Rational® ClearCase LT®

Release Notes

VERSION: 2003.06.00

WINDOWS EDITION



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Scope

These release notes present information about the definition, delivery, and operation of Rational ClearCase LT configuration management software.

Product Definition

Rational ClearCase LT software for Windows operating systems offers client/server solutions for configuration management software. ClearCase LT server software must be installed on a host in the same network domain as the hosts on which you install ClearCase LT client software. A client can access only one server at a time. To ensure adequate performance for all clients, we recommend that you install the ClearCase LT server on a dedicated host.

Before you install ClearCase LT software, read the *Release Notes* for Rational Suite, the *Installation Guide* for Rational Server Products and the *Installation Guide* for Rational Desktop Products (distributed with your software).

What's New in ClearCase LT

This chapter describes new features and other changes in Version 2003.06.00 of Rational ClearCase LT, as follows:

- New Features
- Announcements
- Changes to the Commands
- Changes to the Documentation

New Features

The following is a summary of the new features that are introduced in this release of ClearCase LT:

- ClearCase LT Web
- New and Enhanced Integrations
- UCM Enhancements
- Miscellaneous Enhancements

ClearCase LT Web

ClearCase LT Web supports the following new features:

- The Rational Web Platform (RWP) is the new server for the Web interface. ClearCase LT is a CGI executable that runs with the Apache Web server provided by RWP. We no longer support any other Web server as the server for this interface. For more information, see the *Administrator's Guide*.
- Support for Mozilla 1.0-based browsers, including Mozilla 1.0 and Netscape 7.
- Reverse proxy support. The Web interface allows requests from external users to be passed through a firewall to an internal ClearCase LT Web server.
- Performance improvement. When you perform an update, load, or restore operation on a large number of files, the associated Progress page displays either a

Show Details or **Hide Details** button. Hiding the details can improve performance dramatically when several thousand or more file elements are the subjects of the operation.

- You can create a UCM view based on an existing development stream, even if you
 are not the owner of the stream, as long as you are a member of the same group.
- Support for multibyte character sets.
- Support for Sun JVM 1.4.
- Full-text search capabilities in Help through the **Search** tab in the left navigation pane.
- Using Compare (in ClearCase Properties), you can compare the current version of an element with any other version. In previous releases, you could compare a version only with its predecessor.

For complete information, see the Help.

New and Enhanced Integrations

This section describes integrations that are new or enhanced in this release.

VS.NET

ClearCase LT is integrated more fully with Microsoft VS.NET than with its predecessor product, Visual Studio. This integration supports the UCM and base ClearCase process models, with and without Rational ClearQuest.

The ClearCase LT-ClearQuest integration is also available in VS.NET. You can use these products separately or link them through UCM. With the UCM configuration, you can work on activities and manage change requests concurrently within the VS.NET IDE.2.

Highlights of the integration include the following:

- Whether you are working in UCM or Base ClearCase, the toolbar displays only the operations that are relevant to the process you use.
- A Front Desk utility retains a list of the most recently used views or activities associated with the VS.NET project.
- The integration includes context sensitive menus from within the VS.NET Solution Explorer.

For more information, see the Help for CC.NET.

Visual Age for Java

This release provides support for the integration of ClearCase LT with Visual Age for Java 3.5.3. To configure the integration, see the Help.

WebSphere Studio

This release introduces the integration of ClearCase LT with WebSphere Studio. The integration supports WebSphere Studio versions 4 and 5.0 running on versions 1.0, 2.0, and 2.1 of the Eclipse shell. For more information, see the Help.

Sybase PowerBuilder Enhancements

This release adds support for PowerBuilder 8.0. The integration has also been enhanced to make the application path persist across sessions. For more information, see the Help.

Forte for Java

This release introduces the integration of ClearCase LT with Forte for Java version 3.0. For more information, see the Help.

JBuilder

This release provides support for Borland JBuilder versions 5, 6, and 7. For more information, see the Help.

Microsoft Office

This release provides support for Microsoft Office 2000 and XP.

UCM-ClearQuest Integration

This release includes the following enhancements to the UCM-ClearQuest integration:

- CAL API Calls. Seven calls have been added to the ClearCase Automation Library (CAL) API for administrators who want to customize the behavior of the integration. These calls return information about UCM objects in a project enabled for ClearQuest. Administrators can include the CAL calls in ClearQuest hook scripts to enforce development policies. For more information, see the Help.
- Performance enhancement. This release incorporates changes that reduce the communications overhead between ClearCase LT and ClearQuest.
- During a deliver operation in a project enabled for ClearQuest that has set the policy Transition to Complete After Delivery, if any of the activities being delivered

is set to a view, the integration unsets the activity from that view after it transitions the activity to a **Complete** type state. For more information, see *Managing Software Projects*.

- Format options implemented for this integration enable you to determine the view set to the UCM activity (%[view]p), the ClearQuest record type (%[crm_record_type]p), the likeliest view for resolving the names of versions in a change set (%[name_resolver_view]p), and the name of the ClearQuest database (%[crm_database]p). See the fmt_ccase reference page.
- New policies provide more flexibility in controlling the behavior of projects enabled for ClearQuest. For more information, see *Managing Software Projects* and the Help.

