

Rational Software Corporation®

RATIONAL® CLEARCASE®

DOCUMENTATION SUPPLEMENT

HP IPF (ITANIUM)

VERSION: 2002.05.00 AND LATER

Rational
the software development company

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Rational Software Corporation 20 Maguire Road Lexington, Massachusetts 02421

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Technical Acknowledgments

This software and documentation is based in part on BSD Networking Software Release 2, licensed from the Regents of the University of California. We acknowledge the role of the Computer Systems Research Group and the Electrical Engineering and Computer Sciences Department of the University of California at Berkeley and the Other Contributors in its development.

This product includes software developed by Greg Stein <gstein@lyra.org> for use in the mod_dav module for Apache (http://www.webdav.org/mod_dav/).

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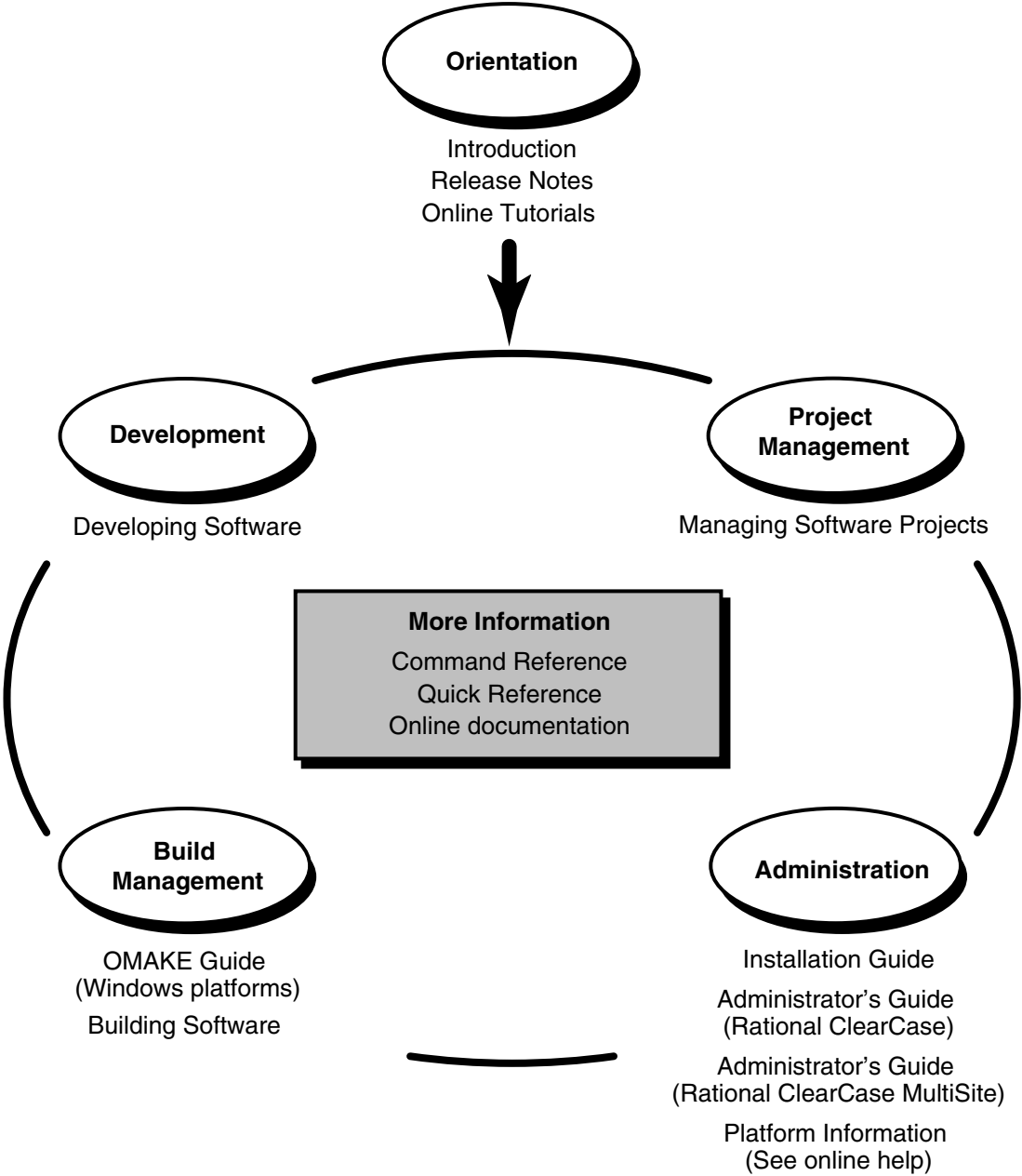
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Preface

This document contains information about Rational ClearCase on HP IPF (Itanium). It is organized as follows:

- ▶ Chapter 1, *HP IPF Release Notes*, contains information that supplements the *Release Notes* for ClearCase and MultiSite.
- ▶ Chapter 2, *HP IPF Platform Information*, contains instructions that supplement the general instructions for UNIX systems in the *Platform-Specific Guide*.

