



SERENA[®]
PVCS[®] VERSION MANAGER[™] 8.6

Installation Guide

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Publication date: February 2017

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Welcome to Version Manager

Thank you for choosing Serena PVCS Version Manager, a powerful and versatile version control system that will revolutionize the way you develop software. Version Manager helps you organize, manage, and protect your software development projects on every level—from storing and tracking changes to individual files, to managing and monitoring an entire development cycle.

Purpose of this manual This manual provides instructions for installing Version Manager on Windows and UNIX operating systems. It is intended for the *Administrator*, the person who installs and configures software for use in a network environment, and the *User*, the person who completes the workstation installation.

For more information Refer to the *Serena PVCS Version Manager Administrator's Guide* for information on configuring Version Manager once it is installed.

Contacting Technical Support

Serena provides technical support for all registered users of this product, including limited installation support for the first 30 days. If you need support after that time, contact Serena Online Services at the following URL and follow the instructions:

<http://support.serena.com>

Language-specific technical support is available during local business hours. For all other hours, technical support is provided in English.


The Serena Online Services web page can also be used to:

- Report problems and ask questions.
- Obtain up-to-date technical support information, including that shared by our customers via the Web, automatic e-mail notification, newsgroups, and regional user groups.
- Access a knowledge base, which contains how-to information and allows you to search on keywords for technical bulletins.

Typographical Conventions

The following typographical conventions are used in the online manuals and online help. These typographical conventions are used to assist you when you use the documentation;

they are not meant to contradict or change any standard use of typographical conventions in the various product components or the host operating system.

Convention	Explanation
<i>italics</i>	Introduces new terms that you may not be familiar with and occasionally indicates emphasis.
bold	Indicates the names of controls and fields on dialog boxes and emphasizes important information.
UPPERCASE	Indicates keys or key combinations that you can use. For example, press the ENTER key.
monospace	Indicates syntax examples, values that you specify, or results that you receive.
<i>monospaced italics</i>	Indicates names that are placeholders for values you specify; for example, <i>filename</i> .
monospace bold	Indicates the names of commands and command options in syntax examples. Also indicates the results of an executed command.
vertical rule	Separates menus and their associated commands. For example, select File Copy means to select Copy from the File menu. Also, separates mutually exclusive syntax choices.
braces {}	Encloses a list of mutually exclusive syntax choices, which are themselves set apart by vertical rules. For example, { <i>version</i> <i>from_ver*to_ver</i> }.
brackets []	Indicates optional items. For example, in the following statement: SELECT [DISTINCT] , DISTINCT is an optional keyword.
...	Indicates command arguments that you can use multiple times in a single instance of a command.
	Shows you which shortcut button to click. Shortcut buttons are placed in the margin.

License and Copyright Information for Third-Party Software

License and copyright information for third-party software included in this release can be found as part of the software download available at:

<http://support.serena.com/Download/Default.aspx>

Chapter 1

Planning Your Installation

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System Requirements

For specific supported platform, version information, and disk space requirements, refer to the readme file.

Installation Options

Version Manager provides a choice between three installation types, each of which contains a set of options appropriate to its intended purpose:

- **Local:** Intended for installation by end users on their local computer.
- **Network:** A single, shared network installation that end users can share once it has been installed and configured on a network by an administrator. This saves disk space on local workstations and ensures that everyone is running the same version of the product. See [Chapter 2, "About Network/Workstation Installs" on page 33](#).
- **Web Server:** Intended for installation by administrators to setup a Version Manager Application Server and the various server applications that run on it:
 - **File Server:** The server that accesses archives, metadata archives, revisions, and other files on behalf of Version Manager users (as opposed to each client directly accessing the archives via the file system).
 - **Web Server:** The server that supports the Version Manager Web Client.
 - **WebDAV Server:** The server that supports the Version Manager WebDAV implementation and Meritage.
 - **SSO Server:** The server that supports Single Sign On and CAC (Common Access Card) login.

The following table describes the options available for each installation type and operating system.