Base ClearCase-ClearQuest Integration

- This integration supports the association of multiple file imports (by clearfsimport) with a single change request. For more information, see the clearfsimport reference page.
- Enhanced capabilities for making ClearQuest associations. The integration lets you specify a file's association with a defect or defects by using checkout or checkin comments that contain a text pattern specified in the environment variable CQCC_COMMENT_PATTERN, or obtain a list of files to associate with a defect from the environment variable CQCC_AUTO_ASSOCIATE. For more information, see the file ccase-home-dir\lib\perl5\CQCCTrigger\CQCC\README.

UCM Enhancements

This release includes the following enhancements to UCM:

- Single-stream projects. Customers who prefer a serial, rather than a parallel, development environment can use single-stream projects. A single-stream project contains one stream: the integration stream. Developers join the project by creating an integration view attached to the integration stream. Because developers work directly on the integration stream, they do not perform deliver or rebase operations. We recommend single-stream projects only for small teams of developers who work closely together.
- **Read-only streams.** You can designate specific streams as read-only to prevent developers from making changes to the stream's components. For example, you might create a read-only stream for your release engineering team members so that they can access a set of baselines without inadvertently making changes to components.
- **Baseline naming templates.** Project managers can specify a template to be used in naming baselines within a project. They construct a baseline naming template

by choosing tokens that represent variables such as project name, component name, date, and so on.

- **Performance enhancements.** This release incorporates changes that reduce the processing and communications overhead for almost all UCM operations.
- Format options for object properties. Formatting options for UCM object properties enable you to output the initial baseline of a component (%[initial_bl]Xp), the activities of a baseline (%[activities]Xp), the promotion level of a baseline (%[plevel]p), the promotion levels defined in the PVOB (%[plevels]), and whether or not a stream is read-only (%[read_only]p). See the fmt_ccase reference page.
- Delivering the current activity. The -cactivity option for deliver specifies that the currently set activity is to be delivered. See the deliver reference page.
- Determining baseline membership. The lsbl command supports the options -member_of and -recurse, which enable you to determine whether a baseline is a member of a composite baseline. See the reference pages for lsbl and fmt_ccase.
- Displaying the activities of a delivery. In the Compare Baselines GUI, you can right-click a deliver integration activity on the Activities tab and select Show
 Contributing Activities from the shortcut menu to show the contributing activities that were included in the deliver operation.

For integration activities in projects enabled for ClearQuest, you can click **Actions** > **Contributors** on the ClearQuest record form to display the activities that were included in the **deliver** operation.

- Using lsproject to display ClearQuest policies. The lsproject –l command displays ClearQuest policies for a project that is enabled for ClearQuest. For more information, see the lsproject reference page.
- 1024-byte object names. Thecleartool interface supports object names of up to 1024 bytes in length (Windows imposes a limit of 260 bytes). Although this enhancement is not specific to UCM, it is of particular interest to UCM users, who must contend with long, generated object names. Note that the GUIs do not support 1024-byte object names. For information on object naming, see the cleartool refernce page.
- Checking PVOB/component relationships. The checkvob command incorporates functionality for detecting and repairing relationships among a PVOB, a project's components, and for projects that are enabled for ClearQuest, the ClearQuest user database. For more information, see the *Administrator's Guide* and the checkvob reference page.
- Listing activities by user. You can use the lsactivity command to list only those activities that are owned by a specified user. See the lsactivity reference page.

- Checking in all versions in an activity's change set. In the Project Explorer, you can right-click an activity and select Checkin All from the shortcut menu to check in all versions in the activity's change set. In projects that are enabled for ClearQuest, you can click Finish Activity from an activity's shortcut menu. This checks in all versions and performs ClearQuest actions, such as transitioning the activity to a Complete type state, based on the project policies that were set.
- New Events. There are new events that support UCM operations. See the events_ccase reference page.
- **Changes to VOB Creation Wizard and Project Explorer.** These GUIs support the creation of multiple components that are stored in the same VOB.

For more information, see *Managing Software Projects*, the reference pages cited in this section, and the Help.

Miscellaneous Enhancements

This section describes miscellaneous enhancements in this release.

- Uncataloging elements that have checkouts. By default, the rmname operation behaves correctly by failing when the element specified to be uncataloged is checked out. See the rmname reference page.
- Creating elements in view-private directories. The mkelem command supports a

 mkpath option that creates an element from a view-private file or directory that
 resides in a view-private directory. The distinctive behavior of this option is that it
 also creates elements from all view-private directories in the element path. See
 the mkelem reference page.
- Handling white space during merges. In previous releases, you could ignore white space when using cleardiff by means of the -blank_ignore command-line option or the lgnore white space during merge option in the Diff Merge Properties window. However, in graphical mode the option was supported only for comparisons, not merges. At this release, the lgnore white space option is available during a merge. In addition, the command option -favor_contrib enables you to specify a contributor to be used for white space formatting of unchanged lines. For graphical merges, the cleardiff GUI displays a list of contributors (Take white space changes from:) from which you can select one to be used for white-space formatting. See the Help and the reference page for cleardiff.
- CLEARCASE_GROUPS environment variable. The environment variable, CLEARCASE_GROUPS, can be used to specify a list of up to 32 groups that ClearCase considers first when determining or displaying which groups a user belongs to. For more information, see the *Administrator's Guide* and the env_ccase reference page.

