

## IBM Rational Rose XDE Developer

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### Highlights

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- **Model-driven development with UML support**
- **Roundtrip engineering Java, C++, and Visual Studio languages**
- **Automatic or on demand model-code synchronization**
- **User-definable patterns and code templates**
- **Runtime analysis including visual execution trace**
- **Assisted modeling**
- **Multiple model support for Model-Driven Architecture**
- **Free-form diagramming**
- **Logical and physical database design**
- **Web publishing and reporting**

IBM® Rational® Rose XDE™ products offer software designers and developers a rich set of model-driven development and runtime analysis capabilities for building quality software applications. Rational Rose XDE Developer editions offer complete visual design and development environments that address the needs of organizations targeting both J2EE-based, C++-based, and .NET-based systems. Our solution allows users to work inside the included Eclipse IDE, or it can be installed into the WebSphere® Studio Application Developer and Integration Edition IDEs, and Microsoft® Visual Studio™ .NET IDE. Rational Rose Enterprise is also included to integrate with Microsoft Visual Studio and other leading non-Eclipse Java™ platform IDEs. The IBM Rational Rose XDE products extend your development environment or integrate with the one you are already using.

The IBM Rational Rose XDE product family combines the rich heritage of the award-winning IBM Rational Rose family with IBM Rational XDE, which extends your IDE with the world's most advanced software modeling capabilities. Though packaged and purchased together, Rose and XDE are installed separately. Use the one that best fits your needs.

### Model with the industry leader

The Unified Modeling Language (UML) has become the industry's standard notation for software architecture and design. 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 XDE family of visual modeling and development tools. IDC recognizes Rational Software as the industry's leader for Analysis, Modeling, and Design (AMD) tools.

The Rational Rose XDE family provides all of the essential elements of UML modeling in one robust product. Applicable to analysts, architects, designers, and implementers, Rational Rose XDE gives you and your team common tools for creating and maintaining UML models of your software project. They support forward and reverse engineering of code and both automatic and on demand modes for round-trip engineering that allow you to control if, when, and how your models are synchronized with your code.

Everyone has good ideas. Having a common modeling language and an easy-to-use tool can document and refine those ideas into artifacts that can be communicated and shared with the whole development team. Rational unifies your team with common modeling technology so that you can build better software faster.

### **Do more in your IDE**

Traditional lifecycle support tools are loosely coupled to your development environment. They have their own user interface, requiring you to ALT-Tab back and forth between two environments. This makes for an awkward and unproductive user experience.

The IBM Rational development solution changes all of that. Rational Rose XDE Developer provides a visual design and development environment inside the IBM WebSphere Studio Application Developer and Integration edition IDEs, the Microsoft Visual Studio .NET IDE, or the included Eclipse IDE, giving the developer a single user experience.

In addition to visual modeling in your IDE, Rational PurifyPlus, included in Rational Rose XDE Developer Plus, offers a set of runtime analysis tools that detect memory errors, highlight application performance bottlenecks, and identify untested code. These features help you find problems in your code and fix them before they surface in your customer's environment. And since PurifyPlus is also integrated directly into WebSphere Studio and Microsoft Visual Studio .Net, you can easily analyze your code for reliability and performance and never leave your development environment.

Only Rational makes visual modeling and runtime analysis an integral part of your development environment, allowing you to do more work right inside your IDE.

### **Develop solid code faster**

Rational Rose XDE Developer provides unique code template and patterns features that allow both code- and model-level reuse to speed your development. It also has special "assisted modeling" capabilities that allow you to create and edit UML models in terms that you know well from your IDE and its languages. In addition, Rational PurifyPlus, in Rational Rose XDE Developer Plus, offers a set of runtime analysis tools that detect memory errors, highlight application performance bottlenecks, and identify untested code. These features help you find problems in your code and fix them before they surface in your customer's environment.

And so you'll never have to go it alone, the Rational Developer Network<sup>SM</sup> (RDN) serves as your online extended development community. The RDN provides reusable patterns and assets, white papers, discussion forums, and a wealth other technical resources. It also includes a set of Rational Development Accelerators where a variety of reusable assets help further speed up your development. With the RDN, you'll never have to start a project from a blank slate.

## IBM Rational Rose XDE specifications

Product Name	Includes
IBM Rational Rose XDE Modeler	Rational Rose Modeler, Rational XDE Modeler
IBM Rational Rose Data Modeler	Rational Rose Professional Data Modeler
IBM Rational Rose XDE Developer for Visual Studio	Rational Rose Professional C++, Rational Rose Professional Visual Basic, Rational XDE Developer - .NET Edition
IBM Rational Rose XDE Developer for the Java Platform	Rational Rose Professional J, Rational XDE Developer - Java Platform Edition
IBM Rational Rose XDE Developer Plus	Rational Rose Enterprise, Rational XDE Developer Plus - .NET and Java Platform editions (Includes Rational PurifyPlus and Visual Trace)