Feature	Description	Install Type			O/S	
		Local	Net work	Web Server	Win	Unix
Desktop Client	The Version Manager graphical user interface. See the <i>Serena PVCS Version Manager Getting Started Guide</i> and the <i>Serena PVCS User's Guide</i> .	X	N W	X	X	X
Serena Single Sign On (SSO) Server	The server that supports SSO and CAC (Common Access Card) login. NOTE If you already have a Serena SSO/ CAC server, such as from an installation of SBM, you probably do not want to install this. See "About Version Manager Servers" on page 10 .			X	X	X

Feature	Description	Install Type			O/S	
		Local	Net work	Web Server	Win	Unix
SCC/COM IDE Client	Development Interface for version management within SCC and COM compliant integrated development environments (IDEs). IMPORTANT! If using with FrontPage Server Extensions, see Chapter 2, "About IDE Client Installs for use with FrontPage Server Extensions" on page 37. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N W	X	X	
Plugin for Eclipse 3	Development Interface for Eclipse-based IDEs, such as IBM Rational Application Developer. This older plugin can integrate with Serena issue management via TeamTrack SourceBridge and Tracker TrackerLink. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X	X	
Plugin for Eclipse 3 (rich integration)	Rich integration for Eclipse-based IDEs, such as IBM Rational Application Developer (RAD). This newer plugin can integrate directly to Serena TeamTrack/SBM issue management and provides a more advanced source control integration than that available via the our older plugin. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X	X	Linux
Plugin for VS (rich integration)	Rich integration for Microsoft Visual Studio. This plugin can integrate directly to Serena TeamTrack/SBM issue management and provides a more advanced source control integration than that available via the older SCC integration. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X	X	
Web Server Application	The server that supports the Version Manager Web Client (as well as providing underlying services required by File Server, SSO Server, and WebDAV Server). See "About Version Manager Servers" on page 10.			X	X	X
Developer's Toolkit	The public API for developing applications that use Version Manager features. See the <i>Serena PVCS Version Manager Developer's Toolkit Reference Guide</i> .	X	N	X	X	X
Version Manager WebDAV	The server that supports the Version Manager WebDAV implementation and Meritage. See "About Version Manager Servers" on page 10, and the <i>Serena PVCS Version Manager Administrator's Guide</i> .			X		
Documentation	The Version Manager manuals in PDF format.	X	N W	X	X	X

Feature	Description	Install Type			O/S	
		Local	Net work	Web Server	Win	Unix
Workstation Install	Part of a Network Installation, it allows users to run a shared copy of Version Manager. See Chapter 2, "About Network/Workstation Installs" on page 33.		N W		X	
Sample Project Database	A Version Manager project database that contains sample data that illustrates the use of Version Manager features. See the <i>Serena PVCS Version Manager Getting Started Guide</i> .	X	N	X	X	X
Command-Line Interface	The archive-centric command-line. See the <i>Serena PVCS Version Manager Command-Line Reference</i> .	X	N W	X	X	X
File Server	The server that accesses archives, metadata archives, revisions, and other files on behalf of Version Manager users (as opposed to each client directly accessing the archives via the file system). See "About Version Manager Servers" on page 10.			X		
PCLI Command Line Interface	The project-centric command-line. See the <i>Serena PVCS Version Manager PCLI User's Guide and Reference</i> .	X	N	X		

NOTE Items in the Network install-type column that are marked with an **N** will be available for use on the system from which the Network install is performed. Those marked with a **W** will also be shared with systems that do a Workstation install from the shared network location.

About Version Manager Servers

The Version Manager Application Server runs on Apache Tomcat and hosts the following Version Manager server applications:

- File Server
- Web Server
- WebDAV Server
- SSO Server

When you start or stop the Application Server, you start or stop any of those Version Manager server applications that you installed to the same system. See the following sections for more information on each server.

About the Version Manager File Server

With the Version Manager File Server, you can increase the speed of most source control operations. Your net performance gain depends on the characteristics of your work and work practices as well as how closely you model your configuration on the ideal.

Previously, Version Manager users needed write/delete access to the archive and metadata files on the file system. This approach left open the possibility that a user could maliciously or accidentally delete archive or metadata files with tools such as Windows Explorer or the command prompt of the O/S. With the Version Manager File Server, you can eliminate this vulnerability since only the file server itself needs write/delete access to the archive and metadata files.

The file server also simplifies cross-platform implementations as you no longer need to share the archives across the network or implement NFS, Samba, or setuid.

For information on configuring and using a Version Manager File Server, see the *Serena PVCS Version Manager Administrator's Guide*.

About the Version Manager Web Server

With the Version Manager web client, you can perform version control tasks in a browser-based interface available on the Internet or intranet. The Version Manager web client is appropriate for users in remote or mobile locations who do not need access to administrative features.

