
 Versata develops applications in a completely unique way. Their technology allows developers to think at a higher level—to think about business rules and not about coding and recoding. 

Paul Messink
Domino's Pizza
Director, E-business Development

The Versata Logic Suite for IBM WebSphere Automating J2EE business logic for enterprise applications

The Versata Logic Suite for Transaction Logic speeds the development and management of complex business logic components running in J2EE application servers like IBM WebSphere.

Utilizing business rules to automate J2EE business logic, the Versata Logic Suite offers proven technology that:

- > Increases business responsiveness of IT departments by allowing applications to be changed by simply changing business rules
- > Focuses scarce enterprise Java developers on the most complex and unique system requirements while enabling other IT staff to use rules-based automation
- > Enables business users and developers to quickly and accurately capture requirements using simple, declarative statements (business rules)
- > Reduces hand-coding of EJBs by up to 98% by compiling business rules directly into executable Java components which are then automatically deployed into the IBM WebSphere application server
- > Optimizes the performance of transactional Java applications with high-performance business logic services installed into the IBM WebSphere application server

A key component of the Versata Logic Suite is the Versata Logic Server. Rule-based automation provided by the Versata Transaction Logic Engine, which resides in the Versata Logic Server, is used by hundreds of organizations—helping to reduce the costs and time associated with developing, implementing, and managing complex enterprise applications.

Specify + Execute = Automate

Software automation occurs by executing systems directly from their declarative specifications. To automate J2EE systems, the Versata Business Logic Suite offers both a design environment, the Versata Logic Studio—for specifying logic through rules, and a runtime environment, the Versata Logic Server—for executing logic within the IBM WebSphere application server.

Developers employ Versata Logic Suite for Transaction Logic to automate the business logic surrounding application data changes. This logic includes querying objects, validating input, deriving or inferring data values, synchronizing changes between interrelated objects, and ensuring that transactions conform to business policies.



Included - A Complete Design and Execution Environment

The Versata Logic Studio is a highly productive design environment that enables developers to easily specify and customize business logic.

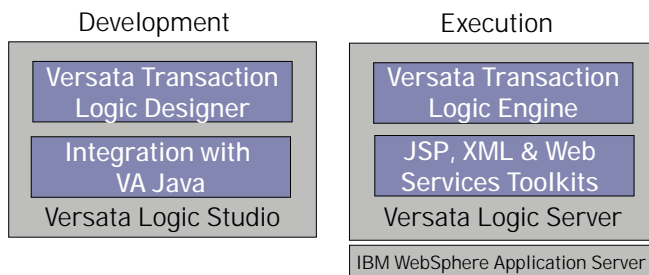
The core of the Versata Logic Studio is the Transaction Logic Designer that uses high-level business rules to specify transactional business logic and automatically deploys it as server-side components (EJB's).

These rule-enabled EJB's can be integrated into existing enterprise applications, or new enterprise applications leveraging other technologies like IBM VisualAge for Java.

In addition, the Versata Logic Studio includes the Versata Presentation Designer to automatically construct Java or HTML applications from rule-automated components.

The industry-proven Versata Logic Server includes a comprehensive set of business logic services installed into the IBM WebSphere application server.

These services provide a high-performance runtime environment for business logic components using the Versata Transaction Logic Engine. The Versata Logic Server also includes universal access APIs, making business logic-based components available to any Java-capable technology. When installed into the Versata Logic Server, the optional Versata Presentation Engine executes client-side interfaces designed in the Versata Presentation Designer.



Using the Versata Logic Suite

Designing Business Logic

To begin development, the Versata Transaction Logic Designer is used to create a set of data objects. Once the data objects are fully specified with business rules, they are automatically implemented and deployed as Java business logic components (EJBs). To jumpstart data object creation, object definitions can be imported from existing UML object models, or re-engineered from existing database schemas.

Next, object behavior and interactions are specified using business rules. The point-and-click interface of the Transaction Logic Designer lets developers define:

- > Relationships between objects (as in "Customers have Orders")
- > Constraints between business objects (i.e. "only Sales reps can place Orders")
- > Validations (domains, data types, required conditions, look-ups)
- > Derivations of attributes (counts of related objects, sums from related objects, and formula—i.e. "and Orders total equals the sum of its Line Items")
- > Event-actions and explicit method calls (i.e. "on a large order, send an e-mail to notify manager")

Versata customers have compiled up to 98% of their EJB business logic using business rules. Since business rules employ a declarative, rather than procedural, programming model, the developer focuses on the "what" —not "how"—of business logic. The result: A single business rule may implement multiple Java methods in multiple EJBs. This highly productive, cross-object logic implementation is achieved automatically as business rules are compiled.

