

IBM[®] Rational Suite[®] AnalystStudio[®]

Highlights

- Connect Business, Application and Data Modelers by providing them with one tool and one modeling notation to streamline communication
- Capture and Manage Changing Requirements so that everyone starts on track and stays on track
- Capitalize on the Power of Use Cases to ensure your system is defined, developed and deployed with the customer in mind
- Unify Analysts with the Rest of the Team through a common set of team-unifying tools

Get it Right From the Beginning

Application development is a complex undertaking. While the software technologies that we apply to this challenge become more powerful, the record shows that it remains difficult to define, develop and deliver solutions that satisfy real customer needs. We tend to forge ahead building solutions to problems which are not clearly understood.

Analyzing your organization's business processes, systems, and market opportunities is indeed challenging. But, having a clear understanding of these needs enables you to target your most opportune problem area from the beginning, and from there, define and deliver a focused, accurate solution.

IBM® Rational Suite® AnalystStudio® helps you better analyze your problem space, and better define and communicate your solution for it, before valuable implementation resources are invested. By integrating a powerful combination of tools for visual modeling, requirements and use case management, defect and change request tracking and industryproven best-practice process guidelines, Rational Suite AnalystStudio helps ensure you solve the right problem and define the right solution.

Connect Business, Application and Data Modelers

Creating visual models helps refine and communicate project requirements, reducing complexity and providing a 'big picture' that various team members can understand and buy into. Models are valuable for showing how the business processes flow, what systems need to be built to automate these business flows, how the systems will work, and how data should be organized and accessed.

With IBM Rational Suite AnalystStudio, models describing your business processes, your system architecture and your database design are developed in one tool, using one modeling language. Specifically, using the industry-standard Unified Modeling Language (UML) and the IBM Rational Rose® component, your business, application and data modelers can create and have visibility into a single, consolidated representation of the system. Using a UML business model to graphically depict roles and interactions enables business analysts to more clearly communicate the business problem. The business models are shared with systems analysts who develop the system use cases that define the application functionality in fulfillment of the highlevel business needs. All these activities are enabled within IBM Rational Rose using one notation to improve collaboration. Using the same tool and same notation, data analysts create data models describing the logical and physical representation of data in the system. In Rational Rose, the data models link to the object models so as change occurs in software components the database design is easily kept in sync.

By uniting all these related models, IBM Rational Suite AnalystStudio provides everyone with a complete, unambiguous picture of the business problem and the proposed solution to that problem, streamlining team communication, while highlighting potential problems early, effectively reducing project risks.

Capture and Manage Changing Requirements

Essential to defining the right system is the capture, organization and management of requirements. Functional and non-functional requirements, design constraints, use cases and other types of requirements need to be elaborated in sufficient detail to drive implementation activities.

IBM Rational Suite AnalystStudio gives you a flexible means of capturing requirements and the power to manage change effectively and easily. Specifically, with IBM Rational RequisitePro® you use Microsoft Word® to author and maintain requirements in documents, which are dynamically linked with an enterprise database. This unique approach allows Rational RequisitePro to become an extension of how you capture requirements today.

Microsoft Word documents are a natural format for documenting requirements, providing context and formatting through a familiar interface. Linking Microsoft Word documents and a relational database provides you with the power to sort, track, and link requirements across documents. And since the Word documents are dynamically linked to the database, any changes you make in one environment are automatically reflected in the other environment. This unique architecture combines the power of a database with the freedom of Word, giving you the best of both worlds to not only capture, but also effectively manage requirements.

The database allows you to easily organize requirement information in packages (folders) using the structure that best suits your needs. From the views into the database you can prioritize, link requirements and track changes to your requirements. Attributes such as priority, difficulty, status, and version number can be assigned to help you effectively manage requirements in a way that is impossible using documents alone. By establishing traceability relationships between related requirements in IBM Rational RequisitePro, you have the ability to assess and manage the impact of change as the requirements evolve. In addition, traceability allows you to determine requirement coverage so you can ensure that business requirements are being fulfilled by software requirements, which in turn map to test cases that verify the requirements have been met.

IBM Rational Suite AnalystStudio helps you capture and manage changing requirements so you can deliver a highly targeted solution that satisfies your stakeholder needs.

Capitalize on the Power of Use Cases

Use cases provide a structured, yet easy to understand approach for capturing a very important set of the requirements information: how the system interacts with the user to deliver its functionality. Use cases describe the system's functionality in plain language and from a user's perspective better equipping you to develop a solution that satisfies users' needs. Because they are easy to understand, use cases make reviewing your proposed solution clearer for the least technical audience. This leads to early agreement from all stakeholders, which is key to avoiding expensive rework costs. IBM Rational Suite AnalystStudio delivers the industry's most comprehensive and robust support for use cases providing a common understanding of the application to be developed and improving team communication.