Once you have installed the Version Manger Web Server and configured a project database, users can connect to the server with their web browser and download the client interface.



NOTE The Web Server Application also provides underlying services required by File Server, SSO Server, and WebDAV Server.

For information on configuring and using a Version Manager Web Server, see the *Serena PVCS Version Manager Administrator's Guide*. For information about using the Web client, see the *Serena PVCS Version Manager Web Client User's Guide*.

About the Version Manager WebDAV Server

With WebDAV Server, you can access a Version Manager project database from within a supported WebDAV client. You can automatically check out and check in files in that project database, as well as perform other common Version Manager tasks. For example, the WebDAV integration with Microsoft Office allows you to open a revision from an Office application, automatically checking it out from Version Manager. After you make changes and close that file, it gets checked back in to Version Manager.

For information on configuring and using a Version Manager WebDAV Server, see the *Serena PVCS Version Manager WebDAV Server Implementation Guide*.

About the Serena SSO Server

Serena SSO authenticates user IDs and passwords, or Common Access Cards and PIN's, against a Security Token Service (STS). This enables you to:

- Login once to a given Version Manager client (Desktop, Web, Eclipse RIDE, and Visual Studio RIDE) and not have to login again during that client session, even when switching between project databases.
- Login to either Serena TeamTrack (SBM) or the Version Manager Web client and not have to login to the other if you launch it as well.
- Use Common Access Card (SmartCard) authentication rather than a traditional user ID and password.



IMPORTANT!

- If you already have a Serena SSO/CAC server, such as from an installation of SBM, you probably want to use it rather than install the Version Manager version of the Serena SSO server.
- If you plan to use ActiveIdentity Client as your CAC utility, install ActiveIdentity Client to your client systems BEFORE installing Version Manager to them. Else you will have some additional manual configuration to do on EVERY client system.
- The task of implementing SSO/CAC can be quite complex, depending upon your usage scenario and environment. Read the chapter on configuring SSO in the *Serena PVCS Version Manager Administrator's Guide* **BEFORE** attempting to install or configure SSO/CAC.

About Full Releases, Patches, and Hotfixes

This manual is mainly about installing a Full Release of Version Manager. This section describes the differences between the release types and provides some about installing a Patch or Hot Fix.

Each release type has a different number of digits in its release number:

- **X.X = Full Release:** This is intended to be installed to a clean system (any previous Version Manager install should be uninstalled). In addition to newly developed features, enhancements, and fixes, it contains the enhancements and fixes of all the Patches and Hotfixes released since the previous full release.



TIP You can backup and restore certain configuration settings to ease setup of a full release. See ["About Upgrading an Existing Installation" on page 14](#).

See the rest of this manual for information about installing a full release.

- **X.X.X = Patch:** This must be installed to a system that already has a Full Release installed to it. In addition to newly developed enhancements and fixes, it contains the fixes of all the Hotfixes released since the previous patch as well as the patches released since the last full release. See ["About Patches" on page 13](#).
- **X.X.X.X = Hotfix:** This must be installed to a system that already has a Full Release installed to it. It contains a fix for a specific issue, or small group of closely related issues. See ["About Hotfixes" on page 13](#).

About Patches

Like full releases, patch installers come in two varieties: one for Windows, one for UNIX/Linux. The Patch and Full Release installers are similar, so you can refer to the chapters on installing full releases for general information about installing. See [Chapter 2, "Installing on Windows" on page 23](#) or [Chapter 3, "Installing on UNIX/Linux" on page 41](#).

The following interactive steps are included in a patch installer:

- License Agreement
- Choose Destination Location

Unlike a full release, a patch installer does NOT provide the ability to select which features to install. Rather, it updates whatever features were installed by the previous full release.

As needed, patches include updates to the documentation (readme, PDF manuals, and help) to support the enhancements and fixes made to the software.



NOTE If you are patching a Network Install, see [Chapter 2, "Patching a Network/Workstation Install that Used the "Local Copy of Java Packages" Option" on page 37](#).

About Hotfixes

Hotfixes usually include an interactive installer, but it is much simpler than those used by full releases and patches. Each hotfix includes a text-based readme that describes what the hotfix fixes and how to install it.



CAUTION! A hotfix is intended as a quick and responsive fix for a specific customer reported issue. If a given issue is of relatively low impact to your organization, you should probably wait for the next full release or patch, when the hotfix will be tested against a wider spectrum of scenarios and any corner cases properly addressed.

