



**Rational** software

**Comply. Improve. Transform.**



**IBM Rational solutions for compliance-driven development**

**ON DEMAND BUSINESS™**

**Imagine what your business could accomplish if you could:**

- Significantly improve the productivity of your software development team
- Reduce the cost of complying with government and industry regulations
- Streamline communications among financial officers and IT executives to help meet audit requirements

Meeting regulatory requirements is more than a legal obligation—it is an opportunity to improve your organization's software development transparency, oversight and results. By embracing a compliance-driven development approach, your team will replace ad hoc or unstructured processes with a streamlined and self-documenting software development lifecycle. Your developers will share software assets, intellectual resources and project data unconstrained by physical boundaries. And you will gain the objective data and insight to make better management decisions. All of which will help your team reach its utmost potential to deliver business results.

The best news is that compliance-driven development is not new or unproven, but an affirmation of what IBM Rational customers have known all along. In fact, businesses around the world are currently taking advantage of IBM® Rational® tools and processes to:

- Establish a sustainable framework for regulatory compliance management
- Automate and document enforcement of IT control structures
- Leverage objective, fact-based metrics for continuous process improvement
- Remain flexible and responsive in a rapidly changing business climate

#### **Establish a sustainable framework for regulatory compliance**

Changes in regulatory policy can have sweeping effects on how your enterprise does business. New legislation can result in downstream changes to dozens of policy documents and hundreds of supporting business controls. Both private and public organizations are impacted by evolving legislation, regulatory rulings, industry standards and court decisions.

A sustainable compliance framework allows your organization to manage the impact of these changes and avoid the cost, chaos and disruption that can ensue from an audit failure. A comprehensive framework can help you assess the impact of regulatory changes, establish a flexible software development process, plan and execute risk mitigation strategies and generate the documentation necessary to help pass audits.

#### **Automate and enforce any IT control structure**

An IT control structure documents the rules for developing and deploying software in your organization, establishing a process with agreed-upon workflow, documentation and signatory authorities. IBM Rational change management solutions can help automate and enforce control structures for software development with flexible and powerful electronic signature, audit trail and workflow management capabilities. IBM Rational testing tools can help automate the validation of IT control structures and provide test logs for auditors.

#### **Leverage objective, fact-based metrics**

IT metrics demonstrate to auditors that you are following a well-defined IT control structure. By showing the number of change requests that have entered the validation stage, for example, you can demonstrate that team members are not circumventing the validation process. IBM Rational solutions routinely collect and track metrics that support the auditing process and facilitate objective business decision making.

#### **Stay nimble and responsive in a rapidly changing business climate**

Managing the impact of regulatory compliance on your IT portfolio is a necessary cost of doing business. But it doesn't have to tax your team's productivity. By investing in compliance-driven development processes and tools, you can accelerate development workflow, automate tedious and time-consuming manual activities and gain objective insight into project status. A more nimble software development team can help you react more quickly to business opportunities and improve overall business agility.

## *Why do auditors care about software development?*

*Auditors understand the critical link between business processes and the applications that automate them. For example, in order to validate the integrity of financial results, organizations must be able to validate the integrity of the applications that generated those results. Regulatory compliance, often thought of as a business issue, quickly becomes an IT issue. Steve Hill, managing partner of KPMG LLP, explains, "IT is so pervasive at most companies that any examination of internal controls is bound to turn into a de facto audit of IT."<sup>1</sup>*





### What is compliance-driven development?

Business-driven development is an integrated approach to software development that aligns line-of-business, development and operations teams to improve business performance. Compliance-driven development is a necessary component of a business-driven development approach. Compliance-driven development combines software development tools and processes to automate the enforcement of generally accepted best practices and customer-specific procedures for software development. It provides a streamlined and orderly alternative to the panic, overtime and manual documentation typically associated with IT audits.