During business rule compilation, the entire set of business objects are analyzed, dependencies are determined, ordering and sequencing of operations is mapped, and transactions are automatically optimized and implemented. This automatic process eliminates the time-consuming and error-prone design and programming typically associated with server-side components such as EJBs.

What's more, when business logic changes, affected components are automatically re-analyzed, re-optimized, and re-deployed. This means that developers no longer must unravel and re-code complex object interactions to make changes—and fully debugged, high-performance applications are maintained in a fraction of the time.

Sharing and Re-using Rule-based Specifications

The business logic specifications are kept in an open XML document-based repository of meta-information that can be shared for team development and versioned with source-code control systems. This business logic repository becomes a powerful business asset that can be re-used over generations of systems and developers.

Customizing Components

Even as business logic automates the majority of application logic, Versata has built in extensibility at every level. Versata-automated components can be customized through pre-built event handlers—allowing Java to be used much like a simple 4GL and extending rules to meet your company's unique business requirements.

In addition, the full Versata Logic Server Foundation Class Library is extensible. Developers can extend foundation classes to add custom behavior to their Versata-constructed objects. In every case, customizations are preserved whenever objects are rebuilt, further improving system maintenance.

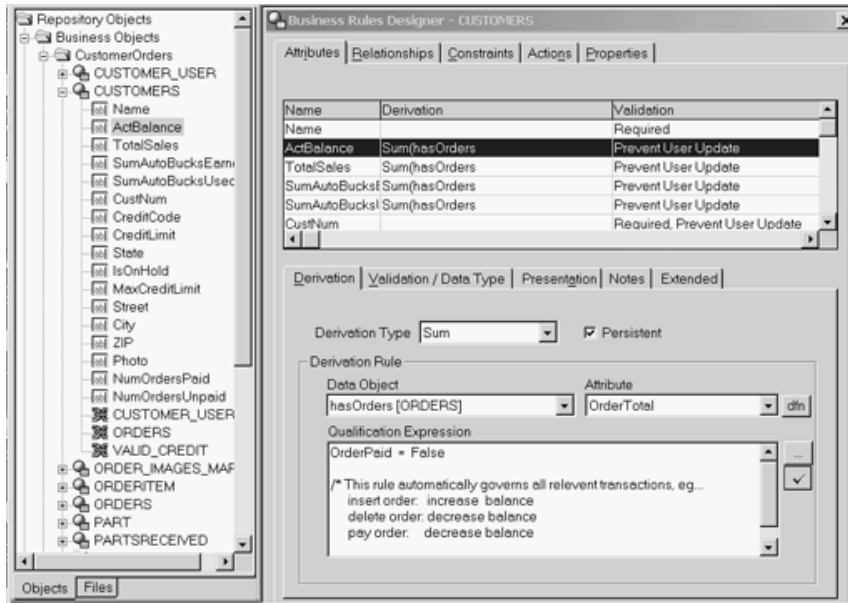


Fig. 2 The Versata Transaction Logic Designer specifies and customizes business logic.

Accessing Business Logic-based Components

Business logic created by Versata is available to any Java-accessible client component, including Java Server Pages (JSPs), web services, Java applications and applets, servlets, and other EJBs—as well as Versata-built client applications.

Versata provides a complete set of universal access services implemented as standard Java interfaces including:

- > Interfaces to each Versata Logic Server business object
- > Buffered and incremental retrieval
- > Cursor support on result sets
- > “Just-in-Time” (lazy) instantiation of business objects

Automating Client Applications

The optional Versata Presentation Designer creates complete Java or HTML applications that easily leverage the definition of Versata Logic Server business components.

Through wizards and graphical interfaces, the Versata Presentation Designer specifies form navigation, data dependencies, captions, pop-up choices, and other application properties by simply dropping business objects onto the Versata Presentation Designer’s workspace. This is made possible by leveraging the meta-information about the business objects created by the Transaction Logic Designer (and stored in the XML document-based repository).

