Rational. software

IBM® Rational Rose® Data Modeler

Highlights

- ***Unify development teams by enabling all team members to develop individually, communicate collaboratively and deliver better software***
- ***Create robust system architecture with resilient, component-based architectures that evolve in a controlled, managed and identifiable way, reducing costs and accelarating time-to-market***
- ***One tool for all your technology needs using seamless integration with all of the leading IDEs and latest technologies, maximizing the speed and simplicity of your development efforts***

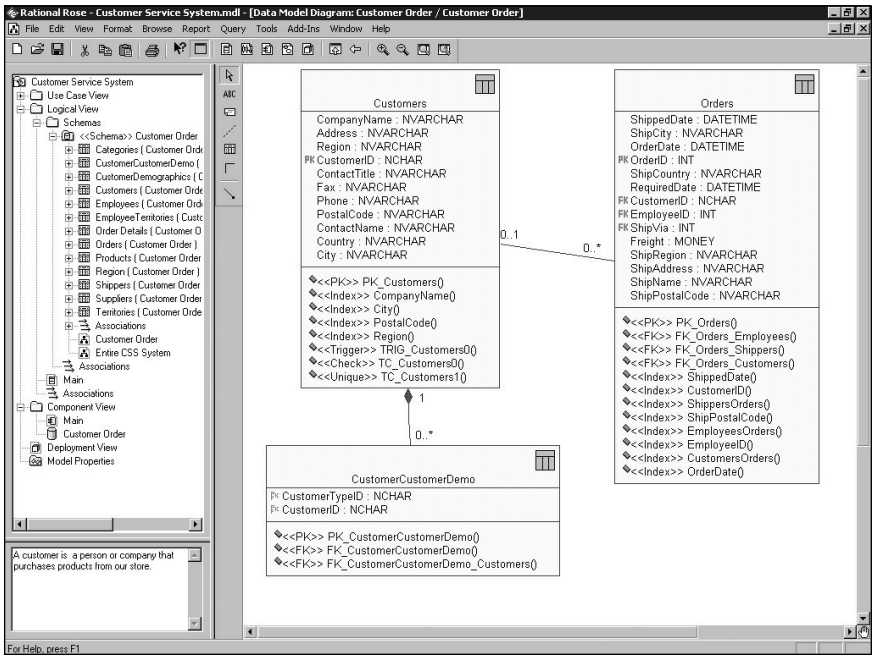
When IBM® Rational Rose® Data Modeler is on the job, database designers, business analysts, and developers can all work together in one tool and one language.

Historically, database designers and developers have faced a common problem. They both worked towards the same goal, but often in very different ways. Database designers used ER notation and focused on the database. Developers, on the other hand, used UML-based tools, if any, and worked on the application. The teams were working in different environments, even though they shared a single, common goal — solving a business problem with applications and databases. Because they worked in different environments, they couldn't easily share information or map objects to data models.

Visual Modeling for the Entire Team

The solution to this problem is to give database designers, analysts and developers access to a single tool, with a shared notation — IBM Rational Rose Data Modeler. Rational Rose Data Modeler makes it possible for database designers, analysts, and developers to work together, capturing and sharing business requirements, and tracking them as they change throughout the development process.

Unlike traditional data modeling tools, IBM Rational Rose Data Modeler is a unique UML-based data modeling tool



IBM Rational Rose Data Modeler features UML Extensions supporting database modeling and design: Identifying and non-identifying relationships, tables, columns including primary, foreign and primary/foreign keys, constraints, triggers and indexes, and more.

that brings together database designers, business analysts and developers — anyone who needs to understand the constructs of the databases and how they interact with, and map to, the application.

With UML, IBM Rational Rose Data Modeler allows communication to flow more freely and breaks down the barriers between teams. It also offers database designers a more sophisticated modeling environment. With the data model in the UML, a database designer can capture information like constraints, triggers, and indexes directly on the diagram rather than representing them with hidden tagged values behind the scenes.

Powered by IBM Rational Rose

IBM Rational Rose Data Modeler leverages the tremendous power of IBM Rational Rose to tie all of the models together in a single language and tool. It provides the link between objects across models for a complete solution. A database designer benefits from the ability to easily communicate the data model to the developer who will implement the data access methods. And, he or she gets instant access to the developer's implementation model, making it easy to review and propose changes.

An application developer responsible for building data access methods can access both the object and data models, as well as vital information on how they relate and map, in a single tool. With this valuable information, the developer can make informed choices about how to build the data access.