### The three dimensions of compliance-driven development

A compliance-driven development approach provides software teams, line-of-business managers, risk officers and analysts with a 360-degree view of evolving software development assets and the regulatory compliance mandates they support. This comprehensive approach documents:

- **What you build** by demonstrating that all regulatory mandates are accurately captured and implemented in key applications
- **How you build it** by demonstrating that all software changes are made in a secure, audit-ready environment, subject to appropriate IT controls at key lifecycle checkpoints
- **IT oversight** by demonstrating effective management of compliance remediation projects and governance of your IT project portfolio

### A proven, open, modular and integrated solution

The Rational solution leverages a modular, integrated and standards-based platform. It allows you to start small with focused pilot solutions that meet specific needs and expand your automation solution at the pace that makes sense for your organization. Primary solution offerings include:

- IBM Rational RequisitePro® for requirements management and policy provisioning
- IBM Rational ClearCase® and IBM Rational ClearQuest® software for change and workflow management
- IBM Rational Manual Tester for testing and validation
- IBM Rational Portfolio Manager for project and portfolio management

These offerings are augmented by over two dozen complementary products that allow you to modify your solution to meet your exact team, technology and platform needs. The Rational solution is extended by Ready for Rational Business Partners who have demonstrated competency in Rational tools and development processes. It is supported by experienced IBM Rational services professionals who can assist you with solution assessment, planning, configuration and installation worldwide.

## Preparing for a compliance audit

### Delivering integrated capabilities

The Rational solution includes key capabilities to improve the transparency, productivity and oversight of your software development activities.

- Lifecycle requirements traceability helps auditors verify that compliance requirements were accurately captured and implemented in key applications
- Policy provisioning support helps trace government policies to corporate policies and the business applications that automate those policies
- Auditable workflow management capabilities help ensure that software changes were made by authorized personnel for valid business reasons
- Flexible metrics and reporting, electronic signature and audit trail capabilities can be tailored to the exact processes and IT controls that govern your development environment
- Verifiable software builds help ensure and document that the correct software is being deployed
- Integrated test management continuously validates that requirements are correctly implemented in key applications and that automated processes are functioning as expected
- Metrics management helps demonstrate adherence to a well-defined process and provides the objective information teams need to analyze and improve process maturity
- Comprehensive testing and validation capabilities help teams substantiate that automated processes and controls are working as expected and operate as specified
- Enterprise portfolio management provides visibility, prioritization and oversight into compliance remediation projects within the context of all IT activities

*To be in compliance implies that you can satisfy both the performance requirements and procedural requirements of a regulation. Performance requirements measure your ability to perform tasks as specified by a regulatory authority—such as your ability to run clinical drug trials in accordance with U.S. Food and Drug Administration—specified criteria. Procedural requirements measure adherence to your own documented procedures; that you follow established procedures for testing application functionality for example.*

*An informal rule of thumb for gauging audit-readiness is your team's ability to “say what you do, do what you say and be able to prove it.”*

*Are business controls in place? An auditor may request documentation on how your change control board works, who must sign off on software changes and how those changes are authorized at key lifecycle checkpoints. Separate interviews with management and associates should reveal the same set of documented business controls.*

*Where is the proof? Automated enforcement mechanisms—such as automated workflow and reporting tools—can help demonstrate proof of these controls in your environment.*

*Who is auditing the automated systems? A combination of test results and metrics can help you validate the automated process by which you obtain results. This helps demonstrate to your auditors that your automated processes are operating correctly and conforming to your intended design.*

*IT metrics can help demonstrate that your process workflow is not being circumvented by naive or unethical users. For example, by showing that 40 enhancement requests entered the validation state in September, that 38 of those requests entered the deployment state within six months and that two remain in validation, you can help demonstrate that your team is adhering to published procedures for deploying quality software.*





### Leverage standards frameworks for regulatory compliance

Although the penalties for non-compliance may be explicit, most regulatory authorities do not provide clear guidance on the specific steps organizations must take to achieve compliance, nor do they certify that a specific solution will pass an audit.