Hotfix files are named like this:

```
vm_####_patch_DEF#####.exe | .tar
```

Where the first four # tell you which release of Version Manager the hotfix is intended to be applied to, and the DEF##### is the ID number of the customer reported defect that the hotfix is intended to fix. The file extension is .exe or .tar depending on whether it is for Windows or UNIX/Linux.

The following sections briefly describe how to install and uninstall a typical hotfix that has an interactive installer.



IMPORTANT! Always read the hotfix readme before installing/uninstalling a hotfix. Its install/uninstall procedure may differ from the typical ones described below.

Installing a Windows Hotfix

To install a Windows hotfix:

- 1 Double-click the patch file: `vm_####_patch_DEF#####.exe`

- 2 Follow the installer prompts.

Uninstalling a Windows Hotfix

To uninstall a Windows hotfix:

- 1 Use Windows' built-in facility for removing programs.

Installing a UNIX/Linux Hotfix

To install a UNIX/Linux hotfix:

- 1 Extract the installer from the tar file:

```
tar -xf vm_####_patch_DEF#####.tar
```
- 2 Initiate the installer:

```
vm_####_patch_DEF#####.ex
```
- 3 Follow the installer prompts.

Uninstalling a UNIX/Linux Hotfix

To uninstall a UNIX/Linux hotfix:

- 1 From a command prompt, change to the patch_backout directory:

```
cd Install_Dir/patch_backout
```
- 2 Run the uninstaller for the hotfix:

```
./vm####_DEF#####_backout.sh
```

About Upgrading an Existing Installation



NOTE This section is about installing a Full Release of Version Manager to a system that already has Version Manager installed. This section is NOT about installing a Patch or a Hotfix. For clarification on those terms, see ["About Full Releases, Patches, and Hotfixes" on page 12](#).

This section contains important information and tips about updating an existing installation of Version Manager. Please review the sub-sections below for ones applicable to your usage scenario.

General Upgrade Considerations

- **Backup and Restore Configuration Settings:** It is possible to backup and restore a variety of server and client configuration settings; doing so can save considerable time and aggravation. See ["Backup and Restore Configuration Settings" on page 15](#).
- **Uninstall:** If you intend to install to the same location as your existing Version Manager installation, you must uninstall your existing installation.

- **Stop the Servers:** Before uninstalling or installing, stop the Version Manager Application Server (File Server, Web Server, WebDAV Server, SSO Server) and any third-party servers you are using with it (Apache, IIS, iPlanet, JSWS).
- **Upgrade Both Clients and Servers:** If you use the Version Manager File Server, you must install the latest version of both the Version Manager clients and the server.



NOTE If circumstances prevent you from completing both the server and client upgrades before work must resume, complete the server upgrades before resuming work. You are less likely to encounter problems when running old clients against new servers than when running new clients against old servers. However *neither* is recommended practice.

- **Windows XP: Location of ISLV.INI Differs Between Upgrade from 8.1 (or Older) and 8.2 (or Newer):** If you upgrade from Version Manager 8.1, or older, the `islv.ini` file will be stored in the `\Windows` directory as it has been in the past. If you upgrade from 8.2, or newer, or install Version Manager on a Windows XP system that does not already have an `islv.ini` file in the old location, the `islv.ini` file will be stored in the new location:
`\Documents and Settings\All Users\Application Data\Serena\VM`



TIP On Windows the file is located at: `%ISLVINI%\islv.ini`. If that variable is not set, run `pci -d` and look at the value shown for `Dislv.ini`. On UNIX/Linux the file is located at: `$HOME/.islvrc`.

- **Cleanup References to Obsolete File Servers:** If a Version Manager client is configured to access a Version Manager file server that is unavailable, the client will hang. To avoid this, be sure to remove any obsolete file server definitions from your `servers.ini` file. See the *Serena PVCS Version Manager Administrator's Guide* for information on configuring clients for use with file servers.

Backup and Restore Configuration Settings

It is possible to backup and restore a variety of server and client configuration settings; doing so can save considerable time and aggravation.

