

# Sr. Rational Tools Consultant

**Objective:** Over 20+ years of professional experience in Software Configuration Management environment using the Rational Toolset to install, build, label, release and test products in various software development environments. Experience in Version control tools like ClearCase and CVS. Strong technical background in all aspect of system administration on UNIX platforms.

Provide assistance with implementation of configuration management, process creation, and process creation and control through the use of ClearCase, ClearQuest and other Rational Tools. Seek position to enhance the overall quality of software configuration and release control at the project, department or enterprise level. Provide implementation so departments could evolve to higher compliance states in order to develop their code more quickly and with less cost.

**Education:** **County College in Scotch Plains, New Jersey**  
A.A.S. – Computer Science

**Related Skills:**

**Experienced in:** Perl, Shell Script (Bourne, C, Korn), Sed, Awk and others.

**Experienced with:** ClearCase, ClearCase with UCM, ClearCase Multisite, ClearQuest, Build Forge, CVS, Apache, VMWare, MySQL, Mozilla Firefox, Thunderbird, Perl, Bash, PHP, Emacs, CDE, C++, VUE 3.0 (Alpha Tester), Cygwin. Also, various tools and applications on Microsoft Windows too numerous to mention.

**Experienced on:** Unix (Solaris, HP-UX), Windows XP/Vista/Windows 7, Linux (Redhat, Ubuntu Desktop/Server, Mandrake, SuSE, Redhat, LynxOS) and others

**Network Experience:** Knowledge of TCP/IP, Ethernet, XP Firewall, DSL Routers, Windows and Unix Networking (NIS/Automount/ftp/ping/etc), some Active Directory/LDAP experience, Samba experience and others.

**ClearCase Experience:**

**A Better Solution, Inc.** - Atlanta, Ga. 2007 - Present

SR. RATIONAL TOOLS CONSULTANT

Software Configuration Management: Consulting concentrating on CM practices and implementation using ClearCase, ClearCase with UCM, MultiSite and ClearQuest. Design and implement process automation and simplification. Assist in Planning and migration of code bases to ClearCase from other CM tools. Train ABS clients in the effective use of ClearCase, UCM and CM practices. Responsibilities also include overseeing workstation/server configuration, COTS tools install/config, writing utilities to extend the capabilities of COTS tools and creation of makefile sub-systems to automate builds.

## **General Dynamics**

(As a consultant with ABS)

Served as ClearCase/ClearQuest Administrator, Build Release and Automation using Perl scripts. Implemented several enhancements and new functionality with a C++/Qt application that integrates the highly specialized UCM/ClearQuest integrated environment into one tool.

Instrumental in establishment of Perl standards and introduction of Perl tools such as Perl::Critic and Perl::Tidy. Worked at promoting usage of CPAN modules.

Developed an extensive test driver application in Perl to interface and drive tests using NetHawk EAST Simulators as well as interfacing to other simulators and external hardware. The system automates the running of regression tests, official testing before the customer, assists with validation of test results, collecting of log files, checking log files into ClearCase and records status into a MySQL database. Developed a PHP web page to present the data in various forms including graphs, reports, exporting to CSV files and emailing of reports. Implemented maintenance programs to scrub and keep the data clean. This system was instrumental in Functional Quality Testing for the MUOS program.

Worked on many enhancements to the extensive ClearQuest system in use at GD. Designed and developed the record set implementing node configurations. Implemented required forms and action hook code. Designed and developed Perl scripts to initially load data into the new records.

Developed a server process (daemon) to process baseline records that were then tracked by ClearQuest. Implemented scripts to create baseline records from other automated process such as Build Forge. Tied together baseline records with node configurations through action hook code.

Participated in code reviews for all production code.

**Texas Instruments**  
(contract)

10/2006 - 06/2007

Serving as ClearCase/ClearQuest Administrator working with Perl scripts and ClearQuest schemas. Responsible for development and deployment of a Perl/Oracle application to track information about projects world wide. Also wrote, modified and maintained several scripts for tracking ClearCase license usage and load balancing of ClearQuest web servers.