- **Printing differences in contributors.** The **Diff Merge** GUI now allows you to print the differences in contributors and includes options to control the layout. See the Help for details.
- Manual merges for graphical rebase operations. The Rebase Stream Preview dialog box incorporates a new option, Merge elements graphically. This option disables automatic merges, allowing you to merge element versions graphically, even if there are no conflicts. See the Help for details.
- XDE and Rose element types. This release introduces the element types xde (for Rational XDE) and rosert (for Rational Rose RealTime). For more information, see the type_manager reference page.
- **Type managers for XDE Tester.** This release introduces the XDE Tester type managers **_rftdef**, **_rtfmap**, and **_rftvp**. These type managers are versions of the **binary_delta** type manager.
- New.Net detection by CC Doctor. The New.Net third-party plug-in software is known to have compatibility problems with ClearCase LT. CC Doctor now detects and reports the presence of this software.
- Object name restriction relaxed. The restriction on object names that disallowed numerics values has been relaxed such that only integers are disallowed. The data converters—the commands that are prefixed clearexport_-have been modified to take advantage of this change. For information about object naming rules, see the cleartool reference page.

Announcements

This section contains announcements, as follows:

- Status of the Feature Level
- Distribution of Perl Extension
- Perl Software Distributions in This Release
- UCM-ClearQuest Integration Support for UCM Packages
- Miscellaneous Announcements

Status of the Feature Level

This release introduces feature level 4. Table 1 shows all supported feature levels and the versions at which they were introduced.

Feature level	Introduced in version
2	4.0
3	2002.05.00
4	2003.06.00

Table 1 Feature Levels and ClearCase LT Versions

Feature level 3 placed constraints on client/server compatibility in UCM environments. Feature level 4 introduces no additional constraint; it is equivalent to feature level 3 in terms of PVOB client/server compatibility. For information on feature level 3, see the Version 2002.05.00 *Release Notes* for your product. Also note that read-only streams and single-stream projects are restricted to PVOBs at feature levels 3 and higher (see the reference page for **mkstream**).

Raising the feature level to 4 results in the following changes in the VOB:

- The predefined element types xml, html, and rose (if they exist) are renamed to xml_v5.0, html_v5.0, and rose_v5.0, respectively. Similarly, element type names that you have changed are renamed to *name_v5.0*. The v5.0 types lose their status as well-known element types. Accordingly, when you create new elements, the file-to-type mapping mechanism no longer treats these types as the defaults (see the cc.magic reference page). The type of an existing element does not change; however, you can use chtype to change it.
- The new predefined element types xml, html, and rose are created. The purpose of replacing these types is to base the type managers on the binary_delta type manager instead of the text_file_delta manager. The cc.magic file maps new elements to these types by default.
- The element type **xde** is created.

For instructions about raising the feature level of a VOB, see the **chflevel** reference page.

Distribution of Perl Extension

ClearCase::CtCmd is a Perl extension that takes **cleartool**–like arguments. **ClearCase::CtCmd** takes a string or an array as an input argument and returns a three-element Perl array, as follows: a status bit, a scalar string corresponding to **stdout**, and any error message corresponding to **stderr**. This Perl extension and its documentation are available from www.cpan.org.

Note: After upgrading to Version 2003.06.00, you must rebuild **ClearCase::CtCmd** to account for the addition of new libraries and symbols to ClearCase LT

Perl Software Distributions in This Release

Beginning with this release, Perl 5.6.1 is distributed with ClearCase LT. Perl 4 has been removed from this release. For backward compatibility, this release also includes a modified version of Perl 5.001m. To use 5.001m instead of Perl 5.6.1, set CCASE_USEPERL5 to a nonempty string (see the **env_ccase** reference page). To verify the version that is being invoked, type **ccperl –ver**.

In conformance with the Artistic License Agreement under the terms of which Perl is distributed, Table 2 describes the modifications that were made to Perl 5.6.1.

Reason for modification		
Modification	Source file modified	
Changes to accommodate Rational installation structure		
Customize install path	win32/config.vc, win32/cinfig.bc, win32/config.gc	
Customize @INC	win32/win32.c	
Use Rational naming conventions		
Specify ratperl in .def	makedef.pl	
Use "ratl" name and Rational install path	win32/Makefile, win32/config.bc	

Table 2 Modifications to 5.6.1 Perl Distribution

Likewise, in conformance with the Artistic License Agreement Table 3 describes the modifications that were made to Perl 5.001m.

Table 3 Modifications to 5.001m Perl Distribution

Reason for modification		
Modification	Source file modified	
Accommodation of underlying C library changes or other OS changes		
Use tempnam instead of mktemp perlexe.cpp		
Building with DLL version of C library	perl.h	
Use open_osfhandle , so we don't need to rely on libc	perlexe.cpp	
Changes to accommodate Rational installation structure		
Have NtGetSiteLib use CLEARCASE_HOME	ntxs.cpp	
Use Rational naming conventions		

Table 3 Modifications to 5.001m Perl Distribution (Continued)

