ClearCase LT Release Notes
Version 2001.03.00
WINDOWS

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

Product Definition

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 ClearCase LT server. To ensure adequate performance for all ClearCase LT clients, we recommend that you install ClearCase LT Server on a dedicated host.

It is essential that you read *Rational Suite Release Notes* distributed with your software and *Hardware/Software Information* on page 1 and *Getting Started* on page 4 of this document before you install ClearCase LT software. These sections contain important information for a smooth and successful installation.

Hardware/Software Information

This section provides basic information on the platforms supported and the software requirements for running ClearCase LT software. There are no special hardware requirements on Windows systems. As appropriate, it may refer you to *Compatibility Issues* on page 7.

Supported Platforms

Supported File Systems

ClearCase LT software runs on the platforms listed in Table 1.

Table 1   Supported Platforms for ClearCase LT Software

Hardware Platform	Operating System
Intel x86	Windows NT 4.0, SP4, SP5, SP6a Windows 2000, Windows 2000 SP1 Windows Me (ClearCase LT Client only) Windows 95 all versions (ClearCase LT Client only) Windows 98 all versions (ClearCase LT Client only)

Table 2 lists the file systems that ClearCase LT software currently supports.

Table 2   Supported File Systems by Platform

Platform	Supported File Systems
Windows NT	FAT, NTFS
Windows 95, Windows 98, Windows Me	FAT, FAT32
Windows 2000	FAT, FAT32, NTFS

If a file system does not appear on the list in Table 2, it is not supported. Inform Rational Technical Support (see *Contacting Rational Technical Support* on page 15) or your sales representative of any concerns you have about this list.

Windows/UNIX Interoperation

ClearCase LT software supports file access between Windows and UNIX platforms using ClearCase File Server (CCFS). ClearCase LT Client views on Windows NT, Windows 2000, Windows 95, Windows 98, and Windows Me systems can access files in UNIX VOBs using CCFS. In addition, UNIX clients can access files in VOBs on Windows platforms using CCFS.

Software Requirements

This section describes the requirements that ClearCase LT software has on other software components.

Windows NT and Windows 2000 Requirements

ClearCase LT software requires the following software on Windows NT or Windows 2000:

- Windows software (see Table 1 on page 2)

- TCP/IP (shipped with Windows NT 4.0 and Windows 2000)

- Internet Explorer 4.0.1 SP1 or later (see *Install Internet Explorer 4.0.1 SP1* on page 6)

- If acting as a ClearCase Web server: Web server software, either Apache (1.3.6 or later), Netscape Enterprise (3.5.1 or later), or Microsoft Internet Information Server (IIS 4.0 or 5.0).

- If acting as a server for the ClearCase/FrontPage or ClearCase/Visual InterDev integration: IIS Web server software and the FrontPage Server Extensions (FPSE).

- An Adobe Acrobat Reader, release 3 or later, to access the online manuals, which are in PDF file format.

- On any system accessing ClearCase LT software through the Web interface, a Web browser; either Netscape 4.6 or later, or Internet Explorer 4.0.1 (SP1) or later.

    Note: It is not necessary to install ClearCase LT software on such a system.

Windows 95, Windows 98, and Windows Me Requirements

ClearCase LT software requires the following software on Windows 95, Windows 98, or Windows Me systems:

- Windows software (see Table 1 on page 2)

- Client for Microsoft Networks (shipped with Windows 95 and Windows 98)

- TCP/IP (shipped with Windows 95 and Windows 98)

- Windows Sockets 2 (shipped with Windows 98)

    Note: If Windows Sockets 2 is not present on a host running Windows 95, ClearCase LT software installs it.

    Refer to *Windows 95 Compatibility Issues with Windows Sockets 2 Update* on page 5 for compatibility issues.

- Internet Explorer 4.0.1 SP1 or later (see *Install Internet Explorer 4.0.1 SP1* on page 6)

- An Adobe Acrobat Reader, release 3 or later, to access the online manuals, which are in PDF file format.

- On any system accessing ClearCase LT software through the Web interface, a Web browser; either Netscape 4.6 or later, or Internet Explorer 4.0.1 (SP 1) or later.

  Note: It is not necessary to install ClearCase LT on such a system.

Disk Space Requirements for Individual Hosts

Table 3 shows the approximate disk space requirements for a new installation of ClearCase LT software. These figures are for ClearCase LT files only; include approximately 5 MB extra for temporary storage during the actual installation.

Table 3   Disk Space for ClearCase LT Files and Upgraded System Files

ClearCase LT Software	Disk Space Required (MB)
ClearCase LT Client	60
ClearCase LT Server	90

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.