ClearCase Documentation Roadmap



Typographical Conventions

This manual uses the following typographical conventions:

- *ccase-home-dir* represents the directory into which the ClearCase Product Family has been installed. By default, this directory is `/usr/atria` on UNIX and `C:\Program Files\Rational\ClearCase` on Windows.
- *attache-home-dir* represents the directory into which ClearCase Attache has been installed. By default, this directory is `C:\Program Files\Rational\Attache`, except on Windows 3.x, where it is `C:\RATIONAL\ATTACHE`.
- **Bold** is used for names the user can enter; for example, all command names, file names, and branch names.
- *Italic* is used for variables, document titles, glossary terms, and emphasis.
- A monospaced font is used for examples. Where user input needs to be distinguished from program output, **bold** is used for user input.
- Nonprinting characters are in small caps and appear as follows: `<EOF>`, `<NL>`.
- Key names and key combinations are capitalized and appear as follows: `SHIFT`, `CTRL+G`.
- [] Brackets enclose optional items in format and syntax descriptions.
- { } Braces enclose a list from which you must choose an item in format and syntax descriptions.
- | A vertical bar separates items in a list of choices.
- ... In a syntax description, an ellipsis indicates you can repeat the preceding item or line one or more times. Otherwise, it can indicate omitted information.

NOTE: In certain contexts, ClearCase recognizes “...” within a pathname as a wildcard, similar to “*” or “?”. See the **wildcards_ccase** reference page for more information.

- If a command or option name has a short form, a “medial dot” (·) character indicates the shortest legal abbreviation. For example:

lsc·heckout

This means that you can truncate the command name to **lsc** or any of its intermediate spellings (**lsch**, **lsche**, **lschec**, and so on).

Online Documentation

The ClearCase graphical interface includes a Microsoft Windows-like help system.

There are three basic ways to access the online help system: the **Help** menu, the **Help** button, or the F1 key. **Help > Contents** provides access to the complete set of ClearCase online documentation. For help on a particular context, press F1. Use the **Help** button on various dialog boxes to get information specific to that dialog box.

ClearCase also provides access to full “reference pages” (detailed descriptions of ClearCase commands, utilities, and data structures) with the **cleartool man** subcommand. Without any argument, **cleartool man** displays the **cleartool** overview reference page. Specifying a command name as an argument gives information about using the specified command. For example:

- % **cleartool man** *(display the cleartool overview page)*
- % **cleartool man man** *(display the cleartool man reference page)*
- % **cleartool man checkout** *(display the cleartool checkout reference page)*

ClearCase’s **-help** command option or **help** command displays individual subcommand syntax. Without any argument, **cleartool help** displays the syntax for all **cleartool** commands. **help checkout** and **checkout -help** are equivalent.

% **cleartool uncheckout -help**

Usage: uncheckout | unco [-keep | -rm] [-cact | -cwork] pname ...

Additionally, the online *ClearCase Tutorial* provides important information on setting up a user’s environment, along with a step-by-step tour through ClearCase’s most important features. To start the *ClearCase Tutorial* from the command line, type **hyperhelp cc_tut.hlp**.

Technical Support

If you have any problems with the software or documentation, please contact Rational Technical Support via 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.

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HP IPF Release Notes

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This chapter provides notes specific to the release of Rational ClearCase on HP IPF (Itanium). For general information on this release, see the *Release Notes* for Rational ClearCase and Rational ClearCase MultiSite.

1.1 Hardware and Operating System Requirements

ClearCase Version 2002.05.00 for HP IPF runs on Itanium 2 hardware that is running HP-UX 11.22. Other configurations of Itanium hardware and HP-UX are not supported.

For HP-UX 11.22 documentation, refer to <http://www.docs.hp.com/hpux/os/11iV1.6/index.html>.

1.2 Platform Restrictions

The following restrictions affect HP IPF:

- Netscape 4 is not supported.
- SMB (Samba) is not supported.

1.3 Release Limitations

Release limitations are as follows:

- ClearCase Web clients are not supported; however, the ClearCase Web server is supported. For information on ClearCase Web administration, refer to the *Administrator's Guide* for Rational ClearCase.
- VOB schema 54 only is supported. For information on VOB schemas, refer to the *Administrator's Guide* for Rational ClearCase.
- **cleargetlog** is not supported (use **getlog** in nongraphical mode instead).

This chapter explains aspects of Rational ClearCase functionality that are specific to HP IPF (Itanium). For a discussion of issues common to many or all UNIX platforms, see the *Platform-Specific Guide* (online only).

2.1 Modifying a crontab Entry

The chapter *Preventing Accidental Deletion of Data by crontab Entries* in the *Administrator's Guide* discusses modifying **crontab** entries or other scripts to prevent infinite looping of scripts. In particular, the chapter discusses altering scripts using the **find /** command. On an HP-UX system, no **crontab** entry is provided by default. The following entry does not search file systems of type **nfs**, nor does it search the viewroot directory:

```
15 3 * * * find / -path /view -prune
    -o -name .nfs\* -mtime +7 -exec rm -f {} \;
    -o -fstype nfs -prune
```

NOTE: In the previous example, long lines are broken for readability. In actual **crontab** files, each entry must be contained on a single physical text line.