Select from a range of styles contained within the Versata Presentation Designer to define the look and feel of your applications. All styles can be easily customized to conform to your corporate standards.

At runtime, the applications you built using the Versata Presentation Designer use services provided by the Versata Presentation Engine. Applications automated in this way are extensible, automatically deployed, and easily maintained when business logic changes.

Executing using the Versata Logic Server— Extending the Power of J2EE EJB Containers

At runtime, the Versata Logic Server extends the power of the IBM WebSphere application server, by providing a comprehensive set of business logic services that are installed into the WebSphere application server EJB container.

Here are just a few examples of the business logic services provided through the Versata Logic Server:

- > Local object access during rules processing eliminates the overhead of EJB interfaces for high-performance operations
- > Transaction cache service speeds rules processing logic spanning multiple EJBs
- > Optimistic locking on business objects improves system performance and concurrency
- > Value-based client access for objects and object sets improves client performance
- > Shared and cached data validation lists improve client performance

Combined, these features optimize the performance and functionality of enterprise applications automated by business rules.

WebSphere customers need to build Java applications, but skilled programmers aren’t always at hand. For help, companies should use Versata’s set of Java tools to speed development with rules-based modeling and automated code generation -- but no tool is a substitute for continuous Java training.

Forrester Group
Tech Insight: WebSphere Customers: Need Development Help?

Enterprise e-Business Architecture

E-business enterprise architectures can be broken out into six conceptual layers. The inner-most layer is made up of back office applications that work together to ultimately provide a service, or business function, to the outer-most consumer layer.

Services are consumed by a variety of user channels. They often must be provided simultaneously through a variety of presentation technologies.

The middle-tiers require a succession of integration, transactional and process-oriented logic. As they work up the technology stack, this logic become progressively more abstract.

In addition, as logic gets closer to the consumer, it becomes dramatically more dynamic as systems strive to achieve greater efficiency and more effective business strategies.

Many features within the IBM WebSphere framework can assist in these middle-tiers. The Java Connector Architecture (JCA) and Java Messaging Service (JMS), provided by WebSphere services, can help standardize enterprise application integration (EAI). Java Transaction Services (JTA) can help guarantee the integrity of changes at the data layer. The entire WebSphere EJB approach can help distribute and secure business components once they are deployed. And finally, JSP and servlets have become fundamental to delivering content at the client-tier.

With in this enterprise architecture, the Versata Logic Suite adds value at every level by providing services specifically designed for business problems.

Versata Elevates Services at Every Level

With in this enterprise architecture, the Versata Logic Suite adds value at every level by providing services specifically designed for business problems.

At the transactional logic layer, Versata automatically creates sets of data objects (as EJB's) from object or data models and uses simple, declarative rules to guarantee the integrity of data as it is modified by any service, application or process utilizing the objects.

Through the Versata Java Connector Architecture, these data objects can map to databases, other data stores, message queues, and enterprise applications.

At the transaction services level, the Versata Logic Suite uses rules to define the inter-related behavior of these objects by stating "what" the objects are to do, rather than "how" they are to do it.

Rules query and aggregate data regardless of its source. They validate inputs and derive new values regardless of their targets.

The Versata Logic Suite can synchronize long chains of actions and reactions between objects, automatically defining, bracking and sequencing transactions.

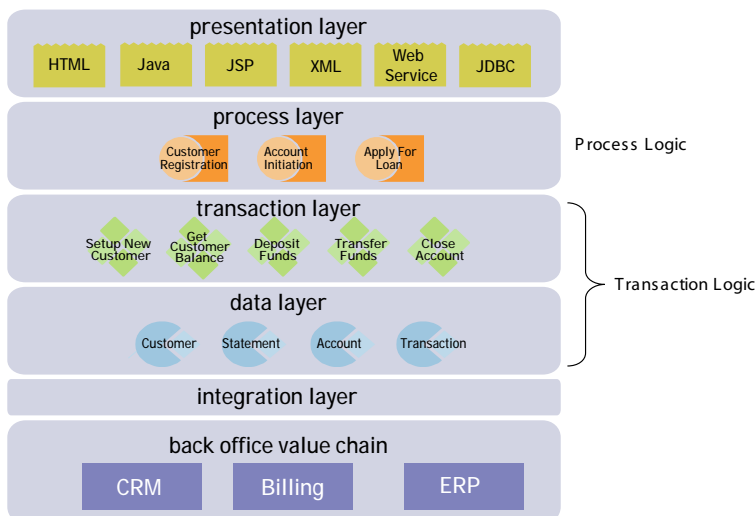
Ultimately, they ensure that transactions are always implemented correctly, perform optimally and conform to all business policies and constraints.