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 Suite* for installation information. It provides instructions on installing ClearCase LT Server and ClearCase LT Client software, lists required products, and contains information about removing Rational software and troubleshooting.

Licensing

Refer to *Administering Licenses for Rational Software* for licensing information necessary for installation and initial operation of ClearCase LT software.

If you have a floating evaluation license for ClearCase LT or ClearCase LT and a Rational Suite Studio product, you must install a FLEXlm server to activate your evaluation license. You cannot activate your floating evaluation license from the Rational License Key Administrator window by clicking **License>Enter a License**. For more information on installing a FLEXlm server, refer to *Administering Licenses for Rational Software*.

Alternative License Mechanism

You may use Rational AccountLink, at **http://www.rational.com/accountlink**, to request and obtain your permanent license key. Follow the AccountLink Getting Started instructions install the permanent key using **license_setup**.

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 LT software or particular features are installed properly.

Requirement for an Evaluation Installation

If you have a floating evaluation license for the ClearCase LT product or ClearCase LT and a Rational Suite Studio product, you must install a FLEXlm server to activate your evaluation license. You cannot activate your floating evaluation license from the Rational License Key Administrator window by clicking **License>Enter a License**. For more information on installing a FLEXlm server, refer to *Administering License for Rational Software*.

Minimal Installation Not Supported

The Rational installation program has an option for a minimal installation on the **Setup Configuration** dialog (see *Rational Suite Release Notes*). This option is not recommended when installing ClearCase LT Client or ClearCase LT Server and it is not supported. We recommend performing a typical installation of ClearCase LT software.

Windows 95 Compatibility Issues with Windows Sockets 2 Update

The installation of ClearCase LT software on a Windows 95 system includes installation of the Windows Sockets 2 update, which ClearCase LT software requires to run on a Windows 95 system.

However, Windows Proxy 2.0 Client and the Windows Sockets 2 update do not function on the same machine. Furthermore, if ClearCase LT software is already installed, installing the Dial-Up Networking 1.2 update causes ClearCase LT software to stop functioning.

Workaround: You cannot install Windows Proxy 2.0 and ClearCase LT software on the same machine. If you want both ClearCase LT software and Dial-Up Networking 1.2 on a single Windows 95 client, you must install them in the order listed below:

1   Dial-Up Networking 1.2 update

2   ClearCase LT software (which includes the Windows Sockets 2.0 update)

(Depending on what is already installed, you may have to reinstall both products.)

Install Internet Explorer 4.0.1 SP1

If some features of ClearCase LT software are to perform properly, Internet Explorer 4.0.1 (Service Pack 1) or a later version of Internet Explorer must be installed on your system.

Note: It is not necessary to run Internet Explorer as a browser on the system; it simply needs to be installed.

The presence of Internet Explorer is required for the ClearCase Administrative Console (implemented as a set of snap-ins to the Microsoft Management Console), for use of the ClearCase Automation Library (CAL), and for use of the enhanced Diff Merge Tool with HTML files.

Set CLEARCASE_PRIMARY_GROUP on Windows 95, Windows 98, or Windows Me Systems

On Windows 95, Windows 98, or Windows Me systems, you must set the environment variable CLEARCASE_PRIMARY_GROUP in the **autoexec.bat** file on each machine running ClearCase LT software. The Windows 95, Windows 98, or Windows Me system does not pick up this value from settings in a user's Windows NT or Windows 2000 logon account.

Product Documentation

The ClearCase LT documentation available with this release comes in print and online formats. The print items included with each license are *Installing Rational Suite*, *Administering Licenses for Rational Software*, and *Introducing Rational ClearCase LT*. Also available in a separately purchased documentation kit are *Introducing Rational ClearCase LT*, *Administering ClearCase LT*, and *Managing Software Projects with ClearCase*.

All ClearCase LT documentation comes online, including this document, *ClearCase LT Release Notes* (**cc_relnotes.pdf**). For more information about online documentation, click the **Contents** tab in ClearCase Help and refer to the **Online Manuals** entry.

Compatibility Issues

This section describes briefly, with references to supplementary information if necessary, considerations relating to the installation or operation of ClearCase LT software in conjunction with the installation of or the operation of other products with which it is expected to work.

With Rational Products

This section describes compatibility issues in relation to other Rational products.