The challenge of managing use cases is allowing quick navigation from use case diagrams, which provide a highlevel graphical description of the system, to their associated use case specifications, which further detail the use case diagrams - all while still tracking the content of use case specifications. Tracking is essential since use case specifications contain software requirements — if these requirements change, you want your development team to know about it. With IBM Rational Suite AnalystStudio, use case specifications are managed in conjunction with the rest of the project requirements in IBM Rational

RequisitePro, while use case diagrams are stored and visually modeled in IBM Rational Rose.

Only IBM Rational Suite AnalystStudio integrates the various use case representations, graphical and textual elements, to give you seamless navigation from either environment. As changes are made to a use case in one tool, they are automatically reflected in the other. For example, from IBM Rational Rose, you can modify the priority of a use case from low to high and that modification will be immediately apparent in IBM Rational RequisitePro. This co-management of use cases between a visual modeling tool and a requirements management tool allows everyone on your team to easily access the information pertinent to them.

Integrating Stakeholder Feedback

To ensure you deploy a solution that truly meets users' needs it's vital to gather and incorporate stakeholder feedback as you build your system. Not only are enhancement requests vital to the current system you're building; they are also the seeds for establishing future functionality. Gathering input from all stakeholders — users, customers, your developers, testers and more — is vital to your ongoing success.

The IBM Rational ClearQuest® component of IBM Rational Suite AnalystStudio streamlines the collection of enhancement requests. An automatically generated Web change request submission form provides a consistent, easily accessible location from which to gather, prioritize and manage input from your stakeholders. Plus, the integration between Rational ClearQuest and IBM Rational RequisitePro lets you link approved enhancement requests to the requirements that will fulfill them.

IBM Rational Suite AnalystStudio eliminates the project risks and time spent from haphazard collection of enhancement requests, and gives you confidence that your requirements accurately reflect the evolving needs of everyone who has a stake in the project.

Process Made Practical

IBM Rational Suite AnalystStudio delivers not only industry-leading tools, but also practical guidance on how to employ them to your greatest benefit. The IBM Rational Unified Process® is an easy-to-use, Webaccessible knowledge base that details time-tested best practices of software development.

Specifically for analysts and project managers, the IBM Rational Unified Process provides an array of invaluable resources, including:

- Requirements and Business Modeling Activities – map the workers, steps and artifacts involved in various activities
- Work Guidelines and Assessment Workshops – help you engage your stakeholders
- Tool Mentors link best-practice guidelines to their practical application within other IBM Rational software development tools from IBM Software Group

 Roadmaps – guide you through development approaches for ebusiness and other specific applications

As an integrated part of IBM Rational Suite AnalystStudio, the IBM Rational Unified Process serves as a recipe for rapid delivery of high-quality software.

Accelerate Success with Rational Services

Like all Rational tools from IBM Software Group, IBM Rational Suite AnalystStudio is supported by a worldwide services organization that combines extensive online resources with personalized training, consulting, and technical support.

- IBM Rational Developer Network[™] helps you learn and use Rational tools and methodologies through online access to training, articles, whitepapers, documentation, scripts, discussion forums, and more.
- IBM Rational University courses are available over the Web, on-site at your organization, or at dozens of classroom locations worldwide.

- Professional Services— including Assessments, QuickStarts, Deployment, and Custom Consulting and Mentoring Services offer proven pathways to efficient technology adoption.
- Technical Support provides efficient problem resolution and up-to-date access to Rational's latest software releases.

A Team-Liberating Foundation: The IBM Rational Suite Team Unifying Platform

IBM Rational Suite Team Unifying Platform forms the foundation of every IBM Rational Suite edition. This essential toolset provides common access to requirements, process guidance, defect and change request data, test results, and up-to-theminute project metrics. The results: increased productivity and reduced project risk. The Rational Suite Team Unifying Platform includes these essential team tools:

Project Management

- IBM Rational Unified Process a configurable software development process platform
- IBM Rational RequisitePro teambased requirements management
- IBM Rational TestManager team
 access to test plans and results
- IBM Rational ProjectConsole/ SoDA – metrics and reporting within a customizable project Web site

Software Configuration Management

- IBM Rational ClearQuest flexible defect and change tracking
- IBM Rational ClearCase LT the market-leading solution for version control and more



GENERAL SPECIFICATIONS Recommended Hardware

- 500 MHz or higher
- 128 MB RAM

Operating Systems

 Microsoft Windows NT 4.0, Windows 2000, or Windows XP

Disk Space

• 650 MB

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*Rational ClearQuest integrates with Crystal Reports Professional Edition for advanced reporting capabilities.

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