ClearCase LT Release Notes

Release 4.2

UNIX

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

Product Definition

ClearCase LT software for UNIX operating systems offers client/server solutions for configuration management software.

Before you install ClearCase LT software, read *Supported Architectures* in this document.

What's New in ClearCase LT

This chapter summarizes significant new and changed features in Rational ClearCase LT.

New features are documented in the *ClearCase Product Family Documentation Supplement*, which is installed as a PDF file in *ccase-home-dir*/doc/hlp/cpf_supplement.pdf.

Summary of Changes in This Release

ClearCase LT release 4.2 introduces the following significant new and changed features:

- Changes to UCM Integration with ClearQuest
- Changes to ClearCase Commands

Changes to UCM Integration with ClearQuest

ClearCase LT release 4.2 includes support for the new release of ClearQuest.

For information on planning and setting up the UCM-ClearQuest integration, see *Managing Software Projects with ClearCase*. For information about setting up the integration with ClearQuest and upgrading your ClearQuest schema to the latest UCM package, see the *ClearCase Product Family Documentation Supplement*.

New UCM Features

Following are features new in UCM:

- Obsolete Objects in UCM Listings
- Privileged Identity for the chproject Operation

Obsolete Objects in UCM Listings

By default, UCM listing commands do not list obsolete objects. A new option, **–obsolete**, includes obsolete objects in the listing. See the reference pages for **lsactivity**, **lsbl**, **lscomp**, **lsproject**, and **lsstream** in *ClearCase Product Family Documentation Supplement*.

Privileged Identity for the chproject Operation

The chproject operation now requires a privileged identity. See the corresponding reference page in the *ClearCase Product Family Documentation Supplement* for details.

ClearCase/ClearQuest Trigger for Username and Password

The checkin trigger recalls your username and password for the ClearQuest database you used previously. If you change your password or connect to a different database, the trigger fails to connect to ClearQuest and the following error message appears:

```
ERROR: Failed to login to ClearQuest with cached user name and
password, do you wish to reenter ? yes_no [yes]
```

If you enter **yes** (default), the previous name and password is cleared and a prompt for the new information appears.

If you enter **no**, the cached information is retained and you exit from the message.

New Merge All Function in the Merge Manager

The new function, **Merge All** in the Merge Manager fixes a problem on all UNIX platforms, where invoking the Merge Manager from xclearcase or specifying find criteria through the command line options to the Merge Manager did not find files that need merging. You had to reenter the find criteria using the Find Wizard to find the results.

The Merge Manager now displays a list of files that need merging, based on user criteria. Previously, you had to select each file in the list and perform individual merges. The new **Merge All** function now lets you automatically merge all the files in the list.

Integration with Sun Forte for Java

This release provides the integration of the SCC level of ClearCase functionality with Sun Microsystem's Forte for Java Release 2.0 toolkit on

- Windows NT, Windows 98, and Windows 2000
- Sun Solaris (Versions 2.6, 7, and 8)

Users of the Java IDE initiate ClearCase actions using the file-system shortcut menus and a set of command icons on the Forte for Java main window toolbar. The following functions are available:

- Check In
- Check Out
- Add to Source Control
- Undo Checkout
- Properties
- Compare to Predecessor
- Source Control History
- Version Tree Browser
- ClearCase Explorer

ClearCase integrated help appears as a book in the Forte for Java online help, which you can access from the IDE **Help** menu. Context-sensitive help, invoked by pressing F1, is also available for the ClearCase commands.

Changes to ClearCase Commands

This section lists new commands and describes changes to ClearCase commands.

New Command

Table 1 lists a new command for this release.

Table 1 New ClearCase Commands

Command	Description
clearfsimport	A new utility that allows you to place source files under ClearCase version control. You can run it in a UCM or base ClearCase view.

New Options and Arguments

Table 2 lists new options and arguments.

Table 2 New ClearCase Command Options

Command	New option/argument	Use
diffbl	**–predecessor** [**–activities**] [**–versions**] *baseline-selector*	Nongraphically displays differences between the specified baseline and its predecessor baseline.
	–graphical *baseline-selector1* *baseline-selector2*	Displays differences between two baselines graphically.
	–graphical **–predecessor** *baseline-selector*	Displays differences between the specified baseline and its predecessor baseline graphically.
clearimport	**-noload**	Reduces the time needed to import versions from flat files or other version control systems into a VOB. To load new versions, the user must update the workspace manually. See the reference page for full details on the behavior of the **-noload** and related **-identical** flag.
lsactivity **lsbl** **lscomp** **lsfolder** **lsproject** **lsstream**	**–obsolete**	Specifies that obsolete objects are to be included in the listing.
mktrigger	*ucm-object-selector*	Attaches a trigger to the specified UCM object.

Table 2 New ClearCase Command Options

Command	New option/argument	Use
mktrtype	**–ucmobject**	Creates a UCM trigger type that can be attached to individual UCM objects.
	–ucmobject –all	Creates a UCM trigger type that can be attached to all project VOB objects.
	–component *component-selector[,...]*	Specifies components for the restriction list.
	–project *project-selector[,...]*	Specifies projects for the restriction list.
	–stream *stream-selector[,...]*	Specifies streams for the restriction list.
rmtrigger	*ucm-object-selector*	Removes a trigger from the specified UCM object.

Obsolete Commands

No commands are obsolete in this release.

Supported Architectures

This section lists the basic platform, hardware and software requirements for running ClearCase LT software.