Reason for modification		
Modification	Source file modified	
perl.exe, perlglob.exe become ccperl.exe, ccperlglob.exe	pp_hot.cpp	
New functions and other changes needed by the embedded	d ClearGuide interpreter	
PerlRequire, PerlClearAv, PerlPushAv, PerlUnshiftAv, PerlCreateSv	perllib.cpp, perlexe.cpp, perllib.h	
Changes related to ClearGuide modules		
Fix for load_process_family_source	Getopt/Long.pm	
Inclusion of changes/upgrades from public domain to sou	irces	
5.002 PerlEval	perllib.cpp	
Defect fixes independent of public domain		
Fix of crash in catch in PerlRequire	perllib.cpp	
Not getting \$@ or return value perllib.cpp		
Change in build or test environment to Perl modules as shipped		
Fix autoloading ParseWords.pm		
Version related changes		
Remove v5.004 test	HTML.pm, Entities.pm	
Remove use strict for use by Perl 5.001m	HTML.pm, Parser.pm	
Remove use strict for use by Perl 5.001m	Date.pm, Parse.pm	
Changes to NT modules		
Incorporate Net::SMTP	Mail.pm, Mailer.pm	
Make it work with NT Perl 5.001m	Net.pm, SMTP.pm	
Make it work with NT Perl 5.001m	Time.pm, Zone.pm	

This release is the last major release that includes 5.001m. The unmodified sources for Perl versions 5.001m and 5.61, as well as the binaries built from them, are archived at ftp.rational.com. A link to the archive can be found at www.rational.com/support/downloadcenter/index.jsp.

UCM-ClearQuest Integration Support for UCM Packages

In the **Project Properties** and **New Project Wizard** GUIs, the **ClearQuest** page displays the policies that are appropriate for the UCM level of the ClearQuest user database associated with the project. If the ClearQuest user database uses the revision 5.0 UCM package (corresponding to Version 2003.06.00), the available policies are as documented in the Help and in *Managing Software Projects*.

If the ClearQuest user database uses an earlier UCM package, the available policies are as follows:

- For UCM package revision 2.0:
 - Check assignment before WorkOn
 - Check before ClearCase delivery
 - Do ClearQuest action after delivery
- For UCM package revisions 3.0 and 4.0:
 - Check assignment before WorkOn
 - Check before ClearCase delivery
 - Do ClearQuest action after delivery

Miscellaneous Announcements

This section contains miscellaneous announcements about this release.

New Install

The install program is new; for complete information, see the Installation Guide.

Change in Installation Directory

In previous releases, the name of the installation destination directory that you specified included the name of the product, "ClearCase." In this release, you should specify only the name of the directory in which the ClearCaseClearCase LT directory is to be created. The standard location for this directory is *drive*\Program Files\Rational. If you specify ClearCase in this path, the product is installed in *drive*\Program Files\Rational. Files\Rational\ClearCase.

Separate sitedef Files for Servers and Clients

In previous releases, one sitedef file held default values for both servers and clients. In this release, you create separate sitedef files for servers and clients.

CLEARCASE_OBSO_SYN Not Supported

The environment variable, CLEARCASE_OBSO_SYN, is not supported in this release.

Removal of the Term "atria"

The following change was made to remove the term "atria":

The environment variable ATRIAHOME has been renamed CLEARCASEHOME.

Name of Microsoft Word Integration dll changed

The name of the dll install file has been changed from CCWordIntegration.dll to ccmsoaddin.dll, and the integration has been expanded to include Microsoft Excel and PowerPoint.

Available Versions of ClearCase LT–ClearQuest Integrations

The ClearQuest Configuration tool (**cqconfig**) offers the administrator a choice of the V1 (previous) integration or the V2 (new) integration implementation allowing administrators to migrate to the new integration as appropriate. The default values were set to **V2** on UNIX (because V2 was a superset of the V1 implementation) and to **V1** on Windows (because the V1 integration had a GUI interface that V2 initially lacked). In this release, the V2 GUI is now available in all circumstances making it as functionally complete as the V1 Windows integration. Accordingly, the default for Windows is now set to **V2**. Administrators can still select **V1**.

Browser Support for ClearCase LT Web Interface

The Web interface no longer supports Netscape 4.7; use Netscape 7 instead.

The Web interface supports Internet Explorer Versions 5.5 and 6.0 running either the Microsoft JVM or the Sun Microsystems JVM, Version 1.4.0 or later.

Changes to the Commands

This section describes changes to the ClearCase LT command set.

New Commands

This release introduces no new commands.

New Options and Arguments

Table 4 lists new options and arguments to commands.

Command	New option/argument	Use
chactivity	-view view-tag	Transitions an activity in the specified view.
	<pre>-cqaction { -cact activity-selector }</pre>	In a single-stream project, checks in the versions in the change set of an activity and closes the activity if the relevant ClearQuest policies have been set.
checkvob	–ucm	Runs checkvob in UCM mode.
	-view view-tag	Uses the view specified in <i>view-tag</i> .
	–log log-dir-pname	Specifies an alternative directory for the log file directory.
	-fix [-force]	Directs checkvob to try to correct any problems it finds. Without –force , –fix prompts you before fixing any problem object.
	-verbose	Specifies verbose output.
	-crm_only	Examines only references to records in a ClearQuest database
	-vob_only	Examines only references to objects in components.
	-component component-selector	Further restricts a -vob_only check to the component specified by <i>component-selector</i>
	object-selector	Specifies the object types that are to be checked.
	-crm_dbname user-database-name	Checks the references held in the ClearQuest database specified by <i>user-database-name</i> .
	-activity cq-display-name	Checks the references held by the activity record specified in <i>cq-display-name</i> .
	-project cq-display-name	Checks the references held by the project record specified in <i>cq-display-name</i> .
chproject	-blname_template baseline-naming-template	Defines the baseline name template for a project.