FIRST: Backup These Files

- `Install_Dir\vm\common\bin\pvcstart.bat`
(`pvcstart.sh` on UNIX; `pvcrunner.bat` on Windows starting with 8.4.6)
- `Install_Dir\vm\common\tomcat\conf\jk\uriworkermap.properties`
(Windows servers only)
- `Install_Dir\vm\inet\props\PVCSServlets.properties`
(Windows web servers only)
- `Install_Dir\vm\common\tomcat\webapps\vm\inet\WEB-INF\web.xml`
(web servers only)
- `Install_Dir\vm\common\tomcat\webapps\WebDAVServlet\WEB-INF\classes\webdav.properties`
(WebDAV servers only)
- `Install_Dir\vm\common\tomcat\webapps\WebDAVServlet\WEB-INF\classes\merant\adm\dav\vm\vm.properties`
(WebDAV servers only)

- *Install_Dir*\vm\common\tomcat\webapps\WebDAVServlet\WEB-INF\classes\merant\adm\notification\notification.properties (WebDAV servers only)



NOTE Repeat the WebDAV steps for each servlet you have installed.

- *Install_Dir*\vm\common\tomcat\webapps\serenafs\WEB-INF\server-config.wsdd (file servers only)
- *Install_Dir*\vm\common\tomcat\conf\server.xml (servers only)



IMPORTANT! If upgrading from Version Manager 8.4.3.x, or earlier, do not use your old server.xml file. If you wish to bring your old customizations forward to the new release, edit the new file as needed to reflect your customizations.

TIP If you have modified the server.xml file AND THEN applied a patch to your Version Manager installation, there will be backup copies of the server.xml file. These can be of use in determining what customizations you have made.

- **server.xml:** The default file as installed by the latest patch.
- **server.xml.bak_####:** The previous version as modified by you.
- **server.xml.org_####:** The default version as installed by the previous patch/install before you modified it.

In the above file names, #### represents the Version Manager release number. To determine what customizations you have made, compare the .bak version of the file to the .org version.

Preserving File Server Settings

To preserve all user-configurable settings of the File Server, including the Path Maps, you can copy the relevant information from your old server-config.wsdd. The file is located at:

Install_Dir\vm\common\tomcat\webapps\serenafs\WEB-INF\

Copy only the section marked by the following tags:

```
<globalConfiguration>
</globalConfiguration>
```

Paste the copied section into the similar section in the new file.



CAUTION! Do **NOT** replace an entire server-config.wsdd file with one from a different version of Version Manager. Doing so can cause problems, for example compromising new features added to support RIDE performance improvements.

Preserving Servlet Definitions

The following applies to both Windows and UNIX/Linux:

- If the installation directory is the same, paths internal to these files should still be valid. However, you should double-check the following file:

```
Install_Dir\Serena\vm\common\tomcat\webapps\vm\inet\WEB-INF\web.xml
```

- If the server name is the same, this parameter should still be valid; however, if you migrate to a new server, you should modify the following files:

```
Install_Dir\Serena\vm\common\tomcat\webapps\vm\inet\WEB-INF\web.xml
Install_Dir\Serena\vm\inet\props\PVCSServlets.properties
```

- As of Version Manager 8.0, we use a different AJP worker (AJP13 instead of AJP12). We recommend that you make the change as well. Check the following file:

```
Install_Dir\Serena\vm\common\tomcat\conf\jk\uriworkermap.properties
```

- Version Manager 7.5 has a now obsolete parameter. It should be removed. It will not be written in the new files.

Edit the following file:

```
Install_Dir\Serena\vm\common\tomcat\webapps\vm\inet\WEB-INF\web.xml
```

To remove the servlet mapping for "ProjectServletAlias". This is a delicate edit. You must comment out or remove the entire exact section. As long as you are careful, the format is easy to discern. It looks like this:

```
<servlet-mapping>
  <servlet-name> ProjectServletAlias </servlet-name>
  <url-pattern> /ProjectRootName </url-pattern>
</servlet-mapping>
```

The following is specific to Windows:

- 1 To preserve your Servlet definitions, backup the PVCSServlets.properties file and restore it to *Install_Dir*\vm\inet\props\PVCSServlets.properties after installing the new release of Version Manager.



IMPORTANT! If the servlets were configured to use a Version Manager File Server, you must reconfigure or restore the File Server path map definitions BEFORE proceeding to the next step.

- 2 Launch the Version Manager Application Server Admin utility and make sure the "Location of Netscape Configuration Files" and/or "Location of Microsoft IIS Scripts Directory" matches the desired location for the new server installation (as they too will be inherited from PVCSServlets.properties).
- 3 If the servlets were configured to use a Version Manager File Server, start the File Server.
- 4 From the Servlets of the Version Manager Application Server Admin utility, select the first servlet from the list, click **Modify**, and then click **Apply**.