Supported Platforms

ClearCase LT software runs on the platforms listed in Table 3.

Table 3 Supported Platforms for ClearCase LT Software

Hardware platform	Operating system
Sun SPARCStation	Solaris 2.6 (32-bit), 7 (32- and 64-bit), 8 (32- and 64-bit)
HP 9000 Series 700 and Series 800	HP-UX 10.20 ACE[1] (except diskless workstations), 11.0[2] and 11.11 (32- and 64-bit support)
IBM RISC System/6000	AIX Release 4.3.2, 4.3.2.6, 4.3.3, 4.3.3.10

Table 3 Supported Platforms for ClearCase LT Software

Hardware platform	Operating system
IBM PC-compatibles	Red Hat Linux 6.2 (2.2.14-5.0 and 2.2.16-22 kernels) Red Hat Linux 7.0 (2.2.16-22 kernel) Red Hat Linux 7.1 (2.4.2-2 kernel)

1. Supported HP-UX ACE releases are July 1997, April 1998, June 1998, June 1999, and December 1999 Workstation ACE, and April 1998, June 1998, June 1999, and December 1999 Networking ACE.
2. Supported HP-UX ACE release is November 1999 ACE.

This release of ClearCase LT does not include support for the following architectures

- SunOS 4.*x*
- HP-UX 9.*x* and 10.01
- Compaq Alpha 5.0
- DC/OSx 1.*x* l

Supported Platforms for ClearCase LT Web Servers and Web Interface

The following platforms support a ClearCase LT Web server:

- Solaris SPARC
- HP-UX
- AIX
- Red Hat Linux

The following platforms support the ClearCase LT Web interface:

- AIX
- HP-UX
- Red Hat Linux
- Solaris SPARC

Supported File Systems

Table 4 specifies the current list of file systems supported for view and VOB storage on ClearCase LT servers.

Table 4 Supported File Systems by Platform

Platform	Supported file systems
Solaris SPARC	UFS, VxFS (Veritas)
HP-UX	JFS, UFS, HFS, VxFS
AIX	JFS
Red Hat Linux	UFS, EXT2

If a file system does not appear on the list in Table 4, it is not supported. Inform Rational Technical Support (see *Contacting Rational Technical Support*) or your sales representative of any concerns you have about this list.

The following file systems cannot be used with ClearCase on any platform:

- Andrew File System (AFS), DCE Distributed File System (DFS)
- Any memory-based file system (such as memFS, tmpFS, swapFS)

Red Hat Linux Software Version Numbers

Table 5 lists the Linux software version numbers supported by this release of Rational ClearCase LT.

Table 5 Linux Software Version Numbers

Component	Red Hat 6.2 Linux	Red Hat 7.0 Linux	Red Hat 7.1 Linux
Supported Linux kernel	2.2.14-5.0, 2.2.16-22	2.2.16-22	2.4.2-2

NFS Support

Third-party automounters are not supported on any platform.

For a given platform, we support the NFS implementations supported by the platform.

If you use non-ClearCase access, see *Administering ClearCase* for a description of the limitations associated with use of NFS and potential workarounds.

Hardware Requirements

This section describes hardware resources required to run ClearCase LT Server and ClearCase LT Client software.

Minimum Hardware Requirements

- For ClearCase LT client hosts
  - 32 MB main memory
  - 300 MB disk space
- For ClearCase LT server hosts
  - 64 MB memory
  - 2 GB disk space
  - 128 UNIX processes[1]
  - 600 UNIX file descriptors per host[1](not per process).

Basic Software Requirements

- The HTML Diff Merge (**xcleardiff**) tool requires a Netscape Web browser; the browser must support whatever level of HTML is used in the files to be compared or merged.
- The Web interface requires the following:
  - On the system acting as a ClearCase LT Web server, either a Netscape Enterprise 3.5.1 or an Apache 1.3.4 or later Web server
  - On any system accessing ClearCase LT software through the Web interface, a Netscape Web browser version 4.5 or later. (Note that it is not necessary to install ClearCase LT software on such a system.)
- Use of the online manuals in the PDF file format requires an Adobe Acrobat Reader, release 3.0 or later.

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1. kernel parameter

Disk Space Requirements for the Release Area

The following table shows the minimum disk space required on each type of network-wide release host.

File system	Disk space
Solaris SPARC HP-UX 10 HP-UX 20	198 MB 207 MB 200 MB
AIX Red Hat Linux	200 MB 119 MB

Exporting the Release Area

Setting up the export is architecture -specific; consult Table 6. For details, see the standard reference pages for these files and programs.

Table 6 Exporting the ClearCase Product Family Release Area

Architecture	Steps to export ClearCase release area	
Solaris SPARC	1. Revise **/etc/dfs/dfstab**:	**share –F nfs /usr/ccase_rls** *options*
	2. Enter command:	# **/usr/sbin/shareall –F NFS**
HP-UX 10, HP-UX 11	1. Revise **/etc/exports**:	**/usr/ccase_rls** *options*
	2. Enter command:	# **/usr/sbin/exportfs –a** *other-options*
AIX	1. Revise **/etc/exports**:	**/usr/ccase_rls** *options*
	2. Enter command:	# **/usr/sbin/exportfs –a** *other-options*
Red Hat Linux	1. Revise **/etc/exports**:	**/ (rw)** - no command is necessary

Architecture Mnemonics and mount Commands

Table 7 provides the architecture mnemonic and sample CD-ROM **mount** commands for supported platforms. The architecture mnemonic is used as the name of root of the release area for each platform or set of platforms.