**Hewlett Packard**  
(contract)

2/2006 - 10/2007

Managed and executed day to day build and release duties. Served as ClearCase/ClearQuest Administrator as well as overall support of systems. Assisted with creating UCM streams and handling of rebase and delivery issues for engineers and the build/release process. Wrote UCM triggers to notify users of deliveries from UCM development streams. Created baselines for official builds. Took over day to day build and release duties. Created a build script that united the various quick and dirty build scripts that were oriented per stream and per build option. This standardized the build process. Augmented this build script to be a daemon that continually builds software when deliveries are detected. Wrote a build status web page that tracks and monitors the continuous building. Created a dynamic web page to show Junit test history. Converted Windows build from bat files and scheduled tasks -> Cygwin and cron thus making the build script identical on both Linux and Windows.

**Broadcom**  
(contract)

9/2005 - 1/2006

Served as ClearCase/ClearQuest Administrator as well as overall support of systems. Developed several triggers as well as ported my mktriggers script which automates the maintenance of triggers. Developed a complex Perl script to merge two ClearQuest databases to a new database with many schema changes. This script handled all aspects of the conversion including changing non US ASCII characters found in the data to their HTML equivalents, dynamic creation of dynamic lists, field renaming and dynamically creating new stateless records as needed.

Developed a script to better handle merging from UCM deliveries and rebases by delaying any non automatic merges to the end of the process as well as handle binary element merge. This process, written in Perl, utilized PerlTk to present the user with a GUI dialog box to choose which version of the binary file to merge.

Designed and developed another ClearQuest database for the Mobile Multimedia group.

Wrote several other scripts including one to interface CVS to IMS (a defect tracking system) recording the change set at commit time, a script to strip out MIME/HTML and attachments for defects submitted to GNATS (another defect tracking system). Also implemented several script to log ClearCase activity, check ClearCase's pulse and gather site and VOB statistics. These scripts were the start for creation of a set Object Oriented Perl modules to encapsulate ClearCase in a Perl like manner (still in development).

**Lynxworks**  
(contract)

12/2004 - 9/2005

Served as a build engineer in the Integration Group responsible for building LynxOS (Linux RTOS) as well as tool chains, testing, releasing and process improvement. LynxWorks uses CVS for version control.

Developed a process of providing full text search of the company's defect database using Perl and Htdig. Developed a web based report to show CVS activity as well as several other CVS related utilities as well as report on the differences between two CVS tags. Automated the build process so that nightly builds could be performed. Developed a web application that allows one to maintain CVS account information including account creation, setting/resetting of password, etc.

**Ameriquest  
(contract)**

3/2004 – 12/2004

Served as ClearCase/ClearQuest administrator to this major mortgage company. As Ameriquest is just starting out I began with importing source code from a flat file systems as well as migrated code from PVCS and Visual Source Safe. Also set up VOBs and regions taking into account security restrictions and concerns. Assisted with designing of the Multisite scheme to India. Participated in design of UCM model to be used for Ameriquest.

**Salira  
(started as contract – converted to CM Engineer)**

8/2001 – 2/2004

After consulting briefly with Salira Optical Network Systems I joined this startup company serving in the role of ClearCase/ClearQuest Administrator for this mostly Windows shop. I helped others in setting up the ClearCase/ClearQuest environment as well as provided Training.

I also served in the role of Release Engineer managing the build process. I employed wide usage of Cygwin, which is a product that provides an extremely workable Unix like environment and engineered a build environment around that using GNU make and other standard Unix and GNU utilities. When users complained that building remotely was slow I performed an analysis on build performance. I also performed Build Stress Testing where I characterized the effect of multiple simultaneous builds performed on the server.

I also setup and developed their ClearQuest bug tracking system as well as served as an advisor/expert on ClearCase issues, branching strategies, labeling and release management.

Designed and developed a tool in C that packaged the product into a more compact form.

Designed and implemented a ClearQuest Daemon which served as an interface between processes and ClearQuest data. This daemon serviced requests from web pages and triggers in order to get and validate data from ClearQuest.

Developed release web pages that managed releases and produced release notes for every release.

Developed process automation scripts to perform automatic branch merging and syncing.

Performed product installation testing for the web component on Linux (SuSE) and Solaris as well as browser testing (Netscape).

Implemented test scaffolding in TCL/TK for test automation.

**Hewlett Packard (System Technology Division / Enterprise Java Lab)  
(contract)**

8/1999 – 2/2001

Setup security system automating the running of Medusa (an internal security audit tool) on approximately 100 machines. Reports are generated automatically and are viewable on the web. Setup and maintained security related patch depots.

