IBM

Rational® software

IBM® Rational Rose®

Highlights

■ *Model-driven development with the UML 1.4 support*

■ *Flexible implementation support—from modeling only, to design-level code generation, to fully-executable application generation*

■ *Round-trip engineering for Java, C, C++, Visual Basic, Ada, XML, CORBA/IDL, MIDL*

■ *Java synchronization can be automatic or on-demand*

■ *Integrates with leading IDEs*

■ *UML-based data modeling*

■ *Data model synchronization with leading database management systems*

■ *Gang of Four (GoF) patterns support for Java & Visual C++*

■ *Multi-user support*

■ *Web publishing and report generation*

IBM Rational Rose is a complete visual modeling solution that allows developers, project managers, engineers and analysts to visualize, understand, and refine requirements and architecture before committing them to code. Using a model-driven approach to software development ensures a scalable, flexible and reliable system that lets you build better software faster.

Model with the industry leader

The Unified Modeling Language (UML) has become the software industry's standard notation for representing software architecture and design models. Rational led the development of the UML so that software professionals could model their analysis and design activities in a uniform, consistent manner. With the UML, you and your team have a common way to communicate and document your software.

To make the UML more practical to work with, we created the industry-leading and award-winning Rational Rose family of visual modeling and development tools. The International Data Corporation (IDC) recognizes Rational Software as the industry's leader for Analysis, Modeling, and Design (AMD) tools.

Only Rational offers the combination of thought leadership and market-leading tools for helping you successfully apply model-driven development with the UML.

Develop solid code faster

Rose gives you the ability to create robust, component-based architectures that help you isolate where changes should occur. And when you make those changes, the architecture insulates other parts of the software from adverse effects. Rational Rose lets you implement change in a predictable, controlled manner, allowing you to develop solid code faster.

A solid architecture leads to solid code. Automated code generation leads to solid code faster. Rose Enterprise automates the generation of design-level code. IBM Rose RealTime goes further and generates libraries, make files, and fully executable applications

from details found in the class model, including state machines. Both editions synchronize updates to your model and code, keeping your architecture and its implementation solid in the midst of continuous change. But even well-designed architectures need to have their components continuously tested. Rational Rose Enterprise and Rose RealTime include a special feature, IBM® Rational® QualityArchitect, which allows you to visually test software components quickly and easily, long before system integration. QualityArchitect generates test drivers and stub code directly from your Rose model, greatly reducing the time needed for testing and re-testing components.

Only Rational combines component-based architecture, robust code generation, and model-based component testing into a single tool that allows you to write higher quality code faster.

Make developing on a team easier
Rose unifies your development team though UML models that provide visual representations of the software. Model-driven development helps integrate your design and implementation environments and keep all staff members working together.

Rational Rose allows developers to use one modeling tool for all of their projects. Rose offers seamless integration with all of the leading IDEs, programming languages, database systems, and associated technologies. Once familiar with Rational Rose, staff members can move across projects with ease, allowing them to quickly become productive on all of their development efforts.

Rational Rose provides web publishing and other reporting features to communicate your design to others inside or external to the project. Rose integrates with Rational RequisitePro so that you can keep the textual details of use case models

managed in requirements documents and a common database. Rose integrates with IBM® Rational® ClearCase® so that you can version control you model elements in the same way you control your source code. And to make Rose accessible as part of an overall solution, we package the product into several editions of Rational Suite.

No one better equips you with modeling tools that integrate across the lifecycle. Rational Rose makes working on a development team easier, allowing you to build better software faster.

For more information, please go to http://www.rational.com/rose to learn more, view online demonstrations, and download/order a Solution CD that includes an evaluation version of Rational Rose.

