

# **About the IBM Software Development Platform**



## **Highlights**

- Provides a comprehensive set of products and proven best practices for teams who build, extend, modernize, integrate and deploy software
- Automates and integrates the business process of software development, helping organizations become more focused, responsive and resilient
- Provides customers and business partners with an application development environment that is modular and scalable to meet their evolving needs

#### Software: Key to an on demand world

Today's on demand enterprise thrives on continuous business differentiation, driven by business processes that can consistently deliver greater business innovation and improved operational efficiency. To get there, organizations are increasingly leveraging the power of software. Whether applied to a legacy system transformation, packaged application implementation or new development project, software development allows organizations to codify their unique business knowledge and set their products and services apart from the competition.

#### The high rate of failure

Software development is a teambased activity, requiring the collaboration of line-of-business stakeholders, software development teams and operations teams, all working towards a common goal. But all too often, these extended teams fail to produce meaningful results. Often the best business ideas fail to be discovered or communicated. But even when they are, execution failures are rampant, causing nearly 60 percent of projects to miss their mark. The resulting inefficiencies cause delays, frustration and ultimately, a loss of business agility.

# A strategic business process

By recognizing software development as a strategic business process—a series of interrelated activities that can be integrated and automated over time—organizations can transform their software development activities into a source of strategic advantage. In so doing, they join an elite rank of

organizations that have successfully embraced a business-driven software development process that yields both top-line business benefits and bottom-line productivity improvements.

#### A proven platform for success

For business and technology leaders who recognize the importance of software development in creating business value, IBM offers a proven foundation: the IBM® Software Development Platform. This complete and configurable solution automates software development by integrating disconnected development processes into a unified whole, with a common toolset, vocabulary and workflow that can be shared by all team members.

The IBM Software Development Platform is:

- Complete. It supports every member of your development team as well as business, technology and operations stakeholders to drive business value throughout your software lifecycle.
- Open and extensible. You can leverage existing assets and choose from a wide array of partner technologies, including Microsoft\* .NET.
- Modular. You can choose the exact tools and adoption path that best fit your needs.
- Proven. It's based on tools and best practices that are the choice of thousands of high-performance software teams.

### The Eclipse advantage

The IBM Software Development Platform is built on a foundation that enables unprecedented automation and team collaboration throughout the development lifecycle: the Eclipse universal framework. Eclipse is both an open source software development project—with over 100 active vendor participants—and a rich foundation for providing shared services across your tooling environment. Eclipse enables role-based user interfaces that provide each member of your team with a custom view of common business and development assets. With Eclipse at its core, the IBM Software Development Platform is supported by a broad community of partners and enriched by a vibrant tools and services ecosystem.

# Accelerate success with IBM Software Services

The IBM Software Services teams are dedicated to helping organizations improve their software development capability and accelerate project

success. Our services encompass worldwide consulting, deployment and QuickStart packages along with a wealth of knowledge and training resources.

#### **Products**

The IBM Software Development Platform spans Windows®, UNIX®, Linux and mainframe platforms and supports a wide spectrum of programming languages, integrated development environments (IDEs) and more than 100 cross-development environments for real-time and embedded system developers. With 18 core products and dozens of complementary and technologyspecific extensions, the IBM Software Development Platform allows you to choose the optimal solution for your team and technology environment.

Requirements and Analysis	
IBM Rational® RequisitePro®	Manage requirements and analyze project scope
IBM Rational Rose® Data Modeler	Design and model database schema to support your enterprise architecture
IBM Rational Rose XDE™ Modeler	Model software architectures and leverage patterns and templates using the industry-standard Unified Modeling Language (UML) notation
IBM WebSphere® Business Integration Modeler	Define, model, analyze, simulate and report business processes, and extend IBM WebSphere MQ Workflow with business tools to visualize process impact
IBM WebSphere Business Integration Monitor	Monitor business processes, in real time and using visual dashboards, for improved business decision-making
IBM WebSphere Studio Asset Analyzer	Maintain and extend existing assets through impact analysis and enhanced application understanding

Design and Construction		
IBM DB2® Information Integrator	Develop integrated, real-time access to diverse distributed information	
IBM Lotus® Domino® Designer	Rapidly create multi-platform applications to automate business processes and increase workflow efficiency	
IBM Lotus Enterprise Integrator for Domino	Provide real-time data access, bi-directional data movement, exchange, transformation and synchronization between applications and data sources	
IBM Rational Rapid Developer	Develop and deploy n-tier Java™ 2 Enterprise Edition (J2EE) and Web applications using architected rapid application development techniques	
IBM Rational Rose Technical Developer	Develop complex Java, C/C++ and embedded software using model-driven development techniques	
IBM Rational Rose XDE Developer family	Perform model-driven development and run-time analysis within your Eclipse, IBM WebSphere Studio or Microsoft Visual Studio development environment	
IBM Rational Suite® Development Studio for UNIX	Implement a full lifecycle solution for building software on UNIX platforms	
IBM Rational Suite for Technical Developers	Implement a full lifecycle solution for building complex software for real-time and pervasive devices	
IBM WebSphere Development Studio for iSeries™	Create Web and J2EE applications with an advanced IDE for iSeries	
IBM WebSphere Host Access Transformation Services	Quickly transform 3270 and 5250 applications for the Web	
IBM WebSphere Studio Application Developer	Provide J2EE developers with a comprehensive IDE featuring visual RAD tools and Rational ClearCase LT	
IBM WebSphere Studio Application Developer Integration Edition	Build service-oriented applications that extend and integrate your existing information technology (IT) assets with a composite application development environment	
IBM WebSphere Studio Device Developer	$Develop\ embedded\ software\ with\ a\ Java\ 2\ Micro\ Edition\ (J2ME)\ application\ development\ environment$	
IBM WebSphere Studio Enterprise Developer	Support a mixed workload environment for z/OS development, including J2EE, C0B0L and PL/1	
IBM WebSphere Studio Site Developer	Provide Web developers with an IDE for building and maintaining dynamic Web sites, Web services and Java applications featuring visual rapid application development (RAD) tools	
Toolkits for IBM WebSphere Studio	Extend the functionality of WebSphere Studio with plug-in tools targeted at specific development needs	

Software Quality		
IBM Rational Functional Tester for Java and Web	Perform advanced functional testing of Java and Web applications	
IBM Rational Performance Tester	Perform scalable system performance testing of Hypertext Transfer Protocol over Secure Socket Layer (HTTPS) protocol applications	
IBM Rational PurifyPlus <sup>™</sup>	Enable developers to perform run-time analysis, including run-time error detection, application performance profiling and code coverage analysis, on applications under construction	
IBM Rational Robot	Perform regression and functional testing of Microsoft .NET and heterogeneous applications	
IBM Rational Test RealTime	Perform component testing and run-time analysis for embedded and other cross-platform applications	

Software Configuration Management		
IBM Rational ClearCase® Change Management family	Provide comprehensive software configuration management (SCM) — including asset management, change and defect tracking, out-of-the-box SCM models and build management — on heterogeneous platforms from Windows to Linux to mainframes	
IBM Rational ClearQuest®	Manage all types of change requests, including defects and enhancements, and implement a flexible workflow process. Integrated with popular IDEs, including IBM WebSphere Studio and Microsoft .NET	
IBM z/OS® SCLM Suite	Provides a complete software configuration management solution for mainframe application development environments	

Process and Project Management	
IBM Lotus Domino	Rapidly build collaborative applications and messaging solutions with a security-rich, scalable and easy-to-use platform
IBM Lotus Notes®	Provide a robust platform for collaborative applications with enterprise-class messaging, calendaring and scheduling, and instant messaging capabilities
IBM Rational Suite	Implement a complete lifecycle solution for cross-functional team development
IBM Rational SUMMIT® Ascendant	Plan and manage enterprise IT projects and programs with a library of methods and Web-based tools for planning, estimating and monitoring
IBM Rational Team Unifying Platform™	Provide core infrastructure including lifecycle process guidance, requirements management, version control, defect and change tracking, test management, and project measurement and reporting
IBM Rational Unified Process®	Adopt a flexible development process that can be configured to your team and technology needs

Deployment Management	
IBM DB2 UDB Administration Tools	Manage tasks that keep DB2 performing at peak levels
IBM Fault Analyzer for z/OS and OS/390 <sup>®</sup>	Assist in the identification and correction of enterprise application failure
IBM Tivoli® Configuration Manager	Automatically provision and update your test and deployment environment
IBM Tivoli Monitoring (Network Performance, Messaging and Collaboration, Web Infrastructure, Databases)	Monitor essential system resources to detect bottlenecks and potential problems, and to automatically recover from critical situations
IBM Tivoli Security (Access, Identity, Privacy)	Improve application security through access, identity and privacy management
IBM WebSphere Studio Application Monitor	Provide run-time performance monitoring and analysis for J2EE applications spanning mainframe and distributed platforms
IBM WebSphere Studio Workload Simulator	Perform simulation and load-testing from IBM @server zSeries® servers to test any Web-serving environment

# For more information

To learn more contact your local IBM Representative or visit our Web site at:

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1 The Standish Group, 2003 Chaos Chronicles, 2003





