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IBM Rational RequisitePro

Highlights

- ■ *Offers advanced Microsoft Word integration*

- ■ *Built on a robust database infrastructure*

- ■ *Features customizable, filterable requirement attributes*

- ■ *Provides in-depth traceability and coverage analysis*

- ■ *Facilitates detailed change-impact analysis with audit trails and e-mail notification*

- ■ *Helps you create and compare project baselines*

- ■ *Provides Web access for distributed teams*

- ■ *Offers flexible reporting options*

- ■ *Includes configurable import capabilities*

- ■ *Integrates with multiple tools in the IBM Rational Software Development Platform package*

- ■ *Features user-definable requirement types*

- ■ *Contains configurable project and document templates*
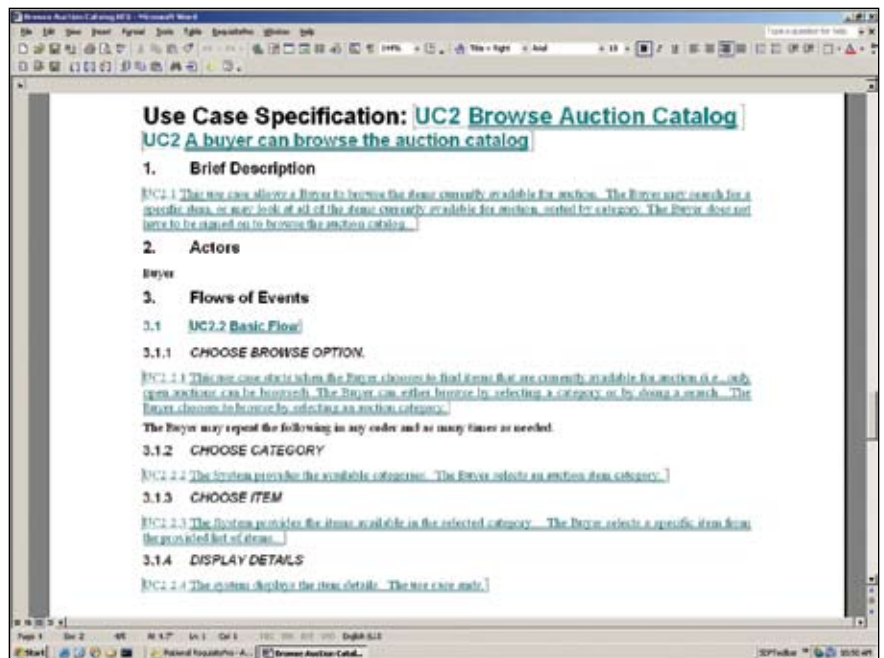
Successful requirements management

The IBM Rational® team has been helping customers over the course of more than 20 years to successfully build and deploy software applications. Time and again during these engagements, requirements management was exposed as a key process area for ensuring project success. The better you communicate and manage your requirements, the better chance your projects have for delivering the right solution on time and within budget — and effective requirements management is the specialty of the IBM Rational RequisitePro® solution. The Rational RequisitePro tool is a powerful yet easy-to-use solution that promotes better communication, enhances team collaboration and reduces project risk.

Power of a database, freedom of Word

In any effective requirements management process, recording the requirements that have been discovered during elicitation is a key step. This helps ensure accurate communication and management of the requirements as they evolve. Documents are a natural format for recording requirements, because they freely provide space for establishing context or for offering supplementary requirements information.

The IBM Rational RequisitePro solution leverages the widely used and familiar Microsoft® Word tool to ease requirements capture. Documents, though useful for requirements capture, are not an optimal environment for prioritizing and organizing information—activities that are best performed using a database. By linking requirement documents to a database, the RequisitePro product marries the best of both worlds.