Notes on Using the UCM-ClearQuest Integration

The UCM process in a ClearCase LT system is enhanced for users who have installed the Rational ClearQuest product by a very tight integration between the activity management provided by UCM and the change request management provided by ClearQuest software. 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 is 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 **UCM_CQActAfterDeliver** global script to include code similar to that below. This automatically fills in the **Resolution** field when the activity is delivered.

```
' Defect record type requires Resolution field to be non-empty
' If record type is "Defect" ...
If (entity.GetEntityDefName = "Defect") Then
   ' If Resolution field is empty...
   If (entity.GetFieldValue("Resolution").GetValue = "") Then
      ' Fill in required field
```

```
        Call entity.SetFieldValue ("Resolution", "Fixed")
    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 which is the target of the **Submit** action to **Submitted**. After applying the UCM package. you may again rename it 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 may delete the dummy state and action.

ClearCase LT Client Loops on Windows 98 Systems with ClearQuest

If ClearQuest software is incorrectly configured (for example, connected to the wrong database), ClearCase operations such as checking an element out or checking an element in fail, because the ClearQuest record corresponding to the UCM activity cannot be located. On Windows 98 systems, this failure can result in the dialog box getting "stuck" so that clicking **Cancel** does not remove it. To work around the failure, do **one** of the following:

■ Click another window before clicking **Cancel**.

■ Press CTRL+ALT+DEL to start the task manager; in the task manager, kill the program that is displaying the dialog box.

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 PVOB Associated with ClearQuest

If you are working with a UCM project that is stored in ClearQuest, and attempt to delete the project record by using the UCM project helper table, you get a runtime error. You cannot delete the record or undo the CommitAction hook. The workaround is to use **squid_patch** to force the **ucm_vob_object** field of the orphaned project to 0.

Late Changes to Documentation

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

Start Menu Differences

In the ClearCase LT printed and online documentation, the names of programs differ from the names that you see on the **Start** menu. For example, the ClearCase LT Doctor help file says:

> To start ClearCase Doctor, click **Start**>**Programs**>**Rational ClearCase LT**>**ClearCase Doctor**.

The text should show the proper name of the program as **Rational ClearCase LT Doctor**.

Incorrect Steps in Project Manager Track of ClearCase LT Tutorial

In the unit titled "Set up and create the ClassicsWeb project" in the Project Manager Track of the ClearCase LT Tutorial, steps 3 and 4 in the "Create an integration view" topic are incorrect. They should say:

3. At the step, **Choose location for a snapshot view**, click **Finish** to accept the default view storage location. Click **OK** at the **Confirm** screen.

4. The **Choose Element to Load** screen appears. Select **ClearCase Tutorial** from the **Available Elements** list and click **Add**. Click **OK** to confirm your choices. After the elements are loaded, click **OK** at the **View Creation Status** message box.

Guidelines and Restrictions on Using ClearCase LT Software

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

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, make your components nonmodifiable when creating a new project. After verifying that the project builds and tests correctly, update the project policies to allow modifications to any or all baselines.

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.

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.

Guidelines on Using the Administration Console

Use the following guidelines when using the Administration Console.

Console Access to the Customer Web Site

To access the ClearCase LT Customer Web site from the Administration Console, you must first set up your Microsoft Internet Options. You can do this either when you first install and configure Microsoft Internet Explorer, or manually using **Control Panel**>**Internet Options**. If these options (for example, firewall and proxy server settings) are not set up, the following message is displayed when you try to connect to the ClearCase LT Web site:

