Rational. software



## **IBM Rational Professional Bundle**

Highlights	The IBM® Rational® Professional Bundle solution drives application devel-
Enables you to design, develop Features UML 2 m	opment that is optimized for IBM
and test applications more and transformatic productively than ever and forward and r	and it provides strong support for
<ul> <li>Is designed for optimization</li> <li>with IBM middleware</li> <li>Offers manual tes and execution, au</li> </ul>	<i>t generation</i> ogy platforms. While the software effectively supports geographically
Enables you to work within functional regress the open and extensible load and performa Eclipse environment	<i>ion testing, and</i> distributed teams through a flexible, floating license model, it also sup-
<ul> <li>Offers flexible installation and ease-of-use features, Web and</li> <li>Provides one bun tools with one lice maintenance agree</li> </ul>	authorized user license model.
rich client rapid application offers flexible lice development, and enables easy your needs transition from mainframe to	nsing to meet Developers working in the C++ lan- guage can develop applications in the same environment used for devel-
Java EE development	Architect - C:Wo

<mark>▶ • Q, • | ♥ • | 目 | ≁ | ◎ • | ● | </mark>⊉ • Q • ♡ ♥ ♥ • ○ ୭ ♥ B I | A - ℬ - J - → • | C| ※ • 애 • ╠ • | C| | # ★ ⊟ • ■ • ∰ • | D| Ⅲ 📬 • 🔛 💩 i 😭 i 🕼 i 📑 💽 Modeling [] Requirement D3 🛿 🖓 Package Ex... 🖓 🗖 🗋 \*PiggyBank Design... 📄 \*PiggyBank Design... \*PiggyBank Design... »5 \*Project Ex... Pigo E 😓 ▽ PiggyBank Design Model \* Palette Select Key Business Layer Elements ogydauto besign Model \* m Pogydauto besign Model \* m Pogydautor besiden at benol Pogydautor b Zoom itso.ad.citybank Design Elements Note Deployment «service» Class 🚜 cashCheck ( ) Gan clieb()
getAccountsByCustomerid()
getBalance()
getBalance()
getCustomerById()
for transfer() Class Interface A Generalizatio «entity» Customer «entity» DoDAF PiggyBankImplementationDe 1 📬 name : String PiggyBankImplementationDe PiggyBankImplementationDe PiggyBankImplementationDe PiggyBankImplementationDe 🕞 balance : Integer - Use Case Component Composite Structu Instance < · > netric Shar PiggyBankEJBCustomerTO Java Outline 📲 Inheritance Explorer 🛛 📑 id : String Web Service E · 2 1 1 1 ~ ⊖C/C++ entity» Account Properties 🔀 Tasks Console Bookmarks Process Advisor <Freeform> PiggyBank Design Model::PiggyBa...cturalLayers::Key Business Layer Elements General Rulers & Grid ⇒8 € 1%.• Fonts and Colors: Appearance Tahoma **v** 9 **v** Cale & accountNumber Cale balance Cale the Customer < Advanced B I A 2 3

developers can use Unified Modeling Language (UML) class diagrams to provide abstract views of C++ classes.

For testing Microsoft<sup>®</sup> .NET applications, the IBM Rational Professional Bundle solution includes testing tools that help teams automate the validation of Microsoft .NET Windows<sup>®</sup> Forms, WebForms and Web services functionality and scalability. The bundle also includes an advanced Microsoft Visual Studio .NET software-based functional testing tool that uses Microsoft Visual Basic .NET code as the test script language.

# Includes the tools you need to build and test IT applications

The IBM Rational Professional Bundle package includes the desktop tools your enterprise needs to design, develop and test Java EE, portal and service-oriented architecture (SOA) applications on both the Microsoft Windows and Linux<sup>®</sup> operating platforms; and it enables you to test Microsoft .NET applications.