This unique architecture leverages the power of a database and the freedom of the Microsoft Word application for more effective requirements management. Documents in IBM Rational RequisitePro format are not simply input to or output from a requirements database. They contain live requirements, allowing you to remain in a familiar Microsoft Word environment to modify requirements. The requirements in Word documents are
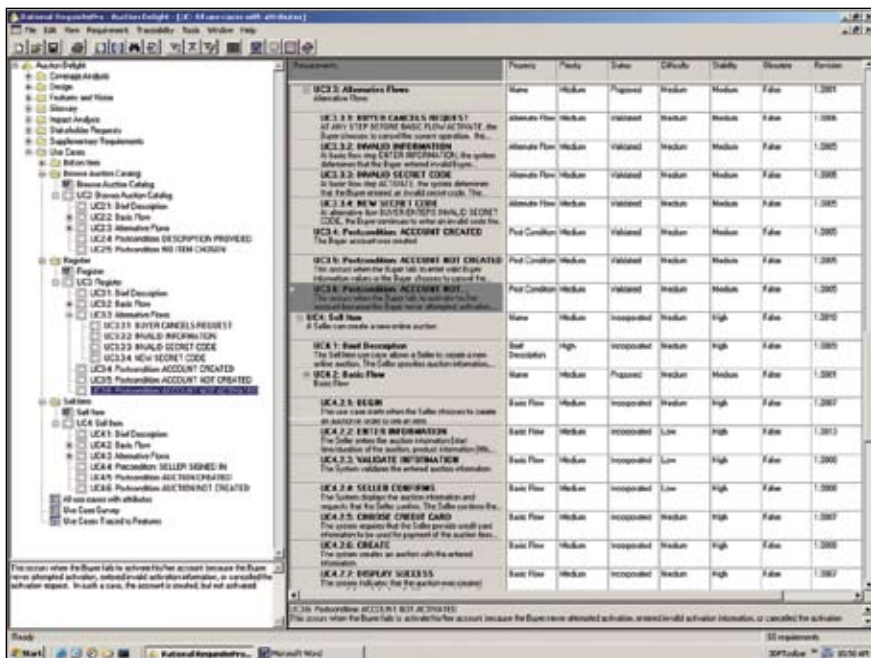

Requirement documents are a familiar capture and communication mechanism, providing context and order. Dynamically linking requirements in documents to a database provides another powerful dimension for organizing and tracking the information.

dynamically linked to supplementary requirements information stored in a database. The database and documents are connected such that a simple double-click on the requirement will launch the Microsoft Word application and take you directly to that requirement in the context of how you wrote it in the document.
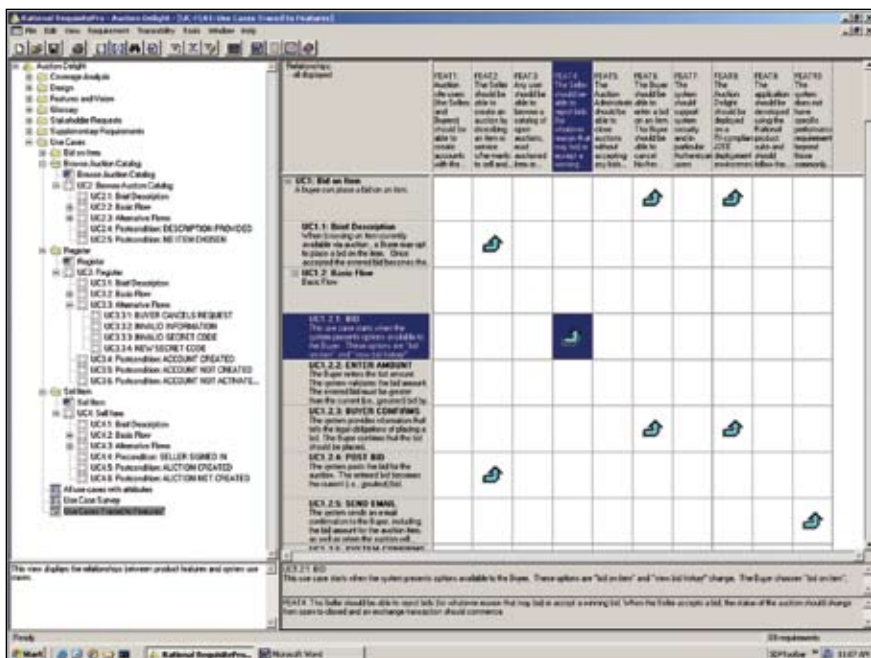
The Rational RequisitePro solution supports a choice of nonproprietary, industry-standard enterprise databases (IBM DB2®, Oracle, Microsoft SQL Server) with which you can easily organize requirements information in packages (folders) using a structure that best suits your needs. From views into the database, you can prioritize, link requirements and track changes.