 Table 4
 New Options and Arguments

Command	New option/argument	Use
chstream	–cview	Specifies the stream connected to the current view to be modified.
deliver	–reset –to integration-view- tag	Resets a new integration view so you can cancel, resume, or complete a deliver operation after the integration view is lost during a deliver operation.
	-cactivity	Specifies that the currently set activity is to be delivered.
diff	-tiny	Same as –window , but uses a smaller font in a 165-character difference window.
	-window	Displays output in a separate difference window.
diffbl	–nmerge	Specifies that no merge is to be performed.
lsactivity	-me	Displays activities owned by the current user.
	–user user	Displays activities owned by the specified user.
lsbl	-member_of [–recurse]	Used by itself, displays the composite baselines of which each baseline is a direct member. Used with the -recurse option, displays all baselines of which each baseline is a direct or indirect member.
lsstream	-in { project-selector stream-selector }	Displays a list of all streams for the specified project, or a list of child streams for the specified stream.
mkbl	-view view-tag	Specifies the view from which to create baselines.
mkdir	–master	Assigns mastership of the main branch of the directory element to the VOB replica in which you execute the mkdir command.

 Table 4
 New Options and Arguments (Continued)

Command	New option/argument	Use
mkelem	-mkpath	For an element that is being created from a view-private file or directory, this option creates elements from its view-private parent directories.
mkproject	-model { SIMPLE DEFAULT }	Sets the project model. SIMPLE : A single-stream project; DEFAULT : A multiple-stream project.
mkstream	-readonly	Creates a read-only stream.
pro- tectvob	pname-in-vob	Pathname of the VOB tag or of any file system object within the VOB.

Table 4 New Options and Arguments (Continued)

Obsolete Commands

No commands are obsolete at this release.

Obsolete Options and Arguments

The *dir* argument to **annotate** and the **-glossary** option for **apropos** are obsolete.

Changes to Command Output

Significant changes to command output are as follows:

- The event comment for the **rmname** operation has been changed from Removed file element to Uncataloged file element in order to reflect the nature of the operation more accurately and distinguish it more clearly from the **rmelem** operation.
- Output from the schedule command uses ISO dates regardless of any specified date format preference.

Changed Commands

Commands that have changed in one or more respects are as follows: **annotate**, **apropos**, **chactivity**, **checkvob**, **chproject**, **chstream**, **deliver**, **describe**, **diff**, **diffbl**, **find**, **lsactivity**, **lsbl**, **lsstream**, **lstype**, **man**, **mkbl**, **mkdir**, **mkelem**, **mkproject**, **mkstream**, **protectvob**, **rebase**, **rmname**, **schedule**. For details, see the corresponding reference pages.

Changes to the Documentation

This section describes noteworthy changes to the documentation.

HTML Help

Most Help, including reference pages, is HTML.

Command Reference

The following reference page has been removed from the *Command Reference*:

The reference page for ClearCase::CtCmd has been removed; for information about this Perl extension, see the Comprehensive Perl Archive Network (www.cpan.org).

Administrator's Guide

The *Administrator's Guide* contains new information about backing up and restoring ClearCase LT and ClearQuest data together.

Tutorial

The script-driven tutorial has been replaced with an HTML tutorial without scripts.

Managing Software Projects

A platform-independent edition of *Managing Software Projects* replaces the separate UNIX and Windows editions that were published at earlier releases.

Location of Files

Manuals in Portable Document Format (PDF) are installed in *ccase-home-dir*\doc\books. In previous releases, they were installed in *ccase-home-dir*\bin.

Most Help files are installed in *ccase-home-dir*\doc\help. In previous releases, they were installed in *ccase-home-dir*\bin.

Restrictions and Guidelines for Using ClearCase LT

This section explains restrictions and guidelines affecting the use of Rational ClearCase Version 2003.06.00 software that are considered noteworthy. These are not necessarily considered defects because the behavior reported is not expected to change in a future release of the product.

This section also describes significant problems with the documentation and includes documentation that was inadvertantly omitted from the manuals or Help.

Copyright Information

In some cases, you will not be able to view the Rational copyright information online. If you want to see this information, you can find it on the Rational Solutions for Windows product CD, Disk 1 under doc/legal_information.html.

Install-Related Restrictions

This section describes restrictions related to the installation of ClearCase LT.

Installer Incompatible with Windows Change Journal Feature

File system corruption can sometimes result from installing ClearCase LT on Windows 2000 to an NTFS partition that has the Windows **Change Journal** log enabled on it. We are working with Microsoft to fix the problem.

Before installing ClearCase LT onto a Windows 2000 system, read Rational Solution 182435434 at http://solutions.rational.com/solutions/display.jsp?solutionld=182435434. Alternatively, you can search for the text *change journal* in the Rational Solutions Knowledge Base at http://solutions.rational.com/solutions.

ClearCase LT Web

This section describes limitations on and guidelines for using the ClearCase LT Web product.