A single-purchase vehicle with just one maintenance contract to manage, the Rational Professional Bundle offering provides the greatest flexibility for team members to install and use the tool or tools they need to do their jobs—even as roles or needs change. The tools included in the IBM Rational Professional Bundle package are architected for ease of adoption, because all of them are installed in an Eclipse 3.2 shell. The Rational Professional Bundle package includes the Rational development and testing tools you need to build and deploy effective and robust applications.

IBM Rational Software Modeler software: UML-based visual modeling and design

The Rational Software Modeler product enables architects, systems analysts, designers and others involved in development to specify and communicate information about development projects from several perspectives and to a variety of stakeholders. The Rational Software Modeler product includes extensive support for the UML as well as capabilities that let development team members leverage one another's work, apply best practices, develop sound system architectures and increase overall productivity.

In addition to rich support for modeling with the UML, Version 2.1.1 (UML 2), a key feature of the Rational Software Modeler product is the flexible model management approach that supports parallel development and architectural refactoring. You can reuse model fragments in new models; split and combine models; independently version control model fragments; and graphically compare and merge models or model fragments. Model-to-model and model-to-code transformations, including reverse transformations, are available to bridge the gap between models and code. And you can apply design patterns—and/or author your own—to ensure that conventions and best practices are followed. Together, all of these features provide a robust tool set to help ensure that development projects are based on a sound architecture—even as the architecture evolves.

IBM Rational Software Architect software: advanced model-driven development The IBM Rational Software Architect product leverages model-driven development with the UML for creating well-architected applications and services. This advanced model-driven development solution helps with understanding, designing, managing and evolving applications across the team, across the world and across different areas of technical expertise. Many powerful visual modeling and editing features—all built on top of the open Eclipse framework—help improve productivity, enhance architectural control and ease the design-to-code experience for Java/Java EE, Web services, SOA and C/C++ applications.

Key features include the flexible management of modeling resources to facilitate parallel development and architectural refactoring. For example, you can leverage the Rational Software Architect tool to reuse model fragments in new models, compare and merge models or model fragments, and more. The software includes Java structural review/control capabilities and flexible modeling support capabilities that use UML-like notations. Forward and reverse transformations bridge the gap between the UML and development technologies including Java. Transformation features help ease the transition from one type of model to another. And, all of the features of the **IBM** Rational Application Developer software for visual development are included as well.

### IBM Rational Application Developer software: comprehensive Eclipse-based visual construction

Rational Application Developer software is a flexible product that helps Java developers rapidly design, develop, assemble, test, profile and deploy high-quality Java/Java EE, portal, Web, Web services and SOA applications. Offering full support

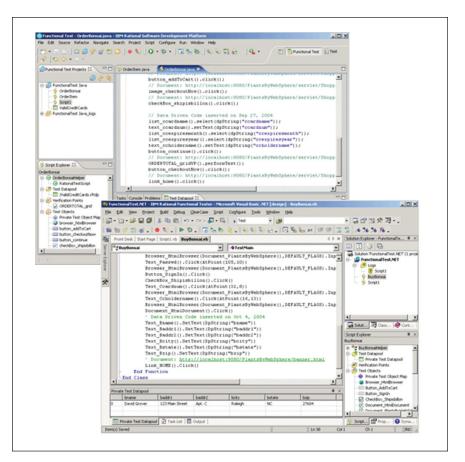


for the Java EE programming model, Rational Application Developer software features visual tools that help reduce manual coding, making development easier for those less familiar with Java technology.

