



IBM Rational ClearQuest

Highlights

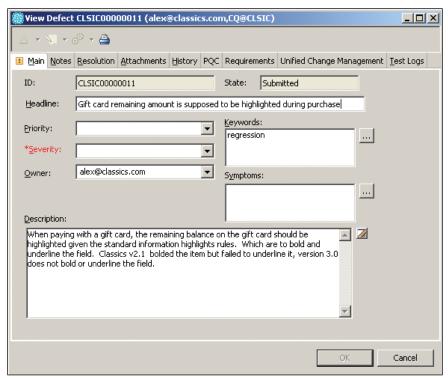
- Manage change across the software lifecycle from requirements to test to production
- Improve visibility into projects with real-time, comprehensive status and reporting
- Make compliance easier with electronic signatures, user authentication, user authorization, repeatable processes, audit trails and lifecycle traceability
- Help to accelerate release cycles and limit errors with automated deployment management
- Improve team communication, collaboration and coordination with automated processes and workflows
- Access from local clients, Web clients and leading IDEs
- Scale from small workgroups to geographically distributed enterprises

IBM Rational® ClearQuest® change management products help you manage the software lifecycle more effectively. Automated workflows control and enforce development processes, from requirements definition through production. By making process enforcement transparent, Rational ClearQuest software helps organizations stay focused on what they need in order to deliver value to the business.

Rational ClearQuest software integrates with requirements, development, build, test and deployment tools, providing process automation and traceability across the lifecycle. Insight and visibility are improved through real-time status and reporting. Security features such as user authentication, user authorization, electronic signatures and audit trails help you meet internal and external compliance mandates. Support for heterogeneous platforms and cross-platform environments provides implementation flexibility.

Supporting multiple approaches to distributed development, Rational ClearQuest software is ideal for teams that span geographic locations. Remote access to Rational ClearQuest capabilities is provided through Web clients. IBM Rational ClearQuest MultiSite software provides additional options for distributed access through replication and synchronization of Rational ClearQuest repositories.

With Rational ClearQuest software, business managers have access to the information they need to make better business decisions. Project managers can more easily manage and track project status and make better-informed decisions about resource allocation and project timetables. Team members, including analysts, developers, testers, deployment managers and customer support personnel, can communicate more effectively.



Represent processes through easily customized forms.

Process automation

Rational ClearQuest software can help you create repeatable, enforceable, predictable processes. Workflows are provided out of the box to jump-start your implementation. Workflows can also be easily customized with the ClearQuest Designer tool to meet your unique, specialized needs. States and actions can be defined, fields can be added and lists can be modified. Mandatory fields help to ensure the right data is collected. E-mail notifications help keep team members informed of changes or updates, and improve response time. By providing control over your processes, Rational ClearQuest software helps make sure nothing falls through the cracks, reducing overall project risk.

Defect and change tracking

Rational ClearQuest defect and change tracking capabilities help you manage issues throughout the project lifecycle. By documenting and managing issues to resolution, Rational ClearQuest software provides closed-loop change management that delivers better project control and helps improve software quality.

Improved visibility into projects and processes

Rational ClearQuest software gives you insight into your processes with comprehensive support for querying, charting and reporting. Distribution, trend and aging charts help you visualize complex data. Charts can be easily created and refined to allow you to drill into the area of data that you need.

Individual team members can gain quick access to their prioritized development activities by generating to-do lists. Queries and reports enable you to view the associations of requirements and the status of your test planning, test authoring and test execution activities. Reports can be run out of the box using Business Objects Crystal Reports run-time libraries (included).

Rational ClearQuest software can integrate with IBM Rational Portfolio Manager software to align project information with information across the portfolio to help you make more informed business decisions. Integration with IBM Rational ProjectConsole™ software can provide a real-time graphical dashboard to view and analyze overall project trends. Additionally, Rational ClearQuest software can integrate with the Microsoft® Project application to help you better manage schedules and resources.