Netscape Versions for ClearCase LT Web and Other Rational Suite Products

The ClearCase LT Web product requires Netscape 7. However, the rest of the Rational Suite products require Netscape 4.78, and are not guaranteed to work correctly on Netscape 7. If you use ClearCase LT Web and another Rational Suite product, use Netscape 7 as your ClearCase LT Web browser, but do not modify your PATH.

Comparing Unicode Files Across Multilanguage Platforms

For a Unicode file to be processed correctly when using the **compare** operation across multilanguage platforms, the file needs a byte-order mark, as follows:

File encoding	Byte-order mark
UTF-8	EF BB BF
UTF-16/UCS-2, Little Endian	FE FF
UTF-16, UCS-2, Big Endian	FF FE
UTF-32/UCS-4, Little Endian	FF FE 00 00
UTF-32/UCS-4, Big Endian	00 00 FE FF

Load Rule Scopes

For the Web interface, snapshot view config spec load rules are specified differently from the way they are specified for the native interface. The keyword **load** is not needed in the **Load rule scopes** portion of the config spec for the Web client.

Compare/Merge Operations Limited to text_file Elements

The **Compare** and **Merge** operations are limited to elements of type **text_file**. Attempts to perform these operations on other types will fail.

Using Special Characters on Non-ASCII Operating Systems

Using special characters on non-ASCII operating systems can cause server output to be corrupted or the server to crash.

For example, the Shift-JIS double-byte tilde character (**FULLWIDTH TILDE**), which is used to indicate "Copy of" in the Japanese Windows environment, can cause this problem. The problem originates in differences between the Unicode conversion tables used by ICU (the publicly available Unicode software currently used by the Web interface) and the base operating system. The ICU Shift-JIS conversion table maps **FULLWIDTH TILDE** to **WAVE DASH**.

Setting Permissions for Temporary File Directory

The server-side CGI process needs access to a directory in which it can create temporary files. The default on Windows is c:\. If the permissions on this directory do not allow everybody to create files in it, obscure failures occur, often with the error message, <code>Operation "fileutl_tmpfile_ext_binary" failed: Permission denied. To avoid this problem, create a directory on the server with permssions that are set to allow everybody access to create files there. Then add a directive like the following to the RWP configuration file: SetEnv TMP d:\temp. The RWP configuration file is normally stored at c:\Program Files\Rational\common\rwp\conf.</code>

Relationship Between Pathnames and Hyperlinks

Pathnames that refer to files in your Web view are normally presented as hyperlinks. However, the Netscape 7 and Mozilla browsers enforce more stringent security restrictions than do other browsers. In these browsers, pathnames are not presented as hyperlinks because they cannot be traversed.

Platform Recommendations for Best Performance

For best performance, we recommend running the Web interface on Windows 2000, Windows XP, or Windows NT.

Handling SSL Warnings

When running the Web interface under SSL, the browser displays warning messages such as You are leaving a secure site. For example, in the VOB View, this may happen when you click a file name to view the file. The reason for the warning message is that a new window is launched to view the local file under the file protocol rather than under https. However, if you choose to view the same file by clicking **View** on the Properties page, a new window is launched under https, returning to the server, and the warning message does not appear.

You can safely ignore these warning messages because all client-server communications in the Web interface are encrypted. To disable the warning messages, use one of the following procedures:

On Mozilla and Netscape 7

- $\label{eq:lick} 1 \quad Click \ \text{Edit} > \text{Preferences} > \text{Privacy & Security} > \text{SSL}.$
- 2 In the SSL Warnings section of the SSL page, clear all check boxes.

On Internet Explorer

- 1 Click Tools > Internet Options.
- 2 On the Internet Options page, click the Advanced tab.
- 3 In the Security section, clear the check box that is labeled **Warn if changing between** secure and not secure mode.

Note that when running Internet Explorer 6 on Windows XP, you cannot disable these warning messages when the displayed page has content from both secure and insecure sources.

Web Client Can Be Very Slow When Browsing Large Directories

The Rational ClearCase LT Web client can be very slow when browsing large directories, especially when your client PC has a slow CPU or limited RAM. For example, on an 800 MHz PC with sufficient RAM, a 1500 entry directory can take approximately 2 minutes to render.

To work around this situation, use one of the following workarounds:

- Smaller directories
- A client PC with a faster processor speed
- If you are running ClearCase LT Version 2003.06.00, a Mozilla based browser. Mozilla based browsers seem to be faster than Microsoft Internet Explorer when browsing large directories.

Browser Pop-up Windows

When using the ClearCase LT Web client, display of pop-up windows must be enabled in your browser.

ClearCase LT-ClearQuest Integration

This section describes restrictions that affect the ClearCase LT-ClearQuest integration.

Activity Link with ClearQuest Record (UCM-ClearQuest Integration)

When a ClearCase activity in a project enabled for ClearQuest is linked to a ClearQuest record, the **Name** of the ClearCase activity is set to match the ClearQuest record's ID. This allows you to access the corresponding activity when you are working on a defect by using the current defect number. For example, you can use the command, **cleartool setactivity** *ClearQuest-record-ID*.

We recommend that you do not change the name of a ClearCase activity, although ClearCase does not prevent that. If you change an activity name, you cannot use the **setactivity** command as already described.