Product Name	IDE Included	IDE Integration	Languages	Business Modeling	Software Architecture & Design	Coding / Construction	Data Modeling	Runtime Analysis and Visual Trace
IBM Rational Rose XDE Modeler	Eclipse	IBM WSSAD* IBM WSSAD IE** MS VS .NET***	N/A	✓	✓			
IBM Rational Rose Data Modeler	N/A	N/A	N/A	✓	✓		✓	
IBM Rational Rose XDE Developer for Visual Studio	N/A	MS VS .NET**** MS VS****	C#, VB .NET, VB, MSVC++, ANSI C++, Managed C++	✓	✓	✓	✓	
IBM Rational Rose XDE Developer for the Java Platform	WebSphere Workbench	IBM WSSAD*, IBM WSSAD IE**	Java	✓	✓	✓	✓	
IBM Rational Rose XDE Developer Plus	WebSphere Workbench	IBM WSSAD* IBM WSSAD IE** MS VS .NET**** MS VS****	Java, C#, VB, VB.NET, MSVC++, ANSI C++, Managed C++	✓	✓	✓	✓	✓

\* IBM WebSphere Studio Application Developer

\*\* IBM WebSphere Studio Application Developer Integration Edition

\*\*\* Microsoft Visual Studio .NET

\*\*\*\* Microsoft Visual Studio

<b>Feature Summary for the Rational Rose XDE Product Family</b>					
<b>X=XDE, R=Rose, P=PurifyPlus</b>	<b>Rose XDE Modeler</b>	<b>Rose Data Modeler</b>	<b>Rose XDE Developer for Java</b>	<b>Rose XDE Developer for Visual Studio</b>	<b>Rose XDE Developer Plus</b>
<b>EIT Architect</b>			<b>EIT Developer</b>		
<b>Includes</b>	Rose Modeler XDE Modeler	Rose Prof. Data Modeler	Rose Prof. J XDE Developer for Java	Rose Prof. C++  Rose Prof. VB XDE Developer for VS .NET	Rose Enterprise XDE Developer Plus - Java XDE Developer Plus -VS.NET PurifyPlus
<b>Supported IDEs</b>					
Standalone (not Eclipse)	R	R	R	R	R
WebSphere Workbench (incl.)	X		X		X
Integrates with WebSphere Studio Application Developer, and Integration Editions thru 5.1.x			X		X
Integrates with Eclipse 2.1.x	X		X		X
MS Visual Studio .NET 7.0, 7.1	X			X	X
Microsoft Visual Studio 6				R	R
<b>Diagrams</b>					
Free-Form	X		X	X	X
Class, Component, Deployment, Sequence, Statechart, Use Case	XR	R	XR	XR	XR
Collaboration	R	R	R	R	R
Physical Storage / Deployment			X	X	X
Physical Data / Tables		R	X	X	XR
<b>Domains - Windows</b>					
UML 1.3	R	R	R	R	R
UML 1.4	X		X	X	X
Data Modeling		R	X	X	XR
C#, VB .NET, Managed C++				X	X
Visual C++ 6.0				XR	XR
ANSI C++					XR
J2SE, J2EE			XR		XR
JSP			XR		XR
Ada, CORBA IDL & MIDL, XML DTD					R
<b>Model-Driven Development</b>					
Reusable Asset Specification	X		X	X	X
Pattern Engine	X		X	X	X
Database Design Patterns			X	X	X
GOF Patterns			XR	XR	XR
Code Template Engine			X	XR	XR
Assisted Modeling			X	X	X
Unlimited Undo	X		X	X	X
<b>Build and Deployment</b>					
J2EE deployment			XR		XR
<b>Runtime Analysis and Testing</b>					
Memory Leak detection					P
Runtime Visual Trace - Sequence Diagrams					X
Rational Quality Architect					R
<b>Team Support</b>					
Multi-Model support	X		X	X	X
Merge Changes	XR	R	XR	XR	XR
Repository / CMt	XR	R	XR	XR	XR
<b>Documentation / Reporting</b>					
SoDA Integration	XR	R	XR	XR	XR
Print Diagrams	XR	R	XR	XR	XR
Web Publishing and Report Generation	XR	R	XR	XR	XR
<b>Process Guidance</b>					
RUP Config for Java & C++			RUP		RUP
RUP Config for .NET				RUP	RUP



## Specifications

### Hardware and Software Requirements

#### Operating System

- Windows NT 4.0 Workstation, Service Pack 6a
- Windows 2000 Professional, Service Pack 2 or Service Pack 3 (Recommend: Service Pack 2)
- Windows 2000 Server and Advanced Server, Service Pack 2
- Windows XP Professional

#### Supported IDEs

- Eclipse Java platform IDE 2.0.x, 2.1.1/2
- IBM Websphere Studio Application Developer 5.0.x, 5.1.1/2
- IBM Websphere Studio Application Developer Integration Edition 5.0.x
- IBM Websphere Studio Enterprise Developer 5.0.x
- Microsoft Visual Studio .NET 2002, 2003

#### Processor

- 450 MHz PII
- Recommend: 700 MHz

#### Available RAM

- Minimum: 256 MB minimum for Rose, or 512 MB for XDE
- Recommend: 512 MB for Rose, or 1 GB or more for XDE

#### Available Disk Space

- 400 MB installation directory per product
- 50 MB workspace
- Recommend: 2-4 GB

#### Configuration Management

- ClearCase 2002.05, 2003.06
- ClearCase LT 2002.05, 2003.06
- Microsoft Visual SourceSafe 6.0c - Supports the SCC interface

#### EJB and Web Modeling and Deployment Platforms

- BEA WebLogic 6.1, 7.0, 8.0
- IBM WebSphere 5.0
- Sun J2EE Reference Implementation 1.3
- Web Server (Apache) 1.3

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Software Group  
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U.S.A.

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04-04  
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