

IBM Rational Data Architect

Highlights

- ***Simplify data modeling – discover, visualize and model diverse and distributed data structures***
- ***Facilitate an enterprise wide understanding of heterogeneous data assets***
- ***Improve accuracy and consistency throughout the enterprise via the foundation of high quality data models compliant to company standards***

Companies today are facing a wide variety of problems associated with enterprise data modeling and information integration due to the ever growing complexity of our enterprise databases and environments. One of the biggest challenges is gaining a thorough understanding of the multitude of enterprise data assets and how they are related to each other. If these relationships are not fully understood, even simple changes may have a larger-than-anticipated impact and result in costly re-development. Without proper modeling of existing systems, database quality and performance suffers.

Rational® Data Architect helps data architects design relational and federated databases, understand information assets and their relationships, and streamline database projects. Rational Data Architect provides advanced features to help data architects discover, model, visualize and relate heterogeneous data assets. Architected for integration, Rational Data Architect combines traditional data modeling capabilities with unique mapping capabilities and model analysis, all organized in a modular project-based manner. Rational

Data Architect is integrated with requirements management and team products for improved project time-to-value, consistency and accuracy in the enterprise environment.

Unlock the mystery of your existing data sources

Rational Data Architect discovers the structure of heterogeneous data sources by examining and analyzing the underlying metadata. All that is needed is an established JDBC connection to the data sources and Rational Data Architect explores their structures using native queries. Using the graphical user interface, users can easily browse through the hierarchy of data elements facilitating an understanding of detailed properties for every element. Users can also visualize tables, views, and relationships instantly in a contextual diagram without any intermediate step. Customization allows users to add colors, annotations, and geometric shapes to guide viewer's eyes to specific areas of interest. In addition, an interactive topology diagram helps users understand even the most complex database structure all with the single click of a mouse.

Change, change, change – the impact

As in any environment, it's always wise to understand the impact of change before it's actually implemented. Rational Data Architect allows users to do just that. Impact analysis lists all of the dependencies on the selected data elements. The results are visually represented and also displayed as a list.

Changes often need to be promoted within and across data models and data sources. Rational Data Architect's advanced synchronization technology compares two models, model to database, or two databases against each other. Changes can then be promoted between models as well as to and from the database for each element or aggregate. For change management in a team environment, Rational Data Architect provides direct integration with IBM Rational ClearCase and CVS to provide seamless versioning, branching, and synchronization of changes. Every

team function is fully executable directly from the user interface to provide a superior user experience.

Information integration design

Rational Data Architect is architected for integration design allowing users to consolidate multiple data sources into a single federated database. Rational Data Architect is integrated with IBM WebSphere Information Integrator Standard and Enterprise editions to simplify the creation, management and deployment of federated databases. This integration allows users to:

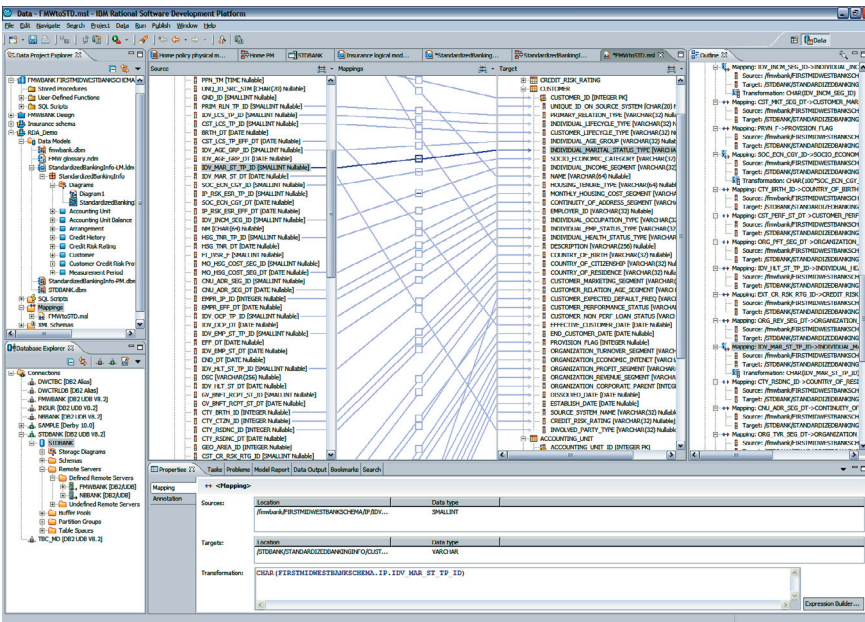
- *Access and discover IBM WebSphere Information Integrator federated data sources*
- *Visualize IBM WebSphere Information Integrator federated database topology*
- *Reverse engineer existing models using IBM WebSphere Information Integrator*
- *Generate and deploy the target model to the IBM WebSphere Information Integrator system*