The following is specific to UNIX/Linux:



NOTE Servlets defined in UNIX Version Manager Server releases prior to 6.8.00 (using the `servlets.properties` file) cannot be preserved.

- 1 To preserve your Servlet definitions, backup the `web.xml` file and copy relevant information into the new file. The location of the old file depends upon the version of Version Manager. For Version Manager:
 - 6.8.00 the file is located at:
`VM_Install_Dir/vminet/tomcat/webapps/vminet/WEB-INF/web.xml`
 - 6.8.1 or newer, the file is located at:
`VM_Install_Dir/vm/common/tomcat/webapps/vminet/WEB-INF/web.xml`



CAUTION! In the following steps, do NOT copy the `<servlet> ... </servlet>` section that contains `<servlet-name> "vminet"`. Also, do NOT modify any `<servlet-mapping>` values that refer to the "vminet" servlet.

- 2 After installing the new version, copy the sections from `<servlet>` up to and including `</servlet>` for every servlet referring to a project database that was added to the old `web.xml` file, and paste them into the new `web.xml` file (which can be found at `Install_Dir/vm/common/tomcat/webapps/vminet/WEB-INF/web.xml`).
- 3 The two `<servlet-mapping> ... </servlet-mapping>` sections that exist for every one of these servlets should also be copied into the new `web.xml` file.

Supported UNIX and Cross-Platform Networks

Version Manager runs on writable UNIX/Linux file systems such as the UNIX file system (UFS) and the Network File System (NFS). Version Manager archives and projects can be shared with Windows users who are sharing UNIX file systems with NFS or Samba.



TIP If you use a Version Manager File Server, you do not need to share the archives across the network or implement NFS, Samba, or `setuid`.

For best results, we recommend that you choose a 32-bit NFS package that supports the following:

- Long filenames
- Case preservation
- Desktop and command-line interfaces
- The ability to set file permissions or `umask`

For more information on sharing archives and projects between a UNIX system and a Windows local area network, see ["Using `setuid` in a Cross-Platform Environment"](#) on page 52 and the *Serena PVCS Version Manager Administrator's Guide*.

Obtaining the Version Manager Installer and Documentation

The Version Manager and License Manager installers and documentation are available on DVD or as a download. See the method below that best fits your needs:

- If you are an existing Serena Support customer and would like to download the files, log in to the My Downloads area of the Serena Support site:

<http://support.serena.com/Download/Default.aspx>

- If you are not a current Serena Support customer or would like to order the DVD, contact your regular Serena point of contact, or refer to the following site for contact information:

<http://www.serena.com/company/contact/index.html>

Licensing Version Manager

Serena License Manager is a licensing server that manages licenses for your Version Manager clients. During Version Manager installation, you are prompted for the server name or IP address of the license server.



TIP During installation, you can choose the **30 day evaluation** option if you just want to try out Version Manager or if you do not yet have licences. Version Manager will be fully functional during the 30 day evaluation period.

See the Serena License Manager documentation for information on installing and configuring Serena License Manager.



NOTE Serena License Manager is not included in the Version Manager installer. It is a separate installer. See "[Obtaining the Version Manager Installer and Documentation](#)" on page 19.

End-User Licensing on UNIX/Linux Workstations

To set up licensing for end-user workstations on UNIX, the Version Manager installation script and launch scripts automatically run a shell script named `vmreg` that updates the `license.ini` file in the `$PVCS_BINDIR` directory and/or the `.islvr` file in an end user's home directory.

However, administrators and users can run `vmreg` as needed. For example, end users who use the command line, but not PCLI or the desktop client, need to run `vmreg` once before using the command line.

The Administrator can save the current configuration-file information in `$PVCS_BINDIR/license.ini`, and then users can move the information into their personal `.islvr` files by running `vmreg`.

The script can be called in the following ways:

- `vmreg [server]`
Copies license information from `$PVCS_BINDIR/license.ini` to `.islvr`. If the `server` argument is present, the script takes the server name from the argument rather than from the value in `$PVCS_BINDIR/license.ini`. Users execute this command from the command line.
- `vmreg -t`
Copies license information from `$PVCS_BINDIR/license.ini` to `.islvr` only if no server definition exists in `.islvr`. The PCL and desktop-client launchers execute this command automatically at startup.
- `vmreg -m server`
Updates `$PVCS_BINDIR/license.ini` with the name of the server and copies that data to `.islvr`. The Version Manager installation script and Administrators execute this command.
- `vmreg -h`
Provides usage information.
- `vmreg -v`
Provides version information.