Table 7 Mounting the CD-ROM

Architecture	Mnemonic	Sample Mount Command
Solaris SPARC	**sun5**	Not necessary (assuming Volume Manager is in use)
HP-UX 10	**hp10_pa**	**mount –F cdfs –r /dev/dsk/c3d0s2 /cdrom**
HP-UX 11	**hp10_pa**[1]	**mount –F cdfs –r /dev/dsk/c3d0s2 /cdrom**
AIX	**aix4_power**	**mount –o ro –v cdrfs /dev/cd0 /cdrom**
Red Hat Linux	**rhat_x86**	**mount –r /dev/cdrom /mnt/cdrom**

1. Use the hp10_pa release area for both HP-UX 10 and HP-UX 11.

Disk Space Requirements for Individual Hosts

Table 8 shows the disk space requirement for each kind of installation. All the space must be contained in a single disk partition.

Table 8 Disk Space Requirements for ClearCase LT Release

Platform	Type of installation	Megabytes
Solaris SPARC	Full copy	140
	Standard	35
HP-UX 10	Full copy	145
	Standard	26
HP-UX 11	Full copy	156
	Standard	32
AIX	Full copy	240
	Standard	58
Red Hat Linux	Full copy	94
	Standard	17

Table 8 Disk Space Requirements for ClearCase LT Release

Platform	Type of installation	Megabytes
All Platforms	Link	< 2 [1] (install of ClearCase LT Client and Server)
	Mounted	< 2 [1] (install of ClearCase LT Client and Server)

1. Disk space requirements for Link and Mounted installations represent the space required for items loaded in the **/var/adm/atria** directory.

If a host will have view directories, the system needs enough disk space to contain all files loaded into the views and all view-private files added to the views. The amount of space required depends on the number and sizes of the files in the views.

The ClearCase LT server must have enough disk space to contain the files and databases used for storage of VOB- or view-storage directories. The amount of space required depends on the characteristics and use of the VOBs and views.

Web Sites of Operating System Vendors

You can find up-to-date information on operating system patches at the vendor Web sites listed in Table 9.

Table 9 Operating System Vendors Web Sites

Vendor	URL
Sun	sunsolve.sun.com
Hewlett-Packard	us-support.external.hp.com
IBM[1]	service.software.ibm.com/support/rs6000
Red Hat Linux	www.redhat.com

1. IBM suggests using the **fixdist(1**) utility to download patches.

Layered Software Packages

In some cases, correct ClearCase processing requires installation of a layered software package. Before installing ClearCase LT on a host, consult Table 10 to determine whether you need to install any such packages.

Table 10 Layered Software Packages Required by ClearCase LT

Host type	Package name	Description
Solaris SPARC	SUNWsprot	SPARCompilers, bundled tools: includes default **make.rules** file
	SUNWbcp	Binary compatibility
	SUNWscpr	Source compatibility, root
	SUNWscpu	Source compatibility, user
	SUNWmfrun	Motif RunTime kit to run ClearCase GUIs
HP-UX 10	Upgrade. **UPG-TLINK**	Compatibility links for file system
	X Window System: X11R5 (or later)	Window system
HP-UX 11	Upgrade. **UPG-TLINK**	Compatibility links for file system
	X Window System: X11R6 (or later)	Window system
AIX	bos.net.nfs.client	NFS
Red Hat Linux	XFree	X Window System Kit
	KNFSD KNFSD-Clients	Both are part of the optional install package.

ClearCase Patches Incorporated in This Release

ClearCase LT release 4.2 incorporates all ClearCase patches since the release of ClearCase Release 4.1. Table 11 shows the specific ClearCase patches.

Table 11 ClearCase Patches Incorporated in This Release

Patch stream	Last patch incorporated
ClearCase 4.1	**clearcase _p4.1-10**

Getting Started

This section contains information to familiarize you with installing, setting up, and using ClearCase LT software.

Pointer to Installation Information

Refer to *Installing Rational ClearCase LT* for installation information. It provides instructions on installing ClearCase LT Server and ClearCase LT Client, with tips on how to start using the software.

Licensing

Refer to *Installing Rational ClearCase LT* for licensing information necessary for operation of ClearCase software. It provides instructions on obtaining and installing licenses.

Installation Issues

This section discusses restrictions or defects that involve the installation of the ClearCase LT product. Take into account the information in this section before or during installation to be sure that ClearCase software or particular features are installed properly.

License Server Install Clarification

When you install the FlexLM license server, you are prompted to enter the location to install Rational products. The installation text incorrectly suggests that this program installs ClearCase LT. It is important to understand that this program installs only the FlexM license server, not a specific product.

To install ClearCase LT after the license server is installed, you need to run the ClearCase LT install program, as described in *Installing Rational ClearCase LT*.

Note: The FlexLM installation text incorrectly refers to the previous version of ClearCase LT as LT 1.0.

Installing License Server on Linux Requires korn Shell

To run the script used to install the FlexLM license server automatically, you must have the korn shell installed on your system.

You can verify whether the korn shell is installed by seeing whether the directory /bin/ksh exists. Or, use the following command in the Red Hat Package Manager tool:

$ rpm -q pdksh

If this returns the pdksh version, the korn shell is installed.