Assigning attributes such as priority, difficulty and status helps you manage your requirements in a way that is impossible using documents alone. The RequisitePro product provides standard attributes and attribute values out of the box, while also being easily customizable to support your project's processes and terminology.

With the combined power of a database and Microsoft Word tools, the IBM Rational RequisitePro solution supplements your use of Microsoft Word documents by providing a means to organize, sort, filter and track requirements contained within your Word documents—delivering a robust and easy-to-use requirements management solution.

The powerful interface allows you to organize requirements information in packages (folders) using a structure that best suits your needs, providing quick access to requirements information.
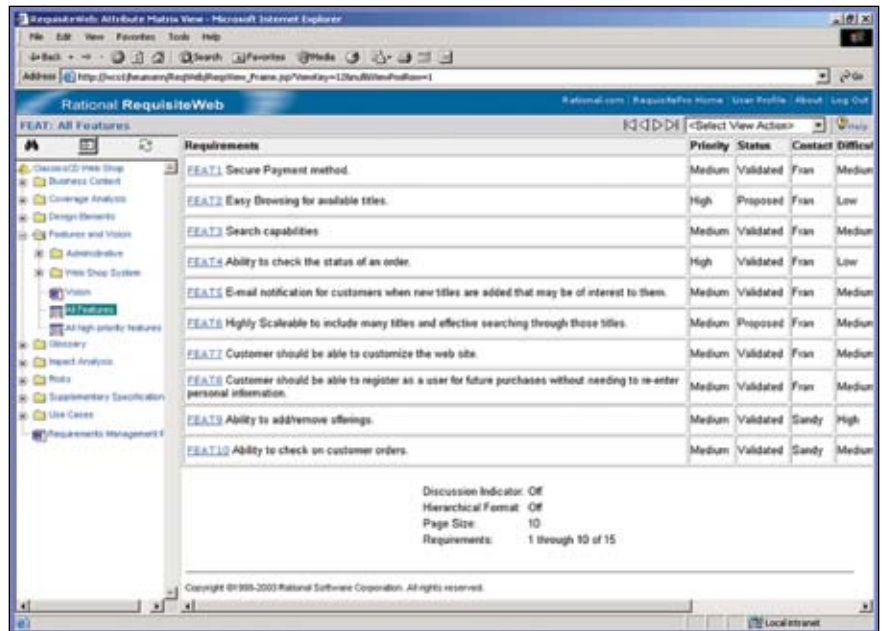

Understanding traceability is easy with the tree view. Requirement relationships are shown in a familiar expandable and collapsible way, while details for the highlighted requirement are shown at right.

Understand the impact of change

Change is inevitable. But change is not the enemy — it indicates responsiveness to stakeholder needs. Unmanaged change, on the other hand, sends many projects spiraling off course. The IBM Rational RequisitePro solution helps you understand the impact of change as it occurs so you can better manage its effect on the project.

The Rational RequisitePro product provides functionality to easily establish and analyze the impact of change. These features allow you to link related requirements, so that as change occurs to one requirement you can easily see its impact on other related requirements. Having real-time visibility to change lets you view its effect across the project and assess coverage for verification and validation. With the ability to perform impact analysis, you can make quick, informed decisions for scope management or resource reallocation. And as requirements evolve, each modification made is captured, tracked and fully documented by the RequisitePro product. Requirement audit trails document the who, what, why and when details of requirement modifications, helping you to analyze change impacts across the project. And e-mails are automatically delivered to notify predefined stakeholders of changes that may affect their work prioritization. By understanding the impact of change, you are much better equipped to control changes that affect your project.

