



All About CVS & CM

CVS SUITE AND CM SUITE 2008 Build 3425 June 2009



Optimized for



March Hare Software Ltd

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Overview

CVS is the original Concurrent Versioning System, the dominant open-source network-transparent version control system designed to assist you in recording the history of a single file or a set of files. These files may be Word Documents, HTML Web Pages or Program Source Code. This software Suite combines the latest advanced server and client software packaged together with this book to ensure reliability and optimal ease of use.

CVS Suite is useful for everyone who creates and/or modifies files on computers - from individuals to large distributed enterprises. CM Suite is particularly useful for larger teams and enterprises that need to consolidate version control repositories without sacrificing productivity.

For example, errors sometimes appear when software or documents are modified, and might not be detected for several weeks. With this software suite, you can easily retrieve old versions to see exactly when, by whom and why the change was made that caused the error.

The Book

This book was written to give you the information required to design, install and maintain a CVS Suite or CM Suite configuration management solution on either a Unix or Windows based system.

Pre-Requisites

Basic system administration skills for Windows and/or Unix are a pre-requisite, however no other prior knowledge of CVS/CVSNT, EVS or SVN is assumed. Some previous exposure to Source Code Management or Configuration Management systems however is an advantage.

Structure

The book is divided into four parts: *Theory, Practical, Client and Reference*. The first three sections may be used as a tutorial on their individual topics, however each topic is built on the knowledge gained in the previous one. March Hare Software Ltd encourages you to work through each section in turn.

The final parts of this book explain what changes are expected in the next release of the software and provide a reference when using the client or administering the server.

Part I -Theory

This section gives an introduction to the theory behind Software Change and Configuration Management and in particular Source Code Control. The different methodologies are examined in perspective of the varying impact that they have on an organization and to a lesser extent their implementation in CVS Suite and CM Suite.

The theory examined in this part of the book forms the basis of the decisions that are made during installation and configuration of the software Suite

If you traditionally learn software by installing it and then trying each of the options then this section is going to be a challenge for you. As a general rule you will not get the best from any Software Change and Configuration Management software solution without this theory.

Part II - Practical

This section gives a detailed walkthrough of the steps required to install, configure and maintain CVS Suite or CM Suite on Windows and Unix. This section also includes walkthrough's of using the software Suite in various scenarios.

Part III - Client

This section gives a detailed walkthrough of the steps required to manage your source code files and documents using the software Suite on Windows with various tools. If you are using CM Suite Server then consult the vendor documentation on how to use compatible client tools such as TortoiseSVN.

Conventions used

The following typographical conventions are used:

Italic

Used for software commands and their options, configuration file keywords, filenames and directory names, for emphasis, and for the first use of technical terms.

Fixed width

Used in code examples and to show the contents of files

Fixed width with italic

Used in syntax descriptions to indicate user-defined items.

Fixed width with bold

Used for user input in examples that show both input and output.

[]

Square brackets enclose optional elements in syntax diagrams.

{ }

Braces enclose lists of elements from which you are required to make one choice.

|

Vertical bars separate elements in lists that are enclosed by square brackets ([...]) or braces ({...}).

...

Ellipses are used within syntax diagrams to indicate repetition. Ellipses are also used in code examples to indicate nonessential command output that had been eliminated for the sake of clarity and space.

SSH, *ssh*, ssh

We use SSH (Uppercase, regular text) as an acronym when referring to the Secure Shell protocol. We use *ssh* (lowercase, italic text) to refer to the Unix command often used to invoke an SSH program. We use ssh (lowercase, no italics) to refer to the cvs ssh protocol.

CVS, CVSNT, *cvs*

We use CVS (Uppercase, regular text) as an acronym when referring to CVS Suite (the product). We use *cvs* (lowercase, italic text) to refer to the Unix or Windows command often used to invoke a CVS or CVSNT program. CVS and CVSNT are used interchangeably and always refer to the modern CVSNT. CVS and CVSNT also refer to the CM Suite client.

EVS, CM Server, *evs*

We use CM Server (Title Case, regular text) as when referring to the CM Suite Server (the product). We use *evs* (lowercase, italic text) to refer to the Unix or Windows command often used to invoke the EVS or CM Server administration command line program. EVS and CM Server are used interchangeably and only refer to the server software.

Late breaking news

March Hare are working diligently at keeping this book up to date with the latest changes in the software, however there are most likely some late changes or problems discovered that are not documented here. Please read the release notes that have come with CM Server **2008** Build 3425 or CVSNT **2008** Build 3425 for important updates.

Learning more about CVSNT and EVS

In addition to this book, there are a number of other helpful resources that you should know.

Professional Support, On Site Consulting and Training

March Hare Software Limited provides professional support for CVS Suite (CVSNT) and CM Server (EVS) in Europe, Canada/USA and the Asia Pacific/Australia.

Each single user license for CVS Suite or CM Suite includes various integrations, this book and e-mail support for installation assistance¹.

Professional support plans include Security Update Notification and all software upgrades. Five levels are available plus ‘per incident’ support for larger customers (min. 50 licenses):

- *Self Support*
- *Bronze (includes e-mail support)*
- *Silver, Gold or Platinum (includes e-mail and telephone support)*

On site services such as Installation of Repository Replication (Multi-Site), Installation and Configuration, User Training, and Administrator Training can be purchased at additional cost by customers with Silver support or higher.

Complete details including pricing, terms and conditions are available on the web site <http://march-hare.com/cvsspro/>.

¹ installation assistance excludes security notification or assistance with resolving performance problems or issues arising from multiple user access

Web Site and Reference Manual

The home page on the web is at <http://march-hare.com/cvspro/>. This site provides a copy of the Reference Manual, and links to most of the available information on the software.

This site also has links to the open source development site for CVSNT and EVS.

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Related Books

There are many books on Configuration Management and Source Code Management that discuss CVSNT's and EVS's forerunner CVS.

Essential CVS by Jennifer Verperman takes you through the basics of using CVS and shows you how to put the tool through its paces. Written for both CVS users and administrators, this book includes a quickstart guide, chapters on advanced topics such as release tagging and a comprehensive reference to CVS commands.

Open Source Development with CVS by Moshe Bar and Karl Franz Fogel contains a guide to CVS and guide to open source project management.

Pragmatic Version Control Using CVS by David Thomas and Andrew Hunt shows how just a handful of basic recipes can be used to get almost all of the benefit from a version control system.

Managing Projects with MAKE by Andrew Oram and Steve Talbott is the clearest description of *make* ever written.

Where to buy more copies of this book and software

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<http://march-hare.com/>