- NOTE TO REVIEWERS: OTHER LINUX INSTALL INFORMATION SHOULD GO HERE. I AM ADAPTING the full ClearCase text (that is subltracting the MVFS insformation) Pleasesupply any other needed information. Thanks.

Installing ClearCase LT with Rational Software Development Studio

If you obtained ClearCase LT as part of the Rational Software Development Studio for UNIX package, install RSDS before installing ClearCase LT.

When you install ClearCase LT after installing RSDS, the first question prompts you for the name of the ClearCase LT license server host. Press RETURN to accept the default value; ClearCase LT will retrieve the appropriate Development Studio license key from the information provided in the RSDS install process.

Deinstalling ClearCase May Remove Web Interface Views

By default, views for Web interface users are created under the host data directory for ClearCase (/var/adm/atria). If ClearCase is deinstalled, the view directories are deleted, but the views remain registered. To avoid leaving entries for nonexistent views in the ClearCase registry, do one of the following:

- Remove any views created by Web interface users before removing ClearCase from a Web server used to provide access to the ClearCase Web interface.
- Use the **–view_storage** option in the ccweb.conf file to designate some other location for Web interface views.

The var directory is not removed by the deinstall process. You must explicitly choose to remove the directory.

Installation Stops if ClearCase LT Exists

If you attempt to install ClearCase LT software on a system that has ClearCase software installed, the installation procedure stops. The procedure displays a message saying that it has detected an existing installation of standard ClearCase and that it is stopping prematurely because of encountered errors. ClearCase LT and ClearCase software cannot exist on the same system. After the ClearCase LT installation stops, deinstall the ClearCase component as follows:

1. Change directory to the ClearCase release area (not the ClearCase LT release area).

This release area is recorded in the file /var/adm/atria/host.dat. You must use the standard ClearCase release area to deinstall the installed version of ClearCase. The ClearCase LT release area cannot be used to deinstall ClearCase.

2. Run the install_release script.
3. Choose the **Local Deinstall** method.
4. Choose the **Local** model.
5. Select the ClearCase component for deinstallation.

Local Deinstall preserves a number of system files—such as rgy, rgy/backup, license.db, and exports.mvfs—in /var/tmp/Atria.preserve. Delete these files. You may also have to delete any files left in the /var/adm/atria tree.

After you deinstall the ClearCase component, you can restart the ClearCase LT installation.

Installation Stops if Installation Directory Not Empty

If you specify an installation directory that is not empty, the install utility halts the install process to avoid deleting directory contents accidentally, and displays an error message.

In the previous version of ClearCase LT, the installation deleted the directory contents without any warning.

Installation of UCM Integration with Rational ClearQuest

To use the UCM integration with ClearQuest, take into account the following issues with the compatibility and version support of the following elements:

- ClearCase LT version (client and server)
- ClearQuest version
- UCM schema package
- ClearQuest metaschema feature level

Consider the following points:

- The feature level of the metaschema for ClearQuest 2001.03.00 database is 3. The feature level for ClearQuest 2001A.04.00 database is 5.
- A ClearCase LT release 4.2 client requires a ClearQuest 2001A.04.00 client, because the integration of UCM with ClearQuest uses new ClearQuest API calls.

Table 12 shows the compatibility of different releases of ClearCase LT and ClearQuest, UCM Package Revision Number, and the ClearQuest database feature level.

Table 12 Integration of UCM with Rational ClearQuest

ClearCase LT release	UCM package revision number	ClearQuest database feature level	UCM/CQ integration supported?
release 4.1	2.0	3	Yes
release 4.1	2.0	5	No
release 4.1	3.0	3	No
release 4.1	3.0	5	No
release 4.2	2.0	3	Yes
release 4.2	2.0	5	Yes
release 4.2	3.0	3	Yes
release 4.2	3.0	5	Yes

To upgrade to release 4.2 from 4.1 and continue to use your integration of UCM with ClearQuest, you must perform the first two steps. The last two steps are optional.

1. Install ClearQuest.
2. Install the ClearCase LT client (or both ClearQuest and ClearCase LT simultaneously).
3. Upgrade your UCM-enabled ClearQuest schema with the new version of the UnifiedChangeManagement package.
4. Upgrade your ClearQuest user database to the new version of the schema.

Recovering from an Unsuccessful Installation

Some users may encounter problems running **install_release** on previously installed systems. At a certain point, **install_release** attempts to shut down the running CPF product software on the system. This is done by running the shutdown script, *ccase-home-dir*/etc/atria_start. /etc/rc.d/init.d/atria.

There is a known problem with the shutdown script. In some instances when the installation is no longer intact, the script encounters an error and prevents **install_release** from completing the installation or deinstallation.

Workaround: Delete *ccase-home-dir*/etc/atria_start, which lets the install proceed as if it did not need to stop a current installation.

NOTE: If an installation continues to fail because CPF product software is running, you must reboot the machine.

ClearCase Clients Need Compatible Language Settings

All ClearCase client computers that access a common set of VOBs and views must use a single common character encoding system. If all computers are not configured this way, ClearCase operations may fail or produce confusing or unreadable output.

For example, the Japanese SJIS and Japanese EUC encoding systems are available. They both represent Japanese characters but are incompatible. For this reason, you cannot mix SJIS and EUC in ClearCase clients.

Product Documentation

The ClearCase LT documentation available with this release comes in print and online formats. The books included with each license are *Installing Rational ClearCase LT*, *Administering Licenses for Rational Software*, and *Introducing Rational ClearCase LT*.