Implemented nightly automation for the lab's machines including security checks, automatic installation of line printer models, etc. This automation was bundled into an SD-UX bundle.

Migrated user data to HP NetStorage 6000. Worked extensively with HP NetStorage 6000 Support on problems with this machines OS and interfacing with Windows 2000.

Migrated HP-UX applications from one application server to another.

Participated in several critical planned networked down times where the team was able to implement changes to the infrastructure, including migration to ClearCase 4.0, migration of project and user data to HP NetStorage 6000's and other such changes.

Set up Netscape Enterprise Web Server and iPlanet 4.1 Web Server.

**Cisco Systems  
(contract)**

3/1999 – 8/1999

Served as ClearCase/Unix Systems Administrator. Responsible for all ClearCase operations in CNS/AD on Sun Solaris, HP-UX, Windows NT 4.0 and Windows 2000. Assisted in creating additional View and Vob servers and balancing the ClearCase load amongst them. Participated in Rational's Beta program for Windows 2000. Installed, tested and documented ClearCase on Windows 2000 as well as Windows NT 4.0.

Assisted in recovery of a catastrophic disk failure in a critical vob. Assisted with implementing a backup strategy with Arcserve Open. Helped evaluate system monitoring packages.

As CNS/AD was in a secured and isolated network, learned and assisted users with ssh/scp.

**SUN Microsystems  
(contract)**

12/1998 – 3/1999

Worked on the Sunpeak Configuration Management team performing promotions of code updates into test and production environments. Also worked on improving the process flow of promotions utilizing make and rdist.

**Hewlett Packard (System Technology Division / Language Lab)  
60-Level Software Engineer**

2/1988 – 11/1998

Primary ClearCase and Multisite Administrator for a large ClearCase environment with approximately 1400 views and 180 vobs. Most vobs are multisited between several other labs and I am responsible for resolving Multisite problems. I also serve as general System Administrator, overseeing approximately 400 machines in the lab. I help institute policies and procedures to keep the network running smoothly. Also participate in the design and restructuring the network topology and ClearCase topology by bring in many Kittyhawks, Mohawks and Bravehawks (about 40 of them) for use as ClearCase Vob, View and Build, Mail, Application, X Terminal and Web servers. Assist in documenting setup and configuration as well as trouble shooting and handling of patches for all lab wide shared resources.

Responsible for setup and running of Windows NT domain, account setup and print serving. Setup and evaluated ClearCase 3.2 on NT. Developed backup strategy for NT systems. Maintain a repository of software tools as well as evaluated and recommended several PC packages for lab usage. Main point of contact for Windows 95/NT problem solving in the lab. Also sought after by many people in Hewlett Packard relating to both PC and Unix configurations and problem solving.

Also served as webmaster for the lab as well as consult on HTML questions and design issues. Installed, configured and maintain the Netscape Suitespot Servers including the Enterprise and Directory servers. Developed several web pages and forms for the lab as well as run The Unofficial Quicken® Web Page.

I developed an Application Server providing many machines with many software packages without the need for individual system administration utilizing scripting and NFS heavily.

Prior to the Productivity Project I worked on COBOL/SoftBench product which consists of encapsulating some core HP Micro Focus COBOL tools using C++ 3.0 and the SoftBench Encapsulator libraries. Also,

working on porting an X/Motif application to MS Windows 3.1. The code is written using C++ 3.0 on both the HP workstation and the PC (Borland C++ 3.1).

Worked in the Ada project on Ada/SoftBench. This project was similar to COBOL/SoftBench in that it involved some SoftBench encapsulations using a language called edl.

Produced Ada Bindings to Xlib, Xt and Motif. This involved using a modified C compiler to translate C header and source files to Ada declarations and function prototypes. Using this methodology we were able to migrate our product from X11 R3 and Motif 1.0 to X11 R4 and Motif 1.1 in one week!

Worked on a project that produced Ada Bindings to HP-UX, which enabled me to get good breath knowledge into all system calls, and another binding to Starbase graphical subsystem.

Performed destructive testing on MPE/XL 1.0-1.3. Wrote several programs to stress the OS. Submitted 300+ Service Requests many of which appeared on Must Fix lists.

**References:** Available upon request