Working with 5.3/6.0 Project Roots

You can either upgrade a 5.3/6.0 project root to the new format, or you can work with it as it is--but with some limitations on the functionality supported. See the following sections for more details on your options.

Upgrading 5.3/6.0 Project Roots

Installing and using this release of Version Manager enables you to take advantage of the functions and features identified in the *Version Manager Getting Started Guide*. Because these features are more powerful and intuitive than the features provided in earlier releases of Version Manager, we recommend you upgrade your 5.3/6.0 project roots to the new project database format.

For information on upgrading a 5.3/6.0 project root by copying it to a project database, refer to the *Serena PVCS Version Manager Administrator's Guide*.

Supported and Restricted Functionality for 5.3/6.0 Project Roots

Without upgrading a 5.3/6.0 project root to the project database format, there are many features of the new Version Manager desktop client that you can still use. This release of Version Manager supports all of the basic Version Manager tasks, such as adding workfiles, checking in workfiles, checking out revisions, and assigning version labels. All of these tasks can be completed more easily than with the Version Manager 6.0 desktop client.

Some tasks, however, are restricted. When you open and work with a 5.3/6.0 project root in Version Manager, you cannot:

- Create new projects within the 5.3/6.0 project root.

- Delete projects from the 5.3/6.0 project root.
- Copy projects, subprojects, or versioned files from a project database into a 5.3/6.0 project root.
- Configure a 5.3/6.0 project root.
- Define or modify security on a 5.3/6.0 project root.

To complete any of these tasks, upgrade your existing projects to the new project format, or use the Version Manager 6.0 desktop client. This release of Version Manager honors the changes.

Chapter 2

Installing on Windows

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Before Installing

Before initiating the Version Manager installer, ensure that the target system is in the necessary state. See the following sections.

Stop Version Manager Servers

If any of the following Version Manager servers are installed to the target system:

- File Server
- Web Server Application
- WebDAV Server
- Serena Single Sign On (SSO) Server

Then you **MUST** do the following:

- Remove the NT service if you installed the Version Manager Application Server as an NT service.
- Stop the Version Manager Application Server and any third-party servers being used with it.

Remove the NT Service

To remove the NT service:

- 1** Launch the Version Manager Application Server Admin from the Windows Start menu (Programs | Serena | Version Manager | Version Manager Application Server). The Version Manager Application Server Admin appears.
- 2** Click the **Remove NT Service** button.
- 3** Restart the computer.

Stop the Version Manager Application Server

To stop the application server:

- 1** Launch the Version Manager Application Server Admin from the Windows Start menu (Programs | Serena | Version Manager | Version Manager Application Server). The Version Manager Application Server Admin appears.
- 2** Click the **Stop** button.

Disable Anti Virus Software

Before installing, disable any anti virus software. In particular, disable any anti virus software that scans files in real-time as you access them. Such real-time scanning software may hang the installer during the creation of the sample database.

Are You Doing a Network/Workstation Install?

See ["About Network/Workstation Installs"](#) on page 33.

Will You Be Using the IDE Client with Microsoft FrontPage Server Extensions?

See ["About IDE Client Installs for use with FrontPage Server Extensions"](#) on page 37.

Are You Installing the Integration to Visual Studio?

Before installing the Version Manager integration to Visual Studio, ensure that the IDE has been run at least one time. Else a package load error may appear the next time Visual Studio is started. This in itself does no harm, but it prompts you as to whether you want to load this package in the future (you DO!). Choosing incorrectly at this point will disable the integration and require an uninstall and reinstall to fix the integration.

Are You Updating an Existing Version Manager Installation?

See [Chapter 1, "About Upgrading an Existing Installation"](#) on page 14.

If Only I had Known then What I Know Now... :-)

Have you reviewed [Chapter 1, "Planning Your Installation"](#) on page 7 and the Version Manager readme? We suggest that you take a quick look for topics that may apply to your install and usage scenario.

Installing Version Manager

The following procedure explains how to install Version Manager from the Serena PVCS Professional Suite DVD or from the downloaded installation file. For information on obtaining the software, see [Chapter 1, "Obtaining the Version Manager Installer and Documentation"](#) on page 19.