Traceability across the lifecycle

Rational ClearQuest software integrates tightly with requirements, development, build, test and deployment tools. In addition, Rational ClearQuest software is a core component in the IBM Rational Team Unifying Platform™ and IBM Rational Suite® solutions, enabling automated lifecycle support across development disciplines from requirements creation through application testing. By linking requirements, code, build records, test cases, deployment records and other development assets, Rational ClearQuest software extends traceability across the full lifecycle.

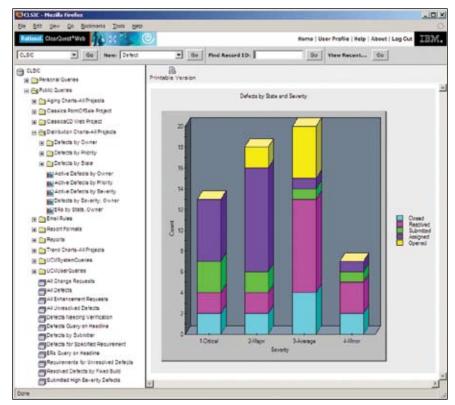
Requirements tracking

Requirements records can be replicated directly from the IBM Rational RequisitePro® application into Rational ClearQuest software. These requirements records can be associated with other development assets such as defect submissions, build records and test cases. Rational ClearQuest associations are replicated back into the Rational RequisitePro application, providing analysts with connections to Rational ClearQuest information such as activities, change requests and test data.

Activity-based change management

Rational ClearQuest and IBM Rational ClearCase® software configuration management products work together to allow you to define and manage changes to software assets as activities. Through the Unified Change Management capability, file versions in Rational ClearCase software are associated with activities in Rational ClearQuest software. Developers can then perform operations directly on the activities rather than on the collections of files associated with them.

This activity-based approach to change and configuration management helps developers to work on the right versions of the right files. It allows them to create collections of file versions, or "change sets," for each individual change. This enables developers to manage their work at the task level, instead of managing individual files. It helps build



Improve visibility, easily monitor projects, make better decisions.

engineers ascertain that the right file versions are incorporated into the build. Testers can easily confirm that the right functionality and builds are tested. Quality assurance (QA) engineers can quickly see and validate what has changed between builds. And project managers can more easily track and assess project status.

Enterprise quality management

Rational ClearQuest software manages the full range of testing activities from test planning, to test execution, to the capture and analysis of test results. Test plans can be defined. Test cases can be created and associated with specific test plans. Rational ClearQuest software is integrated with a variety of

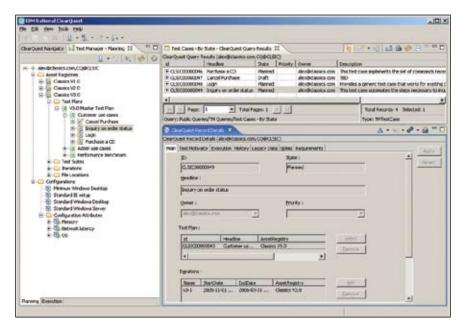
test execution tools including IBM Rational and other test tools that are supported by the Eclipse/Test and Performance Tools Platform (TPTP) framework. This enables Rational ClearQuest software to associate test execution scripts authored in these test tools with test cases in Rational ClearQuest software, and to initiate test execution. Rational ClearQuest software captures the test results, which allows you to easily summarize all the test results for a given test plan into a chart or report.

Build and deployment tracking

Rational ClearQuest software allows you to create and enforce a repeatable process for building and deploying applications. Build records track when a build starts and when it ends; they also track build logs and other build information. Deployment records track deployments through test environments and into production. Additionally, you can establish approval gates before deploying any of these environments. Build records and deployment records can be associated with each other and with other Rational ClearQuest records. such as test cases and test results, to help track which builds were tested and deployed.

Build automation

Rational ClearQuest software integrates with IBM Rational Build Forge™ software to automate build and release management. During an automated build cycle, Rational Build Forge software can directly create and update Rational ClearQuest build records, providing enhanced audit trails and extended traceability. Together, the Rational ClearQuest and Rational Build Forge solutions help you automate, track, audit and analyze the application lifecycle for improved product quality and increased team efficiency, and to help you meet compliance mandates.