Among its key features are extended support for the open and extensible Eclipse 3.2 platform. The Rational Application Developer product is integrated with and optimized for IBM WebSphere Application Server and IBM WebSphere Portal Server software, and it includes test environments for both. Autosynchronized code modeling is a major productivity feature that lets developers work in either visual mode or code mode, automatically updating changes in the other. For SOA and portals/portlets, the Rational Application Developer software features robust capabilities and automated development techniques that generate key components. For Web applications, easy-to-use wizards bring virtually all aspects of Web development—HTML, JavaServer Pages (JSP), JavaServer Faces (JSF) and servlets—into a common interface. IBM Rational Functional Tester software: flexible, robust automated functional regression testing

IBM Rational Functional Tester software enables both novice and expert testers to automate the tedious, errorprone tasks of functional regression testing. With this single tool, testers can troubleshoot a wide variety of application types such as Web-based, Java and Microsoft Visual Studio .NET applications. The Rational Functional Tester test recorder capability enables testers to create tests simply by recording their interactions with the application, thereby reducing the need for programming. And the robust test playback environment helps improve test script resiliency.

Key features include support for several scripting languages. An industrialstrength editor for test authoring and customization can be used in the Java language in the Eclipse environment, or in the Microsoft Visual Basic .NET language in the Visual Studio .NET environment. Data-driven testing is wizard based, making advanced automation techniques accessible even to the novice tester.



The patented IBM ScriptAssure<sup>™</sup> technology built in to the Rational Functional Tester software and the pattern-matching capabilities improve test resiliency and reduce future test maintenance needs as the application user interfaces change. IBM Rational Manual Tester software: from ad hoc to controlled and efficient manual testing

IBM Rational Manual Tester software is designed to support the diverse skill sets of the people often tasked with manual testing—business analysts, subject matter experts and testers. You can create detailed robust manual tests that are easy for the test executor to follow. The Rational Manual Tester product also promotes the use of linked content, which is the ability to mark test steps as reusable components that can be shared across multiple tests. The advantages are time and cost savings, as well as greater control over test script quality and consistency. The Rational Manual Tester product helps reduce the likelihood of human error in the areas most prone to mistakes data entry and data verification.

Key features include a rich text editor for authoring detailed manual tests. Tests can contain rich text (fonts. bold, etc.), images, file attachments and verification points to capture observations during testing. Verification points, data collection fields and results are highly customizable to fit each team's processes. Assisted data entry and data verification enable the tester to store critical data as part of the test instructions, helping to speed the process and reduce human error. Shared test content enables reuse of common test steps for more consistency and less test maintenance.

IBM Rational Performance Tester software: performance testing for Web applications A multiuser testing tool for validating Web application scalability before deployment, the Rational Performance Tester product is designed to provide productivity from the start, where "codefree" tests are represented in an intuitive graphical format. Necessary parts of realistic performance testing, complex data variation and synchronization are automatically managed. Rational Performance Tester software has low hardware resource requirements, which means you can achieve greater testing scalability with lower hardware expenses. The Rational Performance Tester software helps you guickly identify and drill down to the root cause of performance problems.

Representing tests as a sequential flow of Web pages, the graphical test tree view features a user interface supporting advanced capabilities such as data pooling, data correlation, looping and conditional events with no coding required. Advanced users have the ability to write custom test code to handle unique needs in the Java programming language. Powerful, intuitive, built-in reports are presented in near real time, giving the tester instant feedback on test progress and application performance. Hardware resource and application server software monitoring enables testers to quickly pinpoint the software module and even the line of code causing the performance bottleneck.

# Designed for applications targeting IBM middleware

IBM WebSphere Application Server middleware is a high-performance and extremely scalable transaction engine for dynamic business applications. IBM Rational Professional Bundle software lets you deliver a rapid and efficient response to business needs through the ability to develop, test and deploy new business applications for this middleware without having to worry about which practitioner tools you need.

Several of the products in the bundle include test environments for the IBM WebSphere Application Server product, Versions 5.0, 6.0 and 6.1. Additional capabilities help to automate the deployment process. For example, you can automate server configuration processes to suit the application under test, and provide high levels of compatibility with the IBM WebSphere Application Server product. In addition, the testing tools included in the IBM Rational Professional Bundle product support the testing of applications on any Web or application server.