To replace subjective guesswork with objective criteria, many companies are adopting standards-based frameworks as part of an overall enterprise risk management strategy. A standards-based framework can help your organization align its processes with commonly accepted IT management best practices.

The most popular frameworks include:

- The COSO internal controls framework created by the Committee of Sponsoring Organizations of the Treadway Commission
- The Control Objectives for Information and Related Technology (COBIT) framework, governed by the Information Systems Audit and Control Association (ISACA)
- The Capability Maturity Model Integration (CMMI) framework, governed by the Carnegie Mellon Software Engineering Institute (SEI)
- The IT Infrastructure Library (ITIL) framework, governed by the United Kingdom's Office of Government and Commerce (OGC)

Whether you adopt all of the guidelines within one of these frameworks or tailor them for your own needs, the IBM Rational solution can provide valuable support.

The Rational solution:

- Automates the fundamental principles of software development oversight, including process enforcement and guidance, lifecycle requirements traceability, continuous validation, metrics analysis and project management and measurement
- Can be customized to your exact process, workflow and reporting requirements
- Is proven in thousands of successful engagements, supporting a broad spectrum of process and standards frameworks
- Automates implementation of the IBM Rational Unified Process® (IBM RUP®), a flexible, iterative software development process framework that can deliver customized process guidance to your team



## Customer experience:

### Standards frameworks in practice

#### Support any process framework

The RUP is a software development process framework that can help your team adopt any IT framework—including COBIT, CMMI or ITIL. Its configurable architecture enables you to tailor the process components you need for each stage of your software development project. Incorporating best practices adopted by hundreds of organizations and taught in hundreds of universities, RUP methodology is the de facto industry-standard software development process.

*In 2003, a regional insurance company was dismayed to discover that it had failed an independent Sarbanes-Oxley compliance audit. It failed the audit because it could not document its methodology by proving that IT approvals were in place, procedures were followed or that the steering committee was functioning. It also lacked adequate documentation of requirements, designs and test results.*

*The IT organization was surprised by the degree of detail required by the audit findings. Working with the company's CFO and CIO, the IT compliance officer determined that the best defense against future audit failures was to adopt the COBIT framework across the IT organization. This would provide both technology and business leaders with a set of common criteria for evaluating conformance with published IT standards. Within the software development organization, the IT compliance officer established a goal of achieving CMMI Level 4 (the "managed" level) as a means of measuring and documenting the team's process maturity.*

*Immediately following the failure, the company standardized on paper-based audit trails. But that proved costly, consuming roughly a quarter of development resources. The company researched automation solutions and implemented IBM Rational ClearQuest to help it enforce and document that proper IT controls were in place, procedures were followed and documentation was approved.*

*The insurance company passed its next audit. The IBM Rational ClearQuest implementation increased the software team's productivity by about 25 percent by eliminating the time it had been spending with the manual paper system. And less paperwork meant improved team morale. By standardizing on process frameworks, the company now has a set of objective criteria in place by which it can measure its performance and strive for continuous improvement.*





### Managing risk and compliance in the financial services industry

Charged with navigating a tidal wave of regulations published by the Securities and Exchange Commission (SEC), Internal Revenue Service (IRS), New York Stock Exchange (NYSE), Financial Accounting Standards Board (FASB) and European

## Spotlight

### Sarbanes-Oxley Act

*Intended to restore confidence in public financial reporting in the wake of a series of public scandals, the Sarbanes-Oxley Act of 2002 represents a fundamental change in how management carries out its fiduciary responsibilities. Every publicly traded U.S. company with more than US\$75 million in revenues is subject to the provisions of the Sarbanes-Oxley Act.*