Parallel construction and maintenance of multiple application versions have their own impact on change as well. Each release of an application possesses a unique set of requirements that builds upon those of prior releases—a natural result of the maturity arising from customer feedback and market growth. To keep track of changes in requirements across these multiple releases, the Rational RequisitePro solution facilitates the creation and comparison of requirement baselines. A baseline is a logically grouped set of requirements for a particular version of an application. The RequisitePro product can construct these baselines and perform comparisons between them, exposing differences at the project, document or requirements level in a Web-accessible report. Project baselines can also jump-start the creation of new releases, ensuring efficient transfer of historical data.

IBM Rational RequisitePro software comes with a Web interface, making requirements accessible to all team members, especially in remote locations or multiplatform environments. Access, query, modify, create requirements and requirements documents, and manage traceability through the RequisiteWeb interface.

Integrate requirements across tools and teams

The better informed each project team member is of the requirements, whether located remotely or locally, the more accurately team members can deliver a solution that satisfies project or business goals. Integrating requirements with other lifecycle artifacts and processes ensures clear communication and saves time-consuming rework.

Through the IBM Rational RequisiteWeb feature, a Web interface for the IBM Rational RequisitePro solution, remote team members can create, view and modify requirements and requirement documents. Requirements traceability can also be managed using a traceability matrix or a traceability tree, which visually depicts relationships between requirements.

The RequisiteWeb feature permits full requirements creation and editing capabilities, reducing the need to install thick-client interfaces on the desktops of remote team members.

And through powerful integrations with other tools in the IBM Rational Software Development Platform package, the IBM Rational RequisitePro solution helps you integrate requirements across tools and teams, optimizing team collaboration around the requirements. The following sections detail how.

Requirements access for developers

To ensure optimal design and to minimize costly rework, developers need access to requirements from where they sit. The IBM Rational RequisitePro solution enables requirements access from within the IBM Rational Software Architect, IBM Rational Software Modeler and IBM Rational Rose® Technical Developer tools. Requirements information is presented directly in the integrated development environment (IDE) by the Rational RequisitePro solution — no need for the developer to move between products.

Through these integrations, the Rational RequisitePro solution lets developers connect requirements to use-case models, enabling instantaneous access to use-case specifications from use-case diagrams as well as visibility into requirements information. This functionality can help ensure developers implement the functionality that truly reflects customer needs, as they evolve.

In addition, the integration capability among the IBM Rational RequisitePro, Rational Software Architect and Rational Software Modeler solutions can enable you to connect design elements to requirements. By linking design elements with requirements, you can easily review and assess the impact of requirements changes on design elements and keep developers informed of changes that may impact their work.

Requirements access for project managers

As customers and other stakeholders begin to use your product, requests for change inevitably result. However, blindly accepting all incoming changes can result in feature creep that

destabilizes software projects. The integration between the Rational RequisitePro solution and the IBM Rational ClearQuest® product provides an effective means for triaging incoming requests, simplifying the incorporation of accepted change requests into the next iteration of your project. The information housed in one tool is readily available within the other, making it easy to take into account the needs of your users when prioritizing requirements for the next iteration.

Requirements access for testers

Without access to the latest requirements, how can testers be assured they have prioritized their work appropriately? The integration with the IBM Rational TestManager and IBM Rational ClearQuest products helps ensure that requirements serve as a direct input to test-case creation so that testers and quality assurance (QA) engineers can validate their applications with confidence. And as changes to requirements occur, testers can run reports that highlight which test cases are impacted by the change, ensuring their test cases are properly updated to reflect the latest requirements.

Requirements access for the team

The IBM Rational RequisitePro solution supports the IBM Rational Unified Process®—or IBM RUP®—methodology, ensuing that your requirements management process and automation follow industry-proven best practices.