At the process level, the Versata Logic Suite uses process models to enact complete business workflows that coordinate human activities with transactions automated by rules.

Here, Versata provides enhanced control, visibility, escalation and exception handling to business transactions.

At the presentation level, the Versata Logic Suite can create user interfaces to transactional applications or to business processes.

It draws directly on rule-enabled business objects to create input screens, work lists, and even complete Java and HTML applications. These applications can be automatically resynchronized when business logic changes.



How do you buy these products from IBM

Versata for WebSphere is sold through IBM's Passport Advantage program: <http://www.ibm.com/software/passportadvantage>

Use the following to order direct from IBM :

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
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Program Name	Part Number
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Versata Studio Client 5.5 WinNt/2000 128r CD Media Pak English (THE EMEA PID NUMBER for this IS AS FOLLOWS: PID# 5724-B23)	BA03KNA
Volume Purchase Order:	
Versata Logic Server 5.5/SW Sub/Support to 1 Anniv	D50I5LL
Versata Logic Server 5.5/SW Sub/Support to 2 Anniv	D50I7LL
SW Sub and Support Renwl to 1 Anniv	E004CLL
SW Sub and Support after License to 1 Anniv Date	D50IDLL
Versata Logic Server 5.5 Migration Trade-up SW License & maintenance to 1 Anniv	D50MMLL
Versata Logic Studio Client 5.5/SW Sub/Support to 1 Anniv	D50IRLL
Versata Logic Studio Client 5.5/SW Sub/Support to 2 Anniv	D50ISLL
SW Sub and Support Renwl to 1 Anniv	E004GLL
SW Sub and Support after License to 1 Anniv Date	D50ITLL
Versata Logic Studio Client 5.5 Migration Trade-up SW License & maintenance to 1 Anniv	D50MNLL

 Versata enables us to fit within our existing development methodology a framework for capturing our core business logic and processes as easy-to-understand and modifiable business rules. The Versata solution is a powerful complement to our J2EE application server environment, the enterprise platform on which we build and manage our applications.

By significantly reducing the complexity of developing and maintaining Java-based applications, we believe that Versata will allow us to enhance customer service by increasing response time, reducing costs and bringing to market additional customer products and services. 

Steve Barnes
British Telecommunications plc
Manager of Integration Technology Infrastructure



The Versata Logic Server

At a Glance

Features	Benefits
<ul style="list-style-type: none"> > Quickly and accurately capture requirements using declarative business rules > Automatically and iteratively create reusable, complex business logic components from declarative business rules > Change applications by simply rewriting business rules, rather than hand-coding > Automatically construct complex transactional business logic as EJBs > Incorporates a completely extensible framework with pre-built business logic services for EJB components > Fully supports Java, EJB, XML, HTML, JSP, web services, and all industry-standard data-bases—as well as legacy data sources and systems > Runs in IBM WebSphere Application Server, Advanced Edition 	<ul style="list-style-type: none"> > Enhance collaboration and deliver applications that completely meet end user and business requirements > Reduce hand-coding, re-use business logic, and improve application integrity > Accelerate IT response to business change and dramatically reduce maintenance costs > Leverage industry standards and avoid proprietary pitfalls > Focus developers on business logic rather than infrastructure code > Integrate with your enterprise and business partners > Leverage the power of application server platforms—including scalability, clustering, load-balancing, and failover

Versata Logic Suite Requirements

	Versata Logic Studio*	Versata Logic Server
Operating System	Windows NT or Windows 2000	(varies depending on application server platform) IBM AIX SUN Solaris Windows NT Windows 2000
Hardware	Pentium 266 MHz or higher (320 MHz recommended) 256 MB RAM minimum (512 recommended) Video support 256 colors or greater Video resolution 800x600 or greater Disk free: 350 MB exclusive of application server, web server or database server	
Application Server Platforms	Application Server Platforms	IBM WebSphere Application Server, Advanced Edition

* The Versata Logic Studio includes Versata Logic Server single-user license (runtime) for development

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