*Section 404, "Management Assessment of Internal Controls," requires the production of an annual internal control report that assesses the effectiveness of internal control structures as attested by external audit firms. According to Forrester Vice President Margot Visitacion, "Any application that supports a financial transaction or financial reporting must be designed, coded and tested with auditability in mind."*

*Sarbanes-Oxley legislation has been a catalyst for improving IT accountability, transparency and governance. According to a recent survey of financial firms, a majority of respondents—and 83 percent of respondents who work for very large firms—believe Section 404 increases confidence in financial reporting.<sup>3</sup>*

Union (EU), financial firms operate in one of the most complex regulatory environments. In this intensely competitive global environment, banks, insurance companies and other financial firms are seeking new ways to lower compliance costs while improving operational security, resilience and business continuity.

### Changes and challenges

Converging business trends have compounded the complexity of regulatory oversight:

- Mergers and acquisitions bring the added complexity of unifying business processes, applications and data across domains
- Offshore and near-shore contracted development programs multiply the burdens of enforcement across geographic, legal and cultural divides
- With the growth of Internet-based financial services, data privacy, security and governance issues have emerged as leading concerns
- The ability to recover quickly from disruptive events—such as network failures or natural disasters—with regulatory compliance records intact is an increasingly urgent priority

### A Rational approach for the financial services sector

The Rational solution is grounded in a solid understanding of industry challenges. IBM Rational can help your organization:

- Reduce cost by automating the enforcement of IT controls throughout the software lifecycle
- Automatically generate the software development documentation that can help you pass audits
- Maintain a repository of SEC, IRS, NYSE, FASB, EU and other regulatory requirements, and trace the impact of these requirements throughout your software lifecycle



- Build new financial products and services in an audit-ready environment
- Enhance packaged financial applications with custom code
- Help enforce IT controls in offshore and near-shore development environments
- Manage IT assets acquired as a result of mergers and acquisitions

### Reducing compliance cost

According to Financial Executives International (a professional association of CFOs, treasurers and financial controllers), spending for Sarbanes-Oxley Section 404 compliance averaged US\$4.4 million last year—30 percent more than anticipated<sup>2</sup>. The Rational solution can help financial companies reign in costs by automating the enforcement of IT controls for software development and replacing multiple ad hoc processes with a single unified process for software development.

### Improving oversight of geographically distributed development

An increasing number of software development teams are distributed across geographic locations as the result of merger and acquisition activity or offshore development programs. These distributed teams require tools that enforce compliance mandates while providing a consistent flow of data from one team to the next. The Rational solution can be extended to geographically distributed teams, bridging the divides of time, language and culture to maximize team results.

### Protecting software assets and records

Disruptive events such as system and network failures or natural disasters can have dire consequences for companies who maintain comprehensive audit trail records. By providing automatic replication and synchronization capabilities, the Rational solution can help companies maintain business continuity in the event of disaster.



## *Customer experience: Improving oversight over distributed development*

*A regional bank had grown through a series of acquisitions. The bank was in the process of centralizing its IT operations when a routine audit brought business expansion plans to a sudden halt. No new branches or ATMs could be opened until the bank demonstrated successful remediation of failures uncovered by the Federal Reserve. Reported in the trade and general press, the audit failure was a source of bank-wide embarrassment that threatened customer retention and acquisition programs*

*Reasons for the audit failure? Inadequate governance, standards and business controls across its distributed development environment. Working with a cross-functional team, IBM helped the bank implement best practices for geographically distributed development. Internal controls were automated and enforced through IBM Rational ClearCase and IBM Rational ClearQuest. The silver lining? Two years later, the company credits its new solution with improving team collaboration—and providing a two-year jumpstart on its Sarbanes-Oxley compliance initiatives.*





### Managing risk and compliance in the healthcare and life sciences industries

Today's healthcare and life sciences organizations face unprecedented demands. Reducing clinical and administrative costs, harnessing an explosion of data and improving the quality of patient care all need to be navigated while meeting tighter compliance and security mandates.