Feature Summary for the Rational Rose Product Family

The features of the various editions of the Rose product family are summarized in the table below:

	Rose Enterprise	Rose Professional	Rose Modeler	Rose UNIX/Linux	Rose RealTime
UML & Modeling Support					
UML 1.4 Support	✓	✓	✓	✓	✓
Structure Diagrams					✓
Data Modeling	✓	Data Modeler Edition			
Gang-of-Four patterns	✓	Java Edition		Java only	
J2EE patterns	✓	Java Edition			
Language & Implementation Support					
J2ESE RTE	✓	Java Edition		✓	✓
J2EE RTE	✓	Java Edition		✓	✓
J2ME RTE					✓
J2EE Deployment of application Server	✓	Java Edition			
Visual Basic RTE	✓	VB Edition			
Visual C++ RTE	✓	C++ Edition			NT Only
C and C++ Full declaritive and structural definition (algorithmic) code generation					✓
C and C++ Behavioral modeling using state diagrams with full code generation					✓
ANSI C++ RTE	✓	C++ Edition		✓	
ANSI C code generation	✓				✓
Ada RTE	✓	Ada Edition		✓	
ASP and JSP RTE Web modeling	✓				
COM Component Reverse Engineering	✓	VB/C++			
CORBA/IDL RTE	✓	Java/C++/Ada			
MIDL RTE	✓				
XML DTD RTE	✓			✓	
Host and Target UML model execution and debugging					✓
Auto Synchronize Source and Model File	Java/ANSI C++	Java/ANSI C++		Java/ANSI C++	
Code Templates	✓	VB/C++			
Rational Quality Architect	✓				RQA RT
Multi-Model					
Multi-Model Support	✓	✓	✓	✓	✓
Model Integrator	✓	✓	✓	✓	✓
Publishing/Reporting					
Web Publisher	✓	✓	✓	✓	✓
Basic Report Generation	✓	✓	✓	✓	✓
General					
Partner Add-Ins Support	✓	✓	✓	✓	✓
Rose Extensibility Interface	✓	✓	✓	✓	✓
Rose RealTime Extensibility Interface					✓
Integrations with Other Rational Products					
Test RealTime Integration					✓
ClearCase Integration	✓	✓	✓	✓	✓
Apex Integration	✓	Ada Edition		UNIX only	
Integrations with Other Products					
Visual SourceSafe	✓	✓	✓		NT Only
IBM VisualAge for Java	✓	Java Edition			
WebGain Visual Cafe	✓	Java Edition			
Sun Forte for Java	✓	Java Edition		Linux/Solaris	
Borland JBuilder	✓	Java Edition		Linux/Solaris	
Microsoft Visual Studio 6	✓	VB, C++ Editions			

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SPECIFICATIONS

Hardware and Software Requirements

A Pentium-based PC compatible
computer system

- *600 MHz PIII*
- *512 MB of RAM*
- *400 MB of disk space*

Operating System

- *Windows NT 4.0, Service Pack 6a*
  and SRP(Security Rollup Package)
- *Windows 2000 Professional, Service*
  Pack 2 or Service Pack 3
- *Windows XP Professional*

Supported Databases

- *IBM DB2 Universal Database 5.x,*
  6.x & 7.x
- *IBM DB2 OS390 5.x & 6.x*
- *MS SQL Server 6.x & 7.x & 2000*
- *Oracle 7.x, 8.x, and 9.x*
- *Sybase System 12*

Note: To reverse engineer Oracle and
DB2 databases using Rose, an RDMS
client must be installed.

UNIX/Linux System Requirements

- *512 MB of RAM*
- *400 MB of disk space*
- *Server: A midrange of UNIX server*
  or client UNIX workstation
  (SparcStation 20 and above)
- *Client: Any UNIX workstation or PC*
  if running eXceed version 6.1 or higher
  to display X windows
- *Display: X Window Color*

Display

- *Disk Space: 270 MB plus 1-3 MB*
  per Rose model

UNIX/Linux Supported Platforms

- *Linux x86 (Red Hat 6.2, 7.0, 7.1)*
- *SUN Solaris 2.6, 2.7, 2.8, 2.9*
- *HP-UX 11.11i*
- *SGI IRIX 6.5.5*

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