Note that the **Headline** field for a ClearCase activity is synchronized with the corresponding field in a ClearQuest record. That is, if you change this field from within either ClearCase or ClearQuest, the corresponding field in the ClearQuest record or ClearCase activity is modified as well.

Registry Problem (Base ClearCase LT–ClearQuest Integration)

The original Windows version of the Base ClearCase-ClearQuest integration ("V1") may on occasion fail to see the expected ClearQuest database because of outdated or incorrect description information that is maintained in the Registry. The error message that results is "Error trying to logon to the ClearQuest database"

If this occurs, do the following:

1 Using **regedit**, check the following registry entries and correct the information if necessary, where *version* is the ClearQuest version, for example, 2003.06.00 and *user* is the current user name.

HKEY_CURRENT_USER\Software\Rational Software\ClearQuest\2003.06.00\Common\CQIntSvr\marie

2 Using the Windows NT Task Manager or similar tool appropriate for your operating system, locate and end the process **cqintsvr11.exe**. The process restarts as needed and checks the registry for the latest values of the keys that were set in Step 1.

Permissions Problem (Base ClearCase LT–ClearQuest Integration)

A problem that is believed to originate in a Microsoft service pack can cause the Base ClearCase LT-ClearQuest integration to fail when a user logs on to a computer with an identity other than **Administrator**. The symptoms may include error messages **such as** This program can only be run within a ClearQuest trigger or Automation error...library not registered. To repair the problem:

On Windows 2000 and Windows XP systems

- 1 Log on to the system as **Administrator**.
- 2 Edit the registry using the **regedt23** command, select HKEY_CLASSES_ROOT, scroll down to **TypeLib**, and click it.
- **3** Select **Security** > **Permissions** from the main menu.
- **4** In the dialog box, add an entry for **Everyone** if this entry has not already been established.
- 5 Enable Allow read access for this entry.

- **6** Click **Advanced**, select **Reset Permissions** on all child objects, and enable propagation of inheritable permissions.
- 7 Click **Apply** and confirm the changes.

On Windows NT 4.0 systems

- 1 Complete steps 1 through 5 of the procedure for Windows 2000 and Windows XP systems.
- 2 Select Replace Permission on Existing Subkeys.
- **3** Click **OK** and confirm the changes.

Naming dbsets (UCM-ClearQuest Integration)

When assigning names to dbsets, follow these rules:

- If you have only one dbset, you can name it as you want.
- If you have multiple dbsets, the dbset that is to be associated with the integration should, if possible, be named the ClearQuest version that you are using; for example, **2003.06.00**.
- If you have multiple dbsets and none of them can be assigned the name of the ClearQuest version string, use the procedure that follows for naming the dbset that is to be associated with the integration.
- 1 Stop the clients.
- 2 Start the Windows registry editor.
- 3 Navigate to HKEY_LOCAL_MACHINE\Software\Atria\ClearCase\CurrentVersion.
- 4 Click CurrentVersion, click Edit > New > Key, and type ClearCase Squid. You should now have the new registry key, HKEY_LOCAL_MACHINE\Software\Atria\ClearCase\CurrentVersion\ClearCase Squid.
- 5 Click ClearCase Squid, click Edit > New > String Value, and type DBSet in the Value Name field of the Edit String properties sheet.
- **6** Type the name of the master database in the **Value Data** field on the Edit String properties sheet. You should now have a single string value named **DBSet** with the database name as its data.
- **7** Restart the clients.

Use of Rootless UCM Components

It is no longer possible to make a baseline in a rootless component that is not modifiable. Making a baseline of a composite component for the purpose of changing its members is regarded as making a modification in a component. A rootless component should be modifiable except in the following circumstances:

- The component is to hold only non-modifiable members.
- No baseline is ever to be made in the component.

Treatment of Workaround for RATLC00586383 at This Release

RATLC00586383

The workaround for **diff_merge** defect RATLC00586383 was to copy richedit32.dll into the clearcase\bin directory. Users running Version 2003.06.00 installations must remove this file manually.

Treatment of Time Stamps by Windows and UNIX

Windows commands that display time stamps adjust for daylight saving time based on the current DST setting rather than whether daylight saving time was in effect at the time of the file modification. This is a deliberate behavior. As a result, the time stamp output from a Windows command for a given file may be different from that shown by **cleartool** or UNIX commands for the same file.

Adding a Large Number of Files from Windows Explorer

If you attempt to add a large number of files to source control from within Windows Explorer, the operation fails. To add a large number of files to source control, use the **cleartool mkelem** command instead.

MMC taskpads and the Admin Console

A defect associated with taskpads in the Microsoft Management Console, version 1.1 and 1.2, causes problems in the ClearCase Administration Console. The problem occurs when you follow this sequence of steps:

- 1 Select the **All VOBs** or **All Views** node from the navigation bar of the Administration Console. The program displays the associated taskpad.
- 2 Select a VOB or view tag from the taskpad list, and then click Manage storage.
- **3** After the storage for that node has been successfully displayed, click the MMC back navigation arrow to return to and display the previously selected taskpad.

The taskpad list is blank.

Use either of the following methods to work around the problem:

- In taskpad mode, select ViewTaskpad to turn off taskpad mode.
- Navigate to the taskpad with the back arrow and select **Refresh** from the **All VOBs** or **All Views** node.