Due to the safety-critical nature of their work, healthcare and life sciences organizations typically adhere to higher standards of application development security, authentication and process enforcement than less regulated industries.

### Spotlight

#### FDA 21 CFR Part 11

*The CFR is a codification of rules published in the Federal Register by the executive departments and agencies of the Federal Government of the United States. Title 21 is allocated to the Food and Drug Administration. Part 11 of Title 21 describes the criteria under which the agency considers electronic records, electronic signatures and handwritten signatures executed to electronic records to be trustworthy, reliable and generally equivalent to paper records and handwritten signatures.*

IBM Rational provides the software development tools, services and best practices to support teams creating the next generation of drugs, devices, medical procedures and healthcare administration systems.

IBM Rational solutions can help teams:

- Create software and systems that comply with U.S. Food and Drug Administration (FDA) Title 21 Code of Federal Regulations (21 CFR) Part 11
- Extend packaged clinical and administrative applications with custom code to enforce regulatory compliance mandates
- Build the software that supports data-driven research and medical device development in bioscience, biomedicine and other life sciences disciplines
- Leverage robust audit trails to track data errors and omissions to their source, whether keying errors, sourcing errors or system flaws
- Manage and document FDA and other regulatory body requirements throughout the software lifecycle
- Leverage flexible electronic signatures, Lightweight Directory Access Protocol (LDAP) authentication and workflow capabilities to automate and enforce internal controls throughout the software development lifecycle
- Automatically generate the software development documentation that can help you demonstrate effective IT oversight



## *Customer experience:*

*Extending packaged applications for regulatory compliance*

*One of the world's top drug companies needed to find a cost-efficient way of bringing its clinical trial systems into compliance with 21 CFR Part 11 requirements. Data from clinical trials of this pharmaceutical company's developmental drugs is stored in the Phase Forward Clintrial™ program. The Clintrial database is exported and analyzed using a statistical analysis package. The statistical data is then given to the FDA.*

*The company had determined that compliance with 21 CFR Part 11 required it to track and document any automation of the clinical trial process—including extraction, analysis and reporting. After researching alternative solutions, it selected IBM Rational ClearCase to augment its existing packaged application-based solution. ClearCase software can track changes to files and directories automatically and behind the scenes—helping to maintain complete, annotated version histories.*

*Using IBM Rational ClearCase software, the company is able to properly define and report its processes, allowing it to comply with FDA regulations and helping assure continued market success. Rational ClearCase software has also helped the client implement internal standards and procedures to increase operational efficiency.*

## *Customer experience:*

*Managing requirements in medical device development*

*For more than 50 years, the medical device division of a leading pharmaceutical company has provided cost-effective solutions for screening, diagnosing and monitoring diseases. The company's medical devices represent a significant technological advance for the global healthcare community.*

*Within the highly regulated environment of medical device manufacturing, stringent FDA and Association for the Advancement of Medical Instrumentation regulations govern the traceability of product requirements to software requirements, risk management hazards and software verification results. The company relies on IBM Rational RequisitePro to enforce requirements management discipline and meet these stringent traceability requirements.*

*Rational RequisitePro helps the team successfully manage the approximately 20,000 requirements associated with a typical release. Each requirement is categorized by attribute, allocated to one or more verification activities and traced to verification test procedures and test results. By integrating Rational RequisitePro into its product development lifecycle, the company is able to meet the stringent documentation requirements required to deliver medical devices to market.*





### **Managing risk and compliance in the aerospace, defense and government sector**

Navigate contractor and agency collaboration complexities. Modernize aging systems. Satisfy citizen stakeholder access to services. Share data while protecting privacy. Whether implementing a social services system or building the next generation of strategic missile defense systems, government agencies and their technology partners must ensure compliance with a multitude of local, regional and national regulations.