Note: The only manuals updated for this release are the *ClearCase LT Release Notes* (this document), *Installing Rational ClearCase LT*, and the *ClearCase Product Family Documentation Supplement*.

Other books can be purchased separately from the Rational Press Shop at www.rational.com/shop, including *Introducing Rational ClearCase LT*, *Administering ClearCase LT*, *Managing Software Projects with ClearCase*, and the *ClearCase Reference Manual*.

All ClearCase LT documentation is provided on line, including this document, *ClearCase LT Release Notes* (cc_relnotes.pdf). For more information about online documentation, click **Help Topics** in ClearCase Help and refer to the **Online Manuals** entry.

Restrictions and Guidelines for ClearCase LT

This section presents restrictions, limitations on, or guidelines for the use of ClearCase LT software that are considered noteworthy. These are not considered defects because the behavior reported is not expected to change in a future release of the product.

Guidelines for Using UCM

This section describes guidelines for and restrictions on using Unified Change Management (UCM) in ClearCase LT.

Restrictions on Using the UCM-ClearQuest Integration

The UCM-ClearQuest integration is not supported on AIX 4.3.2 and Red Hat 7.1 platforms. ClearQuest does not support these operating systems for this release.

When Setting Up a Project, Make Components Read-Only Initially

You cannot change an integration stream's configuration to use an earlier baseline of any components that are marked as modifiable by the stream's project.

This may be a problem when creating a new project if the precise set of foundation baselines is not known in advance. After a modifiable baseline has been added to a project, it is not possible to roll back to an earlier baseline later on if building or testing indicates this is necessary.

To work around this limitation, initially specify your components to be nonmodifiable when creating a new project. After verifying that the project builds and tests correctly, update the project policies to allow modifications to any/all components.

Notes on Using the UCM-ClearQuest Integration

For users who install the Rational ClearQuest product, the UCM process in ClearCase LT software is enhanced by a very tight integration between UCM activities and the change request management provided by ClearQuest. Use the following guidelines with the UCM-ClearQuest integration.

Transitioning a ClearQuest-Enabled Project After Delivery

If the **Do ClearQuest action after delivery** policy is enabled on a UCM project, delivery of a ClearQuest-enabled UCM activity may result in an attempt to transition the activity to a **Complete** state type.

If the activity record has a field that must be filled in before it can transition to the **Complete** state, the program displays an error. An example is the Defect record type in the default UnifiedChangeManagement schema, whose **Resolution** field must be non-empty before it can be resolved.

Workaround: Modify the **UCU_CQActAfterDeliver** global script to include code similar to that below. This automatically fills in the **Resolution** field when the activity is delivered.

```
REM Add complete resolution code
REM Defect record type requires Resolution field to be non-empty

'Get hook's session context
Set Session = GetSession()

'Get the entity
Set entity = Session.GetEntity(entity_type,entity_id)

REM If record type is "Defect" ...
   If(entity.GetEntityDefName = "Defect") Then
REM If Resolution field is empty...
   If(entity.GetFieldValue("Resolution").GetValue = "") Then
REM Fill in required field
   session.EditEntity entity, "modify"
   Call entity.SetFieldValue("Resolution", "Fixed")
   msg = entity.Validate
REM Remember to do some action if validate fails
   entity.Commit
   End If
End If
```

See the ClearQuest API documentation for information on editing entities.

Schema Requires Submitted State

If you are applying the UCM package to a custom ClearQuest schema (as opposed to using the out-of-the-box Unified Change Management schema), be aware that this package depends on the existence of a state with the name **Submitted**. If your custom schema does not include a state with this name, you can apply the package to your schema by using one of the following methods:

- Before applying the package, temporarily rename the state that is the target of the **Submit** action to **Submitted**. Apply the UCM package and rename the state to its original name.

- Create a dummy state called **Submitted**, and assign its state type to **Complete**. If you do this, you must also create a dummy action whose target is the **Submitted** state. After applying the UCM package, you can delete the dummy state and action.

Cannot Import UCM-Enabled Records from a ClearQuest Database

In general, you cannot import UCM-enabled records from a ClearQuest database; ClearCase LT software cannot guarantee that UCM information referencing an arbitrary ClearQuest database is correct. However, this restriction does not prevent data recovery in the event of a data loss. You may successfully import records into a ClearQuest database if all the following conditions are true:

- The records have been backed up from that database.
- The name of the database has not changed.
- The ClearCase LT UCM information in the record is still valid.

Cannot Delete a Project Record in ClearQuest

If you are working with a UCM project that is linked to a ClearQuest user database and attempt to delete the project record, you get a run-time error. You cannot delete the record or undo the CommitAction hook. The workaround is to use the **squid_patch** utility to force the **ucm_vob_object** field of the orphaned project to 0.

Expediting Slow Logon to ClearQuest Web

To improve performance, a change was made to the way the trigger handles connections to ClearQuest Web, keeping open the same communication session for the duration of the trigger and possibly into the next trigger call. If logging on still seems slow or problematic, administrators can turn off this feature by changing the $CFG::keepsession global variable within the Perl trigger script to `FALSE`.

Restrictions on ClearCase LT Web Interface

The following restrictions apply to using the ClearCase LT Web Interface.

Restrictions on the Web Interface in a UCM Environment

If you are using the Web interface in a UCM environment, the following restrictions apply:

- You can work only on existing activities that you own; you cannot create new UCM activities using the Web interface.
- You cannot deliver changes to an integration view.