Note that with MMC 1.1, resizing the console window refreshes the list; resizing has no effect in MMC 1.2

Checking In Identical .frm Files in Visual Basic 6.0

By default, ClearCase software does not create a new version of a file that is identical to its immediate predecessor. When you attempt to check in a .frm file that is identical to the checked-in version, the integration does not check it in. However, if the .frm file has an associated .frx file, the integration checks in the .frx file as a read-only file. To avoid this problem, set the option to allow identical checkins.

Displaying Logging Text Inside IDE

To enable logging text to be displayed inside an IDE, the user must set the registry key HKEY_CURRENT_USER\Software\Atria\ClearCase\CurrentVersion\SCC\DebugTrace = 1 (or = 3 for additional logging to a file). This logging mechanism works for any IDE that supports messages from an SCC provider.

The message Not a VOB Object appears if you click **Add to Source Control**. In this case, the SCC proceeds to add the element to source control.

Problems with the Documentation

This section describes significant problems with the documentation and supplies documentation that is missing from the manuals or the Help.

Browsing the Documentation with Netscape Navigator

If you use Netscape to browse HTML documentation, we recommend Netscape 7.

Omissions from the Command Reference

The **diffbl** reference page does not describe the **-nmerge** option. The correct syntax for the first two usage modes of **diffbl** is as follows:

Display differences between two baselines or streams nongraphically:

diffbl [-activities] [-versions] [-baselines] [-first_only]

[-nrecurse] [-nmerge] { baseline-selector1 | stream-selector1 } { baseline-selector2 | stream-selector2 }

 Display differences between the specified baseline and its predecessor baseline nongraphically:

diffbl -predecessor [-activities] [-versions] [-nrecurse]

[-nmerge] baseline-selector

The **-nmerge** option is used to compare two baselines on the same stream and reports only activity and version changes made on that stream.

The **protectvob** reference page does not describe the *pname-in-vob* argument. The correct syntax for this command is as follows:

protectvob [-force] [-chown user] [-chgrp group] [-add_group group[,...]

[-delete_group group[,...]] vob-storage-pname | pname-in-vob } ...

pname-in-vob can be the pathname of the VOB tag (whether or not the VOB is mounted) or of any file system object within the VOB (if the VOB is mounted). It cannot be the pathname of the VOB storage directory.

The **checkvob** –**ucm** command supports a –**verbose** option, which directs the command to generate more detailed output.

Omission from the Administrator's Guide

The information that follows was omitted from the Administrator's Guide.

If you install Rational Web Platform (RWP) on a host that was previously using a different HTTP server to support version 4.2 or version 2002.05.00 of the ClearCase Web interface and if that HTTP server must continue to run on that host to support other applications, you must do the following:

- 1 Ensure that RWP and the existing HTTP server do not have any port conflicts. (This topic is treated in the *Administrator's Guide*)
- **2** Reconfigure the existing HTTP server to redirect Web interface requests to RWP. See the documentation for your HTTP server for information on how to do this.

Omission from Managing Software Projects

The discussion of enabling a schema to work with UCM in *Managing Software Projects* for Rational ClearCase omits an important step: mapping states to state types.

When you apply the BaseCMActivity package to a schema, ClearQuest adds the BaseCMActivity record type. When you apply the UnitedChangeManagement (UCM)

packages to the schema, ClearQuest adds the UCMUtilityActivity record type. But when you attempt to check in the schema with these changes, ClearQuest displays a series of validation errors stating that you need to map BaseCMActivity states to the AMStates Types package.

You receive this error because, in applying the UCM package to the schema, ClearQuest also applied the AMState Types package. This behavior is not described in the *Administrator's Guide* for Rational ClearQuest or in *Managing Software Projects*.

Before you can check in the schema, you must map states to state types from the AMStates Types to the BaseCMActivity record type, as follows:

- 1 In ClearQuest Designer, click Package > Setup State Types.
- 2 In the Setup States Type dialog box, select a **State Type** for each **State** listed.
- 3 Click Finish.
- 4 Click **File** > **Check in** to record your changes in the schema.

For more information about mapping states and state types, see the *Administrator's Guide* for Rational ClearQuest. For more information about enabling the BaseCMActivity record type, consult the Rational Support Knowledge Database.

Status of ClearCase LT Software Change Requests

Noteworthy problems found in or resolved in Version 2003.06.00 of Rational ClearCase LT are listed in the file cc_issues.htm.

You can find this file in the folder *ccase-home-dir*\install\ after you install the product.

Contacting Rational Technical Support

If you have any problems with the software or documentation, contact Rational Technical Support by telephone, fax, or electronic mail.

For information regarding support hours, languages spoken, or other support information, click the **Technical Support** link on the Rational Web site at www.rational.com.

Your location	Telephone	Facsimile	Electronic mail
North America	800-433-5444 toll free or 408-863-4000 Cupertino, CA	408-863-4194 Cupertino, CA 781-676-2460 Lexington, MA	support@rational.com
Europe, Middle East, and Africa	+31-(0)20-4546-200 Netherlands	+31-(0)20-4546-201 Netherlands	support@europe.rational.com
Asia Pacific	61-2-9419-0111 Australia	61-2-9419-0123 Australia	support@apac.rational.com