Database Development Capabilities for DB2 Databases

DB2 database users can streamline activities by executing DB2 development activities directly in Rational Data Architect. Dedicated wizards and editors understand the DB2 syntax and semantics enabling users to create, execute, deploy and debug SQL statements, Java and SQL stored procedures and user defined functions directly from the Rational Data Architect interface. Rational Data Architect allows users to execute the code against the DB2 database and evaluate results and returning messages from the same tool you use to model the database. Model, test and deploy, all from the Rational Data Architect interface.

Exploiting standards to improve productivity and flexibility

Built on the Eclipse award-winning platform, Rational Data Architect defines a new age in information design. The Eclipse Model Framework (EMF) -based meta models and the Eclipse extensibility interface open new possibilities for users and business partners to extend the Rational Data Architect solution. For example, if users decide they need statistics about their models, they can develop an Eclipse plug-in to do just that. The Eclipse user experience has been proven by millions of users and is further extended with Rational Data Architect - making your daily work faster and more effective.





Life cycle integration

Rational Data Architect is integrated with the IBM Rational Software Development Platform, which includes requirements management and configuration management products to govern the process of data management and application development across the enterprise in an open, modern and extensible architecture. Requirements stored and managed in IBM Rational RequisitePro® can be accessed, associated to corresponding modeling elements, and synchronized with user-selectable rules. Modeling files can be managed by IBM Rational ClearCase® providing seamless versioning, branching, and synchronization of changes. Alternatively, Rational Data Architect integrates with Concurrent Versions System (CVS) for customers who have implemented that tool in their environment. These integrations reduce the risk associated with data modeling and make projects more predictable.

Rational Data Architect enables you to:

- *Create logical and physical data models*
- *Discover data sources*
- *Explore and visualize the structure of data sources*
- *Relate disparate data sources*
- *Compare the structure of two data sources/targets*
- *Discover similarities between data sources*
- *Analyze models and data sources for conformance to enterprise standards*
- *Design and deploy federated databases*

Hardware requirements

- *Processor – minimum Pentium™ 3, 500 MHz, recommended: Pentium™ 4, 1.4 GHz or higher*
- *Minimum memory: 1 GB RAM; more memory generally improves responsiveness*
- *Video: XGA 1024 x 768 x 256 color video resolution; 1280 x 1024 recommended*
- *Mouse or other pointing device*
- *Required disk space: minimum 600 MB; up to 1 GB during installation*

Software requirements

- *Microsoft™ Windows XP Professional, Service Pack 1, 2*
- *Microsoft Windows 2000 Professional, Service Pack 3, 4*
- *Microsoft Windows 2000 Server, Service Pack 3, 4*
- *Microsoft Windows 2000 Advanced Server, Service Pack 3, 4*
- *Microsoft Windows 2003 Standard Edition*
- *Microsoft Windows 2003 Enterprise Edition*
- *Linux: Red Hat Enterprise Linux WS 3.0*
- *Linux: SuSE Linux Enterprise Server 9.0*

Software integrations

- *IBM Rational ClearCase*
- *IBM Rational ClearCase LT*
- *IBM Rational RequisitePro*
- *Concurrent Versions System (CVS)*

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