- You cannot rebase your development stream.
- You cannot use the Web interface to view ClearQuest-enabled projects.

Interactive Triggers Fail When Accessed Through Web Interface

The ClearCase Web interface supports noninteractive triggers. Interactive triggers, such as those that attempt to read input or create a window, will fail.

If a trigger attempts to read input using **clearprompt**, the ClearCase Web interface displays this error:

```
clearprompt is not supported in the Web interface
```

If a trigger attempts to read directly from standard input, it fails because standard input does not specify a valid file descriptor.

In addition, any trigger failure in the Web interface context displays this error message:

```
Interactive triggers are not supported in the Web interface.
If the trigger was interactive, it may have failed for that reason.
```

Trigger script writers can detect whether a trigger is running in the Web interface context by checking for the environment variable ATRIA_WEB_GUI. It is set to **1** if you are running in the Web interface context.

Changes to Files Not Checked Out May Be Silently Overwritten

If you use the Web interface to download (rather than check out) a file to your Web view and then modify the file, your changes to the file are silently overwritten if you download the file again from within the same view. The program assumes that only changes made to checked-out files are meant to be saved.

Host Name Resolution Must Be Enabled on Web Interface Clients

The Java program used in the Web interface attempts to connect to the Web server to transfer files. Web browsers only allow Java programs to open connections to the server from which the programs were downloaded.

To enforce this rule, the Web browser on the Web interface client must be able to resolve the Web server's host name to an IP address. If you use a host name in a URL that cannot be resolved by the client host, the Java program cannot connect to the server. In this case, Web-interface file-transfer operations such as checkout, checkin, and download fail.

If the Web server is being accessed through a firewall by a proxy server, the proxy server being used must support DNS lookup outside the firewall.

ClearCase Web Interface Problem in Overriding Primary Group

When the ClearCase Web server running on Windows logs in a client, it sets the primary group to the designated primary group in the client user's domain account. As a result, sites that use domain mapping to allow user accounts in multiple domains to share VOBs cannot access those VOBs through the ClearCase Web Interface.

Workaround: Specify a configuration variable in the ccweb.conf file, and add a value to the registry that overrides the group setting and enables domain mapping.

Adding the Variable to the ccweb.conf file

To enable a single Web server to support one primary group override, add the **–primary_group** variable with a *groupname* value to the ccweb.conf file. The allowable values for *groupname* are the same as for the CLEARCASE_PRIMARY_GROUP environment variable. The ccweb.conf file must be located in /var/adm/atria/config.. If you need more than one primary group override, configure additional Web servers.

Setting the Registry

Typically, when domain mapping is used to allow users from multiple domains to access the same VOB, each user must create the **DomainMappingEnabled** value (set to 1) in the HKEY_CURRENT_USER\Software\Atria\ClearCase\CurrentVersion registry key.

To enable domain mapping for a Web server, create the **DomainMappingEnabled** value in the HKEY_LOCAL_MACHINES\Software\Atria\ClearCase\CurrentVersion key on the Web server machine. The value must be of type DWORD and set to 1.

If you log in directly to the machine instead of logging in through the Web interface, user values for **DomainMappingEnabled** override the machine value.

Netscape MOZILLA_HOME Environment Variable Must Be Set

When you use the ClearCase Web interface on a Netscape browser, the MOZILLA_HOME environment variable must be set to the Netscape Communicator installation directory. Otherwise, messages similar to the following may be displayed when you try to check out or download files.

```
Netscape:Error
Java reported the following error on startup:
java.lang.SecurityException: system classes were not signed.

Netscape: Error
# Error: Issuer certificate is invalid. (-8156)
# jar file: ./java/classes/java40.jar
# path:       ./java/classes/java40.jar
```

We recommend that you check the Netscape Web site, www.netscape.com, for more information on general Netscape requirements.

Internet Explorer 5 May Terminate Display of Web Pages

Internet Explorer 5 terminates the display of Web pages early if the response from the Netscape Web server is delayed. This may affect use of the ClearCase Web interface because accessing VOBs may delay the Web server's response. The Microsoft Knowledge Base article Q226550, which can be accessed at http://support.microsoft.com/support/kb/articles, describes how to download a patch to fix this problem.

Problems Using Netscape 4.5 to Compare HTML Files

A bug in Netscape Navigator 4.5 may cause problems when using Diff Merge to compare HTML files.

Under some circumstances, Netscape opens a mail window, instead of a browser window, when a user tries to render HTML files for comparison using Diff Merge. This can happen when a user has both a mail window and a browser window minimized on the desktop. When the user is comparing two HTML files and clicks **Render HTML**, the Netscape browser opens correctly. If the user minimizes the browser window and selects the browser or another file to render, the mail window may open instead of the browser window.

A different problem may occur if a user closes both the browser and mail windows and leaves the **Message Center** open on the desktop. (The **Message Center** is a toolbar that can start, among other things, the browser and mailbox windows.) When the user clicks **Render HTML**, Netscape attempts to open a new instance of Netscape rather than use the one that is running. As a result, the user sees multiple dialog boxes (some unreadable) from **xcompare** and a message from Netscape that it has found a lock file.

Restrictions on UNIX Snapshot Views

The following sections describe restrictions when using ClearCase snapshot views on UNIX platforms.

