subsystem used across Care Data Components to let you verify that business rules - both processing rules and business policies are being enforced

Clinical Data Repository

An SQL relational Schema for a clinical data repository (CDR), oriented around the Entities, Participations, and Acts core of the HL7 Reference Information Model (RIM)

Related Third-Party Components

The following third-party products have interoperated with Care Data Components. Other comparable products may be used in this role.

Websphere Portal Server ^(TM) by IBM Corporation

A portal framework into which JCP JSR-168-compliant portlets may be installed, managed, and executed.

End User Client

Our typical client is a web browser - IE 6 or greater, firefox 2 or greater, Google Chrome. However, since our user interfaces are generated through an XML canonical form, it is straightforward to support WML or other platforms/renderings.

Features and Benefits

Timeliness and Provable Correctness

- ★★★★★ Manually written software can be buggy; but generated software -once proven - is far superior The solution: renounce the concept of writing software. all systems integration, including user interfaces, but be configured, so that the runtime system is simply executing proven pieces. - the solution is airtight.
- ★★★★★ Good large-scale integration architecture is not simple, and the problem-space is a minefield of surprises to be diffused. The solution: demand the best people you can find to ensure success. - the immediate problem is solved AND the future will not bring it down.

Manageability, Flexibility, and Interoperability


- ★★★★★ Proprietary software is a black-hole of risk to a large and growing enterprise. The solution: demand standards-compliance for all components. We pioneered standards at OMG for probabilistic person identification and fine-grained access control - It comes under control.
- ★★★★★ Most 90's generation and prior software products were not designed with truly flexible architectural reconfiguration or rapid partnering as requirements The solution: demand flexible, service-oriented componentized solutions - you get get and keep your mind around it. This is what ultimately determines success.

Provable Enforcement of Business Rules

- ★★★★★ SQL Databases and Message Brokers excel at physical integration but they do not let you easily monitor and maintain business rules The solution: demand logical integration components - flexibly encapsulating your business rules, not just DBMS and transformation tools. These logic components represent YOUR ultimate responsibilities if you are an IS manager - know for sure that the software is doing the right thing.
- ★★★★★ It's hard to know for sure when quiet errors or privacy breaches are happening. The solution: pervasively employ robust API and facilities for logging, monitoring, alerting, and audit - know what is happening.

User Interfaces

The following list is a sample of our prebuilt/bundled user interfaces. A typical customer of ours will use our software to generate 20-30 portal pages for browsing their enterprise data repositories - whatever the schema. The screens listed here are a sampling of just our "prebuilt" front ends. In the event that a screen shot is grainy or even omitted here, this is typically because we have chosen to limit the degree to which we divulge our design choices.

AC Query Editor	interactively configure queries, filtering on session context variables
Auditable Event Plan	A model showing junctures at which events and their context should be captured for audit.
CC Admin	maintains matching policy configurations
Case Flowsheet	Synchronizes and collates events across all touchpoints for selected users or subjects
DB Artisan	perform DBA operations
Email Alerts	reports a suspected source duplicate
Fuzzy Search	Probabilistic search - by any elements, self-calibrated to recognize outliers
Generated Portlets	Configure your operational portal and/or audit portal
Master Encounter Merge	merges a specified encounter into another, combining child data
Master Encounter Move	moves a specified master encounter to a new master identity
Master Person Merge	merges a specified master identity into another, also migrates encounters as needed
Match QA	Summarizes Match QA Test Results
Merge Portlet	
Operations Log	monitors distribution of access decision outcomes
Operations Monitor	
Operations Monitor	monitors distribution of access decision outcomes
Operations Monitor - Outcomes Trend	
Policy Combination Editor	maintains policies that are combinations of other policies
Portlet Editor (audit)	Use this tool to configure audit portlets. Supports composite parts and context control
Portlet Editor (operational)	Use this tool to configure operational data browsing portlets. Supports composite parts and context control
 T Monitor	monitor response time by query type



SQL Cache	Cache is of High-query-performance, indexed, SQL rows with controled purge window
Sensitive Record Dialog	On sensitive record request, warns then prompts to accept or cancel
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Sequential Logs	Original logs are of high-write-performance, dense, XML raw log files. Named by dates, periodically archived
Suspect ID Conflict Email	The CC sends mail upon detecting an ID conflict (fraud or error)
Suspected Conflicts Page	
Suspected ID Conflicts	Use this page to select cases for review of suspected ID error or fraud
TOAD	maintain DB schema and to edit CDR data

Environment Assumptions and Facility Dependencies

The Care Data Components are designed to leverage the following open-standard facilities purchased and supported separately.

Facility: ANSI-SQL 2003 RDBMS, e.g. Oracle 11i, PostGres, IBM DB2, MS-SQL Server, Informix

Facility: LDAP-compatible authorizations directory, e.g. Novell e-Directory

Platform: Java 1.5 or higher

Platform: OS/Linux

Pricing

The components are highly decoupled from each other and may be licensed separately. We can partner with the VAR of your choice. Call for current pricing models. We will assist with solution design as well as customize training and implementation services to maximally leverage your existing assets.

About Care Data

Since 1992 Care Data has produced coarse-grained service components for large-scale secure data integration and has pioneered new standards in the OMG and HL7 standards organizations. CDS has licensed its facilities to about a dozen large healthcare provider enterprises, WebMD, and to Motorola Integrated Services Division (for Public Safety/Person Identification), and to VARs.