```
Internet Explorer cannot open the Internet site
http://clearcase.rational.com. A connection with the server could
not be established.
```

Misleading Licensing Error Message

If you do not assign a ClearCase LT server for your client, and you try to run any ClearCase LT tool that talks to the server, the error message you get is the same as if you had no license. If you get an error that tells you that you do not have a license for the product, but you are certain that you have a valid license, make sure you have a server name entered for the client. Click **Start**>**Settings**>**Control Panel** and click the ClearCase icon. Ensure there is a valid ClearCase LT server host name in the edit field.

Guidelines on Using the XML DiffMerge Tool

This section notes restrictions and special issues involved in using the XML DiffMerge Tool.

Restrictions on the Tool

Use of the XML DiffMerge tool is subject to the following restrictions as a result of its use of Version 1.0 of the XML **expat** parser:

- All entity declarations for entity references must be within the document; in other words, the constructs specified by the '**standalone="no"**' document declaration are not supported. (See the *XML 1.0 Recommendation* Standalone Document Declaration and Entityref sections (especially Well-Formedness Constraint: Entity Declared) for more information).

- If an entity (other than the predefined entities) is not declared, a parser error message appears on input. In this case, input processing of the document stops, but the application proceeds.

- Files referred to within the input file, via SYSTEM declarations, are read to find externally defined entities, but XML document content defined in these files is not interpolated into the document.

- There is no validation of XML documents, because the parser we use is not a validating parser. On the other hand, the tool tests for well-formedness; it issues an error message and exits upon traversal of a document that is not well-formed.

- Because the parser only parses the internal DTD subset, rather than parsing an external DTD associated with an XML file, it does not handle documents that depend on the resolution of parameter entity references.

- There is no support for Unicode (UTF-16); the parser converts all the input encoding (for example, ISO-8859-1) to UTF-8 output.

In addition, the following restrictions also apply:

- There is no support for editing element attributes or PCDATA; users must make a choice between contributors to resolve conflicts, rather than modifying the result.

- There is no support for attribute-granularity merges; users must pick an element with all its associated attributes from a single contributor, rather than selecting some attributes from one contributor and other attributes from another.

- The choices you make in merging different versions of an XML document are inherited hierarchically. That is, when you select an element to be included in a merged file, all the children of that element are selected as well You cannot select an element from one contributor, but replace a child of that element with the content of that child in a different contributor.

- Users cannot change or undo any choices made during the course of a merge; that is, you cannot alter an insertion, change, or deletion after you have selected it.

- Color customizations for the XML DiffMerge tool are controlled by the settings for the ClearCase text mode DiffMerge. You cannot customize the colors directly from the XML DiffMerge GUI; you can, however affect colors in this GUI by modifying the colors used for text mode DiffMerge.

- The tool does not support the **merge –query** and **merge –qall** options. See the **merge** reference page for a description of these options.

- In the output file generated by the tool, nonterminal whitespace formatting is lost. However, PCDATA whitespace is preserved.

- The tool does not yet support the empty element tag syntax for output. Files containing `<tag/>` constructs are parsed correctly, but the output is of the equivalent form `<tag></tag>`.

Ordering of Files in GUI May Need Adjustment

If two or more contributors insert elements and these insertions are adjacent, the desired ordering in the merge output can be ambiguous. For example, it may not be possible for the tool to determine whether an insertion from contributor A should appear before a corresponding insertion from contributor B.

If the element ordering is ambiguous at a given merge point, the one chosen by the tool may not be the one desired. Review all changes in the merge output to confirm desired ordering.

Checking Your Results

In a number of cases, the XML DiffMerge tool is not able to evaluate correctly a changed element, and will instead report changes to a single element as the deletion of one element and the addition of an identically named element. Because of this limitation in the tool, we strongly recommend that you verify comparisons and merges done using the XML tool with the text version of the DiffMerge tool. We provide a button on the XML DiffMerge toolbar to enable initiation of a textual DiffMerge.

XML DiffMerge Functionality Note

When merging two XML files, once you select one of two alternative elements from the contributor panes, you have effectively deleted the unselected element. As a result, all children of the deleted element are deleted as well, and cannot be selected on succeeding merges.

Creating Elements of Type xml and Creating New Versions of XML Elements

The **xml** element type is based on the text_file_delta type manager. It expects XML elements to be text files. A text file is assumed to have lines no longer than 8,000 characters each, and no character may be a binary \000 (null) character.

ClearCase reports an error while creating an XML element or while checking in a new version of an existing element if the XML data does not look like a text file. If your XML data has more than 8,000 characters between line-terminating characters, its lines are too long for the text_file_delta type manager. If your XML data is encoded with multibyte characters it appears to have binary \000 characters when viewed as a stream of bytes.

To overcome these restrictions, use the **file** element type to store such XML data. The file element type can store any type of file and does not have the same restrictions as the xml element type. To compare and merge XML data that is stored as file element types, you need to invoke the XML DiffMerge tool directly. See *Invoking XML DiffMerge Directly* on page 14.

If you cannot create a new version of an element of type xml, perform the following steps:

1 Undo the checkout and save your checked-out data in a KEEP file. For example:

```
cleartool unco –keep file.xml
```

2 Change the element type from xml to file by using the **cleartool chtype** command.

3 Check out the file.

4 Copy the KEEP file to the checked out file.

5 Check in the file.

Invoking XML DiffMerge Directly

To run XML DiffMerge directly:

1 Make sure the *ccase-home-dir***bin** directory is in your PATH.

2 Issue the **xmldiffmrg** command. For example:

To compare two versions:

```
xmldiffmrg –xcompare file1.xml file2.xml
```

To merge two or more versions using a common ancestor:

```
xmldiffmrg –xmerge –out file.xml.merge –base file.xml file1.xml file2.xml
```

The file names may be version-extended pathnames. You must use the **–xcompare** and **–xmerge** options instead of **–compare** and **–merge**, respectively.

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 folder *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* on page 5.

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