Using the IBM Rational Rose Web Publisher, the entire team can unlock the full power of a model. They can share the models and the metadata beneath those models within the entire organization — even with those members of the team who don't own a copy of IBM Rational Rose.

Accelerate through Architectural Excellence

Projects move along faster with IBM Rational Rose Data Modeler because it lets users transfer between object and data models and take advantage of basic transformation types such as many-to-many relationships. IBM Rational Rose makes it easy to visualize how an entire application will lay out.

Rational Rose Data Modeler starts at the beginning with requirements. Leveraging the tools that make up IBM Rational Suite® AnalystStudio®, specifically IBM Rational® ClearQuest® and IBM Rational® RequisitePro® to manage change and requirements, the entire process from requirements to analysis to design can be accomplished. With the addition of Rational Rose Data Modeler in this toolset, you can visualize the process described and understand the impact of change. This helps the entire team understand exactly how all the pieces of development will work together. In addition, if a requirement changes at any time in during the lifecycle, it can easily be identified assessed and communicated through shared models to any team members who might be impacted by that change.

Key Data Modeling Features

- Object-relational mapping – tracks the migration of an object model to a data model. This form of mapping gives users a deep understanding of the relationships between the application and database keeping them both up to date with changes made during the development process.

- Schema generation – automatically creates database schema from a data model. The schema can be generated directly against the database or saved as a script file for future implementation. The schema can include views, storage, tables, columns, constraints, indexes, triggers, stored procedures, user defined data types, and more.

- Round trip engineering of object and data models - continues to keep everything neatly synchronized no matter where future changes are made. Using the transformation, either the data model or object model can be updated. Round trip engineering of the data model and database allows a user to create a data model based on the database structures or create a database based on the data model.

- Comprehensive database support – allows database designers to fully document their database. This includes drawing the model of what the database will look like, and generating the DDL to create the database.

- Compare and synchronize – keeps the data model and database synchronized. The ability to visualize the differences between the data model and database and then choose based on the difference whether to update the model or alter the database to keep them in sync after changes on either end.

- Domain support – allows database designers to create a standard set of user-defined data types and assign them to any column in the model. Properties of the domain including data types, null ability, default value, check constraint, uniqueness, and other information cascade to assigned columns. Taking advantage of IBM Rational Rose frameworks, the domains can be maintained by a standards group and deployed to all modelers when they begin creating new models.

- Alternate key migration – permits the database designer to choose to migrate a table's primary keys or other column(s) that take part in a unique constraint.

For more information about IBM Rational Rose Professional Data Modeler Edition visit us at: http://www.rational.com/products/rose/data_modeler/pdm.jsp

Accelerate Success with IBM Rational Services

Like all Rational software development tools from IBM Software Group, IBM Rational Rose Data Modeler is supported by an extensive, worldwide service organization. IBM Rational Services can help you build your team's capability through training, consulting services, and technical support. Our services organization offers over 60 courses and a variety of implementation and support plans to speed technology deployment and accelerate project delivery. Available where and when you need them; IBM Rational Services improve self-sufficiency as they build a foundation for continuous software development improvement.

Unify the Team with IBM Rational Suite

IBM Rational Rose Data Modeler is a member of the IBM Rational Suite product family, and is available in IBM Rational Suite® DevelopmentStudio, IBM Rational Suite AnalystStudio, and IBM Rational Suite® Enterprise Editions. Designed to unify software development teams, optimize practitioner productivity and simplify adoption, Rational Suite solutions provide a comprehensive software development platform for the cross-functional team.

SPECIFICATIONS

Microsoft Windows System Requirements

- *A Pentium-based PC-compatible computer system*
- *64 MB of RAM (128 MB recommended)*
- *200 MB of disk space*
- *An SVGA-compatible display (256 or more colors recommended)*
- *Any pointing device with at least two buttons*

Microsoft Windows Supported Platforms

- *Window XP Professional*
- *Microsoft Windows NT 4.0*
- *Windows ME*
- *Windows 98*
- *Windows 2000*

Supported Databases

- *Oracle 7.x, 8.x & 9i*
- *MS, SQL Server 6.5 & 7.x & 2000*
- *IBM DB2 MVS 5 & 6*
- *IBM DB2 UDB 5 & 6 & 7*
- *Sybase System 12*
- *SQL-92 for other DBs*

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