IBM Rational tools and services have a proven track record of helping government agencies and their contracting partners deliver results on time and on budget. The Rational solution can help you:

- Manage the impact of local, regional and national regulations across your program portfolio
- Implement data management and security policies across your application portfolio
- Improve agency and contractor collaboration and control—even across geographic or contractor boundaries
- Align resources with agency business case objectives to balance portfolios, prioritize investments and monitor and measure status
- Integrate compliance risk analysis in portfolio analysis and project approval processes
- Monitor, measure and iteratively achieve higher levels of CMMI maturity
- Define and execute software architectures that embody industry-specific frameworks

### **Spotlight**

#### ***Federal Information Security Management Act***

***The Federal Information Security Management Act (FISMA) of 2002 was signed into law in order to improve governance of information managed by U.S. government agencies. This legislation tasks the Office of Management and Budget with regulatory compliance oversight and calls upon the National Institute of Standards and Technology to specify compliance requirements. FISMA mandates the appointment of an information security officer to serve as a focal point for managing data privacy and information security issues within each agency.***



## *Customer experience:*

*Meeting contractual obligations while responding to legislative changes*

*When a leading global system integrator embarked upon a multi-year contract to build a pioneering social services system, it was an extraordinary undertaking even by the company's own high standards. The contract covered the design, development and implementation of what would be one of the largest information solutions systems for social services agencies in the United States—helping more than 30,000 users deliver public assistance programs like cash assistance, food stamps and employment services benefits to more than three million people in 700 locations.*

*The customer's decision to standardize on IBM Rational RequisitePro was made during the request for proposal (RFP) process. The RFP referenced approximately 6,000 requirements—many associated with regulatory mandates governing the delivery of social services. The team believes this early decision helped it win the bid by demonstrating solid coverage of project requirements. Following the win, the system integrator standardized on Rational RequisitePro, ClearCase and ClearQuest software, along with Rational modeling, testing and test management tools for the 200-person development team.*

*As the project was rolled out, regulatory requirements evolved—along with the statement of work. Explains the chief technologist, “Government agencies are in a constant state of change because of state and federal*

*legislation and the influence of court cases on public policy. We get significant, core changes almost on a weekly basis, so we need to be able to modify requirements and expectations with pinpoint accuracy. Rational RequisitePro enables us to be successful in that area. I don't see how we could have managed all the change that we have gone through without it.”*

*Key to a successful agency/contractor relationship is establishing a common process for governing changes. The project lead explains, “We have a change control board that meets on a weekly basis. It is a governance board in which we and our client consider and discuss the active changes being tracked in Rational ClearQuest. So throughout the lifecycle, we use Rational ClearQuest to manage change and to know when we are done and ready to approve a deliverable. By clearly documenting all issues and comments in Rational ClearQuest, we are able to get deliverables reviewed, approved and paid for on time.”*

*Ultimately, being responsive in the face of continuous change has proven to be one of the most impressive achievements of this successful contractor and agency relationship. The chief technologist concludes, “Because we have to respond to change rapidly, we need to be able to quickly assess the impact of change—not only from a technical perspective, but from a financial perspective as well. With the Rational tools we have in place, we can quickly identify what requirements and artifacts are impacted. We hit the mark, so we don't end up having to do expensive rework.”*





### IBM: Your partner for compliance management

Compliance management spans the breadth of your organization—impacting your financial organization, line-of-business stakeholders, legal counsel and virtually every aspect of your IT operating environment.

Managing compliance across your enterprise—and with customers, suppliers and business partners—is no easy feat. That is why IBM offerings provide a modular, scalable and comprehensive solution. You can start at the pace that makes sense for your company and expand your solution as your needs evolve.