2.2 Moving a VOB

The chapter on VOB maintenance in the *Administrator's Guide* describes how to move a VOB to another host. When moving a VOB, whether or not the hosts have different architectures, one required step is to copy the VOB storage directory. For most architectures, we recommend using

the command **tar -xBpf** – as part of the command line. However, the **-B** option to **tar** is not supported on HP-UX hosts. Instead of the command lines given in the chapter, use the following:

- On the same host to a different disk partition:

```
# tar -cf - libpub.vbs | ( cd /src_2/vobstore ; tar -xpf - )
```
- On a different host with the same architecture:

```
# tar -cf - libpub.vbs | remsh ccsvr04 'cd /src_2/vobstore ; tar -xpf -'
```
- On a different host with a different architecture:

```
# tar -cf - libpub.vbs | remsh ccsvr04 'cd /src_2/vobstore ; tar -xpf -'
```

2.3 Moving a View

The chapter on VOB maintenance in the *Administrator's Guide* describes how to move a view from one host to another. Moving a view also requires using a **tar** command to move the storage directory. On an HP-UX system, which does not support the **-B** option to **tar**, substitute the following commands for the commands in the chapter:

- On the same host:

```
% tar -cf - gomez.vws | ( cd /public; tar -xpf - )
```
- On a different host with the same architecture:

```
% tar -cf - gomez.vws | remsh ccsvr04 'cd /public; tar -xpf -'
```
- On a different host with a different architecture:

```
# tar -cf - gomez.vws | remsh ccsvr04 'cd /public; tar -xpf -'
```

2.4 Manipulating the Block Buffer Cache

The functioning of the block buffer cache has a significant effect on VOB host performance; for more information, see the chapter on VOB performance in the *Administrator's Guide*.

HP-UX provides the **glance** tool for monitoring buffer cache performance. It also provides user-level control over the frequency of flushing the cache to disk through the **syncer(1M)** utility.

2.5 Increasing the MVFS Cache Size

In its chapters on performance tuning, the *Administrator's Guide* discusses changes you can make to improve performance of ClearCase clients. Use the information in this section with that material.

The instructions that follow increase the size of the MVFS cache, in such a way that the changes are persistent.

Setting Individual Cache Sizes

On each ClearCase client:

1. Become the **root** user.
2. Change to the directory `/usr/conf/mvfs`.
3. Edit `mvfs_param.c` and set the MVFS configuration parameters.
4. Rebuild the MVFS parameters. (This command builds `mvfs_param.c` and adds the newly rebuilt `mvfs_param.o` file to `/usr/conf/libusrdrv.a`.)

```
# make -f mvfs_param.mk regen
```

5. Save the old kernel; then rebuild and install a new one:

```
# cd /stand/build
# mv /stand/vmunix /stand/vmunix.prev
# /usr/sbin/mk_kernel -o /stand/vmunix
```

NOTE: Without the `-o` option, `mk_kernel` leaves the kernel in the spot named by the `config.mk` file, by default `/stand/build/vmunix_test`. If you build that way, do the following:

```
# mv vmunix_test /stand/vmunix
```

6. Reboot the system:

```
# /etc/shutdown
```

Optionally, Change All Clients Before Installing ClearCase

If you want to make these changes on all your clients before you install this release of ClearCase, you can edit the configuration files in the ClearCase release area. If you do this, you can avoid an extra reboot of each client host. The ClearCase installation process from the release area to the client host will include the customized parameters when it rebuilds the system kernel.

1. Become the **root** user.
2. Change to the ClearCase release area directory.
3. Edit `hp11_ia64/usr/conf/mvfs/mvfs_param.c` to set the MVFS configuration parameters as described in the chapter *Improving Client Host Performance* in the *Administrator's Guide*.
4. Install ClearCase from the release area onto the client hosts.

2.6 Enable Transitional Links

ClearCase relies on transitional links supplied by Hewlett-Packard to handle the relocation of operating system components between HP-UX 9.x and HP-UX 11.x. HP-UX 11.x systems must be installed with transitional links enabled. These links are enabled by selecting the UPG-TLINK fileset on installation.

2.7 SoftBench Installation and Configuration

Because of changes to SoftBench in version 6.x, it is no longer possible to create a ClearCase menu item on the SoftBench Development Manager file browser. Setting up the ClearCase/SoftBench integration, as described in the help under the topic of third-party integration, enables you to use ClearCase as the Configuration Manager for your SoftBench files. However, it does not rename the Configuration Manager menu item to **ClearCase** on the SoftBench file browser as it did with SoftBench 4 or 5, and it does not add ClearCase functionality to that ClearCase menu.

For information about installing and configuring SoftBench to work with ClearCase on HP-UX computers, see the online information on ClearCase integrations with third-party products.