Create, manage and report test information.

Deployment automation

The Rational ClearQuest integration with Rational ClearCase and IBM Tivoli® Provisioning Manager software allows you to deploy approved build files directly from source code control. In addition, Tivoli Provisioning Manager software can be launched directly from Rational ClearQuest software to facilitate deploying the approved build.

Access anywhere, anytime

Rational ClearQuest software provides a wide range of access capabilities to help ensure that all team members, local and remote, have access to the most up-to-date change management information.

The desktop client provides a consistent interface and functions across Linux®, Microsoft Windows® and UNIX® platforms. This client can stand alone or act from within the open source Eclipse framework.

Web clients provide access to Rational ClearQuest capabilities in an easy-to-use browser-based interface. Web clients simplify administration by eliminating the need to distribute, install, configure, maintain or upgrade software at individual user sites.

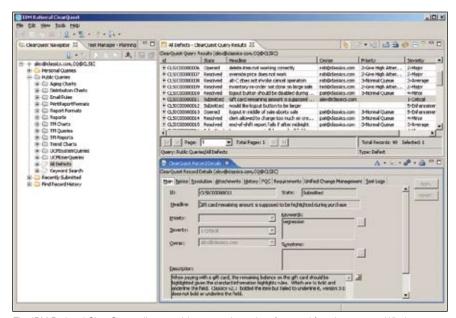
By enabling access from virtually anywhere at any time, Rational ClearQuest software helps improve team communication and collaboration, contributing to a higher-quality product.

Support for distributed organizations

Rational ClearQuest software provides a variety of methods for distributed access. Remote access to a centralized repository is provided through Web clients. In addition, Rational ClearQuest MultiSite software enables automatic replication and synchronization of Rational ClearQuest repositories between geographically distributed sites. By providing support for remote access to a centralized repository, as well as repository replication, Rational ClearQuest software enables you to choose the solution architecture that best fits your organizational needs.

Direct access from leading IDEs

Developers prefer to work within their chosen development environments. Rational ClearQuest software provides deep integration with leading integrated development environments (IDEs), including the IBM Rational Software Architect, IBM Rational Application Developer for WebSphere® Software and Microsoft Visual Studio 2005 environments, as well as the open source Eclipse framework. This integration enables developers to perform change management operations directly within their IDE.



The IBM Rational ClearQuest client provides a consistent interface and functions across Windows, Linux and UNIX platforms.

Access control

User authentication can be performed through the Rational ClearQuest directory of users or through industry-standard directory servers using Lightweight Directory Access Protocol (LDAP). Support for Secure Sockets Layer (SSL) encryption allows communication between the Rational ClearQuest software and LDAP directory to be secure.

User authorization is performed through the Rational ClearQuest user database. You can also extend access control for key security checkpoints through scripting. These features help ensure that changes are made only by authorized individuals.

Audit support

Rational ClearQuest software logs who changed what, when and why. Changes to activities are tracked in the history of the activity. In addition, electronic signatures verify identities of individuals performing specific actions. Through documenting all transactions across the software lifecycle, you can trace the origin and detail of all activities, and verify authorizations and sign-offs.

Heterogeneous, cross-platform support

Rational ClearQuest software supports heterogeneous environments. On the client side, you can access change management functions from virtually any development environment, including the Windows, Linux, UNIX and Apple Mac OS X (via Web browser) platforms. On the server side, you can choose from a variety of supported platforms to store change information. This platform flexibility can reduce administration costs and enable extended teams to easily collaborate, regardless of their individual environments.

In addition, Rational ClearQuest software is integrated with both Rational ClearCase and IBM SCLM Advanced Edition for z/OS® software. By automating the software lifecycle and providing a consistent process paradigm across distributed and z/OS environments, Rational ClearQuest software helps integrate mainframe and distributed development for enhanced project collaboration and release coordination.