Cannot Open a File from Snapshot View Using Version Tree Browser

Using the Version Tree Browser to open a file from within a snapshot view on a UNIX system creates a temporary file that contains the text for that version of the element. Although the name assigned to the temporary file is not the version-extended pathname of the element, it provides all the information contained within that version-extended pathname, including the version number and branch structure of the selected element version. For example, the temporary file name for an element foo.c@@/main/11 would be *unique_id_*foo.c_main_11.

The temporary file is removed when the editor exits.

Version Tree Browser Starts Incorrect diff

The Version Tree Browser now displays an error message if you try to access a checked-out version that is eclipsed. Previously, accessing the checked-out version would appear to work but the version actually accessed was the version visible in the view (that is, the eclipsing version) instead of the checked-out version. The error message now includes the following text with the pathname of the checked-out version:

```
Cannot_generate_name_for_checkout_in_view:<view_tag>
```

Version Tree Browser Opens a Temporary File

If you use the Version Tree Browser to open a file version from within a snapshot view on a UNIX system, a temporary file is created for use within your editor. The name assigned to the temporary file is not the version-extended pathname of the element. But the assigned name provides all the information contained within the element's version-extended pathname, including the version number and branch structure of the selected element version. For example, the temporary file name for an element foo.c@@/main/11 would be *unique_id_*foo.c_main_11.

The temporary file contains the text for that version of the element and the file is removed when the editor exits.

Problems When Administrative VOBs Are Unavailable

The administrative VOB is used by one or more other VOBs as a central repository of global type objects. See the **type_object** reference page for a description of this feature.

ClearCase LT users may see errors when the administrative VOB is unavailable. Following are examples of situations when this may happen:

- A user attempts to attach a version label, using a label type that was previously created automatically, as a local copy of a global label type. The ClearCase **mklabel** command tries to contact the administrative VOB containing the global label type. If that administrative VOB is unavailable, the **mklabel** command fails.

- A VOB backup script attempts to lock the entire VOB object of /vobs/proj\proj before copying data to tape. For each administrative VOB used by /vobs/proj\proj, the ClearCase **lock** command tries to contact the administrative VOB. If any administrative VOB is unavailable, the **lock** command fails, which causes the backup script to fail.

To disable the above checking for a particular ClearCase command (for example, to keep working while an administrative VOB is offline):

1. Become the root user.
2. Set the environment variable CG_PROCFLAGS to the value **no_process**.
3. Execute the command.

If TZ Variable Is Set, ClearCase LT Software Uses It

If the TZ environment variable is set to a value different from the time maintained by the operating system, ClearCase LT software uses the TZ time rather than the system time. In this case, file creation and change dates can be wrong, and config specs may not work as expected.

Notes on Merge Manager Display Elements

On some platforms, the initial window created by the Merge Manager may not display all the toolbar buttons; for example, on some systems, the **VTree** button is not initially displayed. In addition, if the window is shrunk on any platform, the toolbar is clipped. However, in either case, if the window is enlarged, any missing buttons appear.

In addition, if a window uses a large font size, column titles may be truncated. For example, the **Merge Type** column may appear as the **Merge T** or **Merge** column. Enlarging the window does not change the column width. To read all column titles, you may have to use the following procedure:

1. Run the **Find Merge** tool; some elements are displayed in the various columns.
2. Press the SHIFT key and your middle mouse button simultaneously to drag the border of the column and enlarge it.

Finally, view-extended pathnames may be truncated in a number of places. For example:

- The **Name** box in the main Merge Manager window
- The window title of the window spawned by the **destination** and **source** commands
- The **Name** box in the clearhistory window. In this case, you cannot reposition the **Name** field to see the truncated data.

- The windows displaying comments for **checkout** and **checkin**.

Keep checked out Option Changed in Add To Source Control Dialog Box

The behavior of the **Keep checked out** check box in the **Add To Source Control** dialog box has changed. If you selected this check box in previous releases, the view-private file that you added to source control remained checked out. This behavior is consistent with the **cleartool mkelem** command. As a result, you could lose the contents of this file before it was truly part of the VOB. This was most likely to happen if you canceled the checkout.

Now, the file is checked in and checked out. You can continue working on the file, but its contents at element creation time are preserved, even if you cancel the checkout.

Verbose Mode Slows xclearcase Performance

To display the following annotations in xclearcase, select **display version** in the browser preferences dialog box.

```
checked out but eclipsed
eclipsed
eclipsed by checkout
checked out but removed
error on reference
view vob hard link
no config record
disputed checkout
```

Note: Selecting **display version** can decrease performance when xclearcase is working with larger directories.

Problem Using Dtpad Editor on Systems Running CDE

The dtpad editor that is part of the Common Desktop Environment (CDE) is implemented as a client/server application. By default, one dtpad server process is spawned for each dtpad session (dtsession), and all subsequent dtpad invocations run in clients that connect to this server. The server process, however, does not have any ClearCase view context, and thus cannot process VOB files properly.

Workaround: There are two possible workarounds for this problem:

- Invoke dtpad with the **–standalone** option. This forces the current invocation of the editor to run independently of the server process, and as such, it can retain the current view context.

- Before you edit a file, a process set to a view can start the **dtpad –server** process manually. Subsequent invocations of dtpad then connect to this server. To edit files from a different view, terminate and restart the server.

Defects/Change Requests

Noteworthy problems found in ClearCase LT software are listed in the file **cc_issues.htm**. You can find this file in the directory *ccase-home-dir*/install after you install the product.