IMPORTANT! Make sure you are logged in to Windows as an Administrative user or that you run the Version Manager installer with Administrative privileges.

To install Version Manager:

- 1 Launch the Version Manager installer:
 - **From DVD:**
 - a Insert the disc into a local or network drive. In the case of a network drive, it must be mapped; a UNC path cannot be used.
 - b **If autorun is enabled**, an HTML page opens in your default browser. Follow the appropriate links to launch the Version Manager installer--or, optionally, browse the Version Manager documentation before beginning the installation process.

- c **If autorun is not enabled**, use Windows Explorer to navigate to and double-click on: *DVD-Drive:\vm\win32\setup.exe*.
- **From downloaded files:**
 - a Copy the downloaded file to the target system or a network location accessible from it (the file is named like: *vmReleaseNumberw32.exe*).
 - b Double-click the file.
- 2 The Welcome page of the Version Manager installation wizard appears, click the **Next** button.
- 3 **License Agreement Page:** Select the option to accept the license agreement, and click the **Next** button. The Choose License Server page appears.
- 4 **License Server Page:** Do one of the following:
 - Select the **Specify License Server** option and enter the name or IP address of the Serena license server in the **Host Name** field.
 - Select the **Install a 30 day evaluation license** option.
 Click the **Next** button.
- 5 **Customer Information Page:**
 - a Complete the **User Name** and **Company Name** fields.
 - b Do one of the following:
 - To make the installation available to anyone who can log in to the computer, select **Anyone who uses this computer (all users)**.
 - To make the installation available to only yourself, select **Only for me**.



IMPORTANT! If you are limiting access to only one user, make sure you are logged in as the that user. If not, exit the installation program and log in to Windows as the correct user.

- c Click the **Next** button.
- 6 **Setup Type Page:** Choose one of the following installation types:
 - **Local:** Install client features on this machine.
 - **Network:** Install client features to a network location and enable users to share it via workstation installs. See "[About Network/Workstation Installs](#)" on page 33.
 - **Web Server:** Install server and client features on this machine. See [Chapter 1, "About Version Manager Servers"](#) on page 10.
- 7 **Destination Location Page:** Accept the default Destination Folder or click the **Browse** button to select a different location.



IMPORTANT! If you are installing Version Manager to a network location so that other users can perform a workstation installation, make sure that you and the users use the same drive mapping. See "[About Network/Workstation Installs](#)" on page 33.

Click the **Next** button.

8 Select Features Page: Select the features that you want to install.

Feature	Description	Install Type		
		Local	Net work	Web Server
Desktop Client	The Version Manager graphical user interface. See the <i>Serena PVCS Version Manager Getting Started Guide</i> and the <i>Serena PVCS User's Guide</i> .	X	N W	X
Serena Single Sign On (SSO) Server	The server that supports SSO and CAC (Common Access Card) login. NOTE If you already have a Serena SSO/CAC server, such as from an installation of SBM, you probably do not want to install this. See Chapter 1, "About Version Manager Servers" on page 10 .			X
SCC/COM IDE Client	Development Interface for version management within SCC and COM compliant integrated development environments (IDEs). IMPORTANT! If using with FrontPage Server Extensions, see "About IDE Client Installs for use with FrontPage Server Extensions" on page 37 . See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N W	X
Plugin for Eclipse 3	Development Interface for Eclipse-based IDEs, such as IBM Rational Application Developer. This older plugin can integrate with Serena issue management via TeamTrack SourceBridge and Tracker TrackerLink. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X
Plugin for Eclipse 3 (rich integration)	Rich integration for Eclipse-based IDEs, such as IBM Rational Application Developer (RAD). This newer plugin can integrate directly to Serena TeamTrack/SBM issue management and provides a more advanced source control integration than that available via the our older plugin. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X
Plugin for VS (rich integration)	Rich integration for Microsoft Visual Studio. This plugin can integrate directly to Serena TeamTrack/SBM issue management and provides a more advanced source control integration than that available via the older SCC integration. See the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .	X	N	X
Web Server Application	The server that supports the Version Manager Web Client (as well as providing underlying services required by File Server, SSO Server, and WebDAV Server). See Chapter 1, "About Version Manager Servers" on page 10 .			X

Feature	Description	Install Type		
		Local	Net work	Web Server
Developer's Toolkit	The public API for developing applications that use Version Manager features. See the <i>Serena PVCS Version Manager Developer's