Unparalleled scalability

Rational ClearQuest deployments can support thousands of users working across dozens of sites. Whether your team is a small workgroup at a single location or a highly distributed team spanning multiple locations, Rational ClearQuest software provides the scalability to support your evolving organizational needs.

Integration flexibility

Rational ClearQuest software is tightly integrated with a wide range of tools that span the software lifecycle. In addition, Rational ClearQuest software supports multiple application programming interfaces (APIs), including the Perl and common object model (COM) APIs, providing an open, extensible way to meet your specific integration needs.

Accelerate success with Rational services

IBM Rational tools are supported by an extensive worldwide staff of professional services consultants who bring years of experience to help you lay a solid foundation for successful software development projects. You can engage Rational professional services for a variety of scenarios—from largescale customized consulting projects that are tailored to meet your organization's unique needs, to short-term assistance with a single challenge.

IBM Rational ClearQuest products at a glance **IBM Rational ClearQuest** Server platforms Microsoft Windows XP HP-UX Novell SUSE Linux Enterprise Server Microsoft Windows 2000 IBM AIX® 5L™ Novell SUSE Linux Enterprise Server for Microsoft Windows Server 2003 Red Hat Enterprise Linux IBM zSeries Red Hat Enterprise Linux for IBM zSeries[®] Sun Solaris Web servers IBM Rational Web Platform • IBM WebSphere Application Server Client platforms Microsoft Windows XP IBM AIX 5L Citrix MetaFrame Microsoft Windows 2000 Red Hat Enterprise Linux Microsoft Windows Terminal Server Microsoft Windows Server 2003 Novell SUSE Linux Enterprise Server Apple Mac OS X¹ HP-UX Sun Solaris Web browsers Microsoft Internet Explorer Mozilla Firefox Apple Safari Database IBM DB2[®] IBM DB2 Universal Database[™] for Microsoft SQL Server IBM DB2 Express Rational² Microsoft Access IBM DB2 on zSeries Oracle Database Directory services IBM Lotus[®] Domino[®] • Microsoft Active Directory Sun Java[™] System Directory Server IBM Tivoli Directory Server Novell eDirectory Integrations • IBM Rational Portfolio Manager IBM Rational ClearCase IBM WebSphere Studio Enterprise Web Developer • IBM Rational ProjectConsole Developer re Software IBM Rational PurifyPlus[™] Eclipse Application Developer for IBM Rational SoDA® Microsoft Visual Studio 2005

•	IBM Rational
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•	IBM Rational

Software Software Architect Software Modeler RequisitePro IBM Rational Build Forge IBM Rational Functional Tester IBM Rational Manual Tester IBM Rational Performance Tester

 IBM SCLM Advanced Edition for z/OS

• IBM Tivoli Provisioning Manager • IBM WebSphere Studio Site Developer • IBM WebSphere Studio Application Developer

• IBM WebSphere Studio Application Developer Integration Edition

(C#, J#, C++, VB) Microsoft Visual Studio .NET

(C#, J#, C++, VB) Microsoft Visual Studio 6 (C++, J++, VB)

 Microsoft Project Microsoft Excel

 Microsoft Visual SourceSafe Business Objects Crystal Reports

IBM Rational ClearQuest MultiSite

Server platforms

 Microsoft Windows XP Microsoft Windows 2000 Microsoft Windows Server 2003

IBM Rational TestManager

HP-UX IBM AIX 5L

Red Hat Enterprise Linux

• Novell SUSE Linux Enterprise Server

Sun Solaris

Oracle Database

Database

 IBM DB2 IBM DB2 Express • IBM DB2 on zSeries

• IBM DB2 Universal Database for Rational Microsoft SQL Server

Note: Not all versions of listed software are supported.

¹ IBM Rational ClearQuest Web client only.

² Included with IBM Rational ClearQuest software.



For more information

To learn more about how IBM Rational ClearQuest products can help automate processes, improve visibility into projects and deliver quick business results, visit:

ibm.com/software/rational/ offerings/scm.html

For more information on IBM Rational professional services, visit:

ibm.com/software/rational/services/professional/index.html

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