Note that any problems relating to installation or setup of ClearCase LT software are noted in *Installation Issues*.

Documentation Issues

This section presents late changes to documentation and describes errors or information missing from the documentation delivered with ClearCase LT software.

Problems with ClearCase Product Family Documentation Supplement

In this release, **clearmake** is supported in ClearCase LT, but the **clearmake** reference page does not list ClearCase LT in the Applicability section. Also, Chapter 1 of the ClearCase Product Family Documentation Supplement states incorrectly that the **clearmake** reference page does not apply to ClearCase LT.

The printed version of *ClearCase Product Family Documentation Supplement*, Release 4.2 (Document Number 800-024446-000, April 2001) is superseded by the version of the same manual that is installed as *ccase-home-dir*/**doc/hlp/cpf_supplement.pdf** (Document Number800-024446-000 (patch) June 2001).

Problems with Reference Pages

The following problems, relevant to ClearCase LT, exist in the *ClearCase Reference Manual* for ClearCase Release 4.2.

Object-Creation Commands

The reference pages for object-creation commands (**chpool**, **cptype**, **mkattype**, **mkbrtype**, **mkeltype**, **mkhltype**, **mklbtype**, **mkpool**, and **mktrtype**) do not mention explicitly that the name specified for an object must not be a valid integer or real number. Be careful with object names that begin with 0x, 0X, or 0, the standard prefixes for hexadecimal and octal integers.

config_ccase

The **config_ccase** reference page on UNIX systems does not mention the file /var/adm/atria/config/admin.conf, which allows or disallows remote administration of the host. Also, this reference page says that anyone can edit files in the ../config directory. That may not be true for all files there, including **admin.conf**. You must be **root** to edit admin.conf.

softbench_ccase

The **softbench_ccase** reference page is incorrect in the following ways:

- It states that ClearCase integration with SoftBench supports SoftBench 4.*x* and 5.*x*; ClearCase supports 5.*x* and 6.*x*, but does not support SoftBench 4.*x*
- The description of the integration is accurate for the ClearCase integration with SoftBench 5.*x*, but not for 6.*x*. SoftBench functionality changed significantly at 6.*x*, causing the ClearCase integration user interface to also change. For an accurate description of the integration for this user interface, see the online help related to third-party integrations (available from the top-level online help menu).

Problems with the *Administering ClearCase LT* Manual

The following problem exists in the *Administering ClearCase LT* manual for release 4.2:

The description of the job scheduler execution environment in *Administering ClearCase LT* is incorrect. The sentence

```
The standard input stream is closed.
```

should read

```
The standard input stream is set to an empty file.
```

Problems with Online Help

The following issues exist with online help:

Using xman to Display Man Pages

ClearCase and MultiSite reference pages are supplied in ASCII catman format in directories named cat1, cat4, and cat5. If you want to use xman to display ClearCase and MultiSite reference pages, you must create symbolic links named man1, man4, and man5 in *ccase-home-dir*/doc/man that point to the cat directories. For example:

% cd /usr/atria/doc/man

% su
Password: xxxxxx

```
% ln -s cat1 man1
% ln -s cat4 man4
% ln -s cat5 man5
```

CAUTION: If you create **man** directories, do not run **cleartool man** as the root user. If you do, the **man** page will be deleted.

Issues with Bristol HyperHelp

The ClearCase online documentation is displayed using Bristol HyperHelp. If your site already is using HyperHelp, make sure that *ccase-home-dir*/bin appears in the path before any other reference to Bristol HyperHelp. Rational Software has extended HyperHelp to support special features in the ClearCase online documentation. The HyperHelp viewers supplied with ClearCase will display conventional HyperHelp files, but conventional HyperHelp viewers may not display ClearCase HyperHelp files.

Help Window is Blank

Occasionally, a ClearCase help topic fails to appear: the title appears, but the body of the window is blank. When this happens, you can correct the problem as follows:

1. In the Help window menu bar, click **Options >Font >Normal**. The Help window is refreshed.
2. If the wrong help topic is displayed when the help window is refreshed, click the **Back** button to get back the original topic.

Issues with Tutorials

This section describes problems with running tutorials.

Segmentation Fault When Clicking Back Button in Tutorials

On UNIX systems, clicking the **Back** button or links in the ClearCase LT snapshot view tutorial to move back and forth between topics can cause a segmentation fault.

When using this tutorial on hosts running Sun OS 5.8, HPUX 10.20 and HPUX 11.00, segmentation faults occur randomly in Units 1, 3, 4 and 5. These segmentation faults often, but not always, occur when you click

- The **Back** button in the Help window to move back and forth between tutorial topics.
- The link of the last topic in a tutorial unit when you intend to go to the next one.

- A link in the tutorial topic when ClearCase LT windows and dialog boxes are open.

When the segmentation faults occur, the tutorial window closes, and you must start the tutorial again.

Workaround: Restart the tutorial and resume at the place where the error occurred.

If you find that the tutorial is not working, we recommend that you run the tutorial cleanup script and start the tutorial again.

To start the cleanup script, follow these steps:

1 In a terminal window, type **hyperhelp cc_tut.hlp &**.

2 In *Unit 1: Setting up a VOB and snapshot view*, click **Unit 6: What's next?**

3 In *Unit 6: What's next?*, click **Removing data created during the tutorial**.

4 In the Removing tutorial data dialog box, click **SCRIPT: Remove tutorial view and VOB**.

Contacting Rational Technical Support

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

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