As a team-based tool, the IBM Rational RequisitePro solution is part of the IBM Rational Team Unifying Platform™ package. Designed to unify cross-functional teams, optimize practitioner productivity and simplify adoption, these integrated solutions provide your team with a shared platform for development success.

Integral part of the IBM Rational Software Development Platform package

The IBM Rational RequisitePro product is an integral component of the IBM Rational Software Development Platform package. The Rational Software Development Platform product is the industry's most complete and powerful solution for software system creation and application lifecycle management. It provides automation support for essentially all aspects of software development. Further, it unites team members by enabling them to share tools and information effectively with one another.

IBM Rational services

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

- *IBM developerWorks®:Rational services are the technical resource for the community of development professionals using or evaluating IBM Rational tools and best practices. developerWorks:Rational services offer a variety of downloads, resources, discussion groups and education designed to help you utilize IBM Rational solutions to your best advantage.*

- *IBM Rational software training offers a curriculum that includes courses covering all the software development capabilities. A blended curriculum of instructor-led and Web-based training provides a variety of options to suit your organization's education needs.*

- *The IBM Rational worldwide staff of professional services consultants brings 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 help you produce tangible assets through a facilitated workshop.*

- *IBM Rational Customer Support services help ensure that your project keeps moving forward with the help you need, when you need it. These maintenance programs offer efficient problem resolution with online access to tens of thousands of technical notes, patches and upgrades, as well as direct access to a talented team of support engineers. IBM Software Maintenance services are the standard maintenance offering, and IBM Technical Support Account Services can supplement this, according to your business requirements.*

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 Development Platform environment, 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

For additional information about Rational RequisitePro software, please visit IBM developerWorks at:

ibm.com/developerworks/rational/ products/requisitepro

Specifications

IBM Rational RequisitePro

- Processor: 500MHz or greater
- 512MB RAM recommended
- Disk space: 200MB minimum

Operating systems

- Microsoft Windows® 2000 Professional, Server, Advanced Server SP4
- Microsoft Windows XP Professional SP1, SP2
- Microsoft Windows 2003 Server, Enterprise Server Initial, SP1
- Microsoft Windows 2003 Server x64 and Windows XP Professional (must be running in 32-bit mode on 64-bit processors)

Databases

- IBM DB2 V8.1, V8.2
- IBM DB2 Universal Database™ Components for Rational Products V8.1, V8.2
- IBM DB2 Express V8.1, V8.2
- IBM DB2 Express-C V8.1, V8.2
- Oracle 9.2, 10
- Microsoft SQL Server 2005; 2000 SP2, SP3 or SP4; V7 SP4
- Microsoft Access (built in and created by default) 2000, 2002, 2003

Word processor

- Microsoft Word 2000, 2002, 2003

Supported multihosted development environments

- Microsoft Windows Terminal Servers
  - Microsoft Windows 2000 Advanced Server, SP4
  - Microsoft Windows 2003 Enterprise Server, SP4
- Citrix MetaFrame XP, 3, 4

IBM Rational RequisiteWeb

- Processor: 500MHz or greater
- 1GB RAM recommended
- Disk space: 100MB minimum

Operating systems

- Microsoft Windows 2000 Server, Advanced Server SP4
- Microsoft Windows 2003 Server, Enterprise Server Initial, SP1
- Microsoft Windows 2003 Server x64 (must be running in 32-bit mode on 64-bit processors)

Databases

- IBM DB2 V8.1, V8.2
- IBM DB2 Universal Database Components for Rational Products V8.1, V8.2
- IBM DB2 Express V8.1, V8.2
- IBM DB2 Express-C V8.1, V8.2
- Oracle 9.2, 10
- Microsoft SQL Server 2005; 2000 SP2, SP3, SP4; V7 SP4

Note: Microsoft Access software is not supported.

Browsers

- Microsoft Internet Explorer 6 SP1
- Firefox 1.07, 1.5; SP1, SP2
- Mozilla 1.6, 1.7; SP1, SP2

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