IBM Rational Professional Bundle software includes highly productive tools for building applications that target the WebSphere Portal Server product. IBM WebSphere Portal, Version 5.1 software offers a single point of personalized interaction with applications, content, processes and people for a unified user experience. It provides a flexible, open and extensible framework to build successful business-to-employee (B2E), business-to-business (B2B) and business-to-consumer (B2C) portals.

The IBM DB2 9 product is IBM's relational database management system for the IBM AIX<sup>®</sup>, Linux, Hewlett-Packard-UNIX, Sun Microsystems and Microsoft Windows platforms. Tools across the IBM Rational Professional Bundle product provide wizards to help ease the process of connecting applications to DB2 data sources.

### Functions as an integral part of the IBM Rational Software Delivery Platform

The IBM Rational Professional Bundle package is an integral component of the IBM Rational Software Delivery Platform, a complete and powerful solution for software system creation and application lifecycle management. This lifecycle support helps unify team members by enabling them to share information effectively with one another and from tool to tool.

The IBM Rational Software Delivery Platform spans Windows, UNIX<sup>®</sup>, Linux, mainframe and embeddedsystems platforms. It supports a wide spectrum of programming languages, integrated development environments (IDEs) and cross-development environments for real-time-systems and embedded-systems developers.

### Integrates with the IBM Rational Team Unifying Platform solution

The IBM Rational Professional Bundle package integrates tightly with the IBM Rational Team Unifying Platform<sup>™</sup> solution to help the cross-functional teams of analysts, architects, developers and testers productively complete development projects—from requirements to release. It provides common access to development assets (including requirements), communication alerts and workflow processes.

#### Integrates with IBM Rational ClearCase software

Large-scale or distributed teams can achieve enhanced collaboration capabilities by using the IBM Rational Professional Bundle software with the IBM Rational ClearCase<sup>®</sup> change management solution. IBM Rational ClearCase software provides integrated change tracking with software asset management and scales to meet the needs of any size team, including those that are geographically distributed. In fact, several of the products in the IBM Rational Professional Bundle package include IBM Rational ClearCase LT software, IBM's robust software configuration management product.

# IBM Rational services round out the solution

A variety of service offerings are available to complement IBM Rational tools and best practices to help you build software development capabilities in a combination and process that are right for your business. Our services are designed to help you build team skills, improve productivity when implementing a new solution, and maximize the return on your investment in IBM Rational tools.

- IBM developerWorks®: Rational is the technical resource for the community of development professionals using or evaluating IBM Rational tools and best practices. It offers a variety of downloads, resources, discussion groups and education to help you utilize IBM Rational solutions to your best advantage.
- *IBM Rational software training* offers a curriculum that includes courses covering all software development capabilities. Both instructor-led and Web-based training provide a variety of options to suit your organization's education needs.
- The IBM Rational worldwide staff of professional services consultants bring years of experience to help you lay a solid foundation for successful software development projects. You can engage Rational professional services on large-scale customized consulting projects that are tailored to meet your organization's unique needs, or you can engage your local account team for short-term assistance with a single challenge.

- Several types of packaged services are also available, including offerings that provide an objective assessment of your software development capabilities; help you deploy a new tool or methodology; or enable you to produce tangible assets through a facilitated workshop.
- IBM Rational customer support helps ensure that your project keeps moving forward with the assistance you need, when you need it. These maintenance programs offer efficient problem resolution with both online access to tens of thousands of technical notes, patches and upgrades, as well as direct access to support engineers. IBM Software Maintenance is the standard maintenance offering, and IBM Technical Support Account Services can supplement this, according to your business requirements.

#### About IBM Rational software

Rational software from IBM helps organizations automate and integrate the core business process of software development. Rational products, services and best practices power the IBM Rational Software Delivery Platform, the premier platform for teams that discover, develop and deploy software assets in business applications, embedded systems and software products. This modular and complete solution enables teams to adopt a business driven development approach based on open standards, including the Eclipse open source framework. The result is differentiated business performance.

#### For more information

To learn more about the IBM Rational Professional Bundle package, visit:

#### ibm.com/rational/adc



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