No other vendor has greater breadth and depth of capabilities to support your unique needs. Individually or combined, IBM software solutions can help you:

- Adopt a sustainable framework that evolves over time, allowing you to respond quickly to changes in your business, organization or regulatory environment
- Improve fundamental business and IT processes to deliver greater business value
- Manage complexity through automated processes and exception-based reporting
- Streamline vendor management from initial planning through deployment

IBM software solutions include the following key capabilities:

- **Internal controls management** is central to an enterprise-wide approach to risk and compliance management. *IBM Workplace™ for Business Controls and Reporting* delivers a comprehensive environment to document, evaluate and report the status of internal controls across multiple initiatives within an enterprise, such as initiatives for Sarbanes-Oxley compliance. Information can be organized using industry-standard frameworks such as the COSO integrated internal controls framework as well as COBIT, ITIL and ISO 17799.
- **Learning** solutions, such as *IBM Workplace Collaborative Learning*, help organizations plan, author and execute compliance training programs.
- **Business process modeling and monitoring** solutions help customers analyze existing business processes and model alternatives that can reduce regulatory risk. *IBM WebSphere® Business Integration Modeler and Monitor* can easily capture and model current and future compliance processes to deliver a real-time view of business operations.
- **Software development** solutions help customers ensure that regulatory policies are accurately captured and validated in business applications, and that all changes to applications are made in a secure and audit-ready environment. *Rational RequisitePro* traces compliance requirements across your software development lifecycle.



*Rational testing tools* validate application functionality and process automation. *Rational ClearCase* and *Rational ClearQuest* help organizations establish a custom development workflow based on sound change management practices. *Rational Portfolio Manager* helps organizations prioritize, track and manage compliance projects.

- **Operational security** products help organizations manage the security, access, identity and configuration of business-critical systems. The IBM Tivoli® family of identity management products—including *Tivoli Identity Manager*, *Tivoli Access Manager* and *Tivoli Federated Identity Manager*—provide single-sign-on, authentication and authorization services so that only authorized users have access to data, services and transactions. *Tivoli Privacy Manager* builds a centralized audit log of all disclosure activity for sensitive or critical business data. *Tivoli Security Compliance Manager* centrally monitors the status of security policies across enterprise servers.
- **Data/information integration** tools can give companies real-time, integrated access to compliance information across heterogeneous operating environments. *WebSphere Information Integrator* provides a framework for managing structured, unstructured, public, private, mainframe and distributed information to better meet data privacy and other regulatory requirements.
- **Archival and retention** products help organizations meet regulatory record retention requirements at a reasonable cost.

*IBM DB2® Content Manager* software provides an integrated, flexible content repository that can help consolidate and manage critical information related to compliance demands. *DB2 Records Manager* provides one central location for managing record classification and retention policies. *Tivoli Storage Manager* helps customers recover from failures and other errors by storing backup, archive and disaster-recovery data in a hierarchy of offline storage.

- **Financial reporting** solutions help organizations collect, analyze and report data in different formats and under different timescales—a key capability for meeting Basel II, Sarbanes-Oxley and other regulatory requirements. The *IBM Banking Data Warehouse* allows data collection to be performed once and made available in shared structures, simplifying regulatory reporting and documentation. *IBM DB2 Alphablox®* software integrates customized analytics into this and other solutions to help organizations extract business intelligence for improved business analysis.

## For more information

To learn more about Rational compliance-driven development solutions, contact your local IBM representative or visit us at: [ibm.com/software/info/developer/solutions/compliance](http://ibm.com/software/info/developer/solutions/compliance)



## Responsibility for compliance

IBM's customer is responsible for ensuring its own compliance with legal requirements. It is the customer's sole responsibility to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the customer is in compliance with any law.



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<sup>1</sup> "Sarbox Surprises." *CFO*. June 22, 2005.

<sup>2</sup> Marlin, Steve. "The Cost of Compliance Can Only Go Up." *InformationWeek*. March 28, 2005.

<sup>3</sup> Bruno-Britz, Maria. "IT Complexity: Compliance Achilles Heel for Banks." *Bank Systems & Technology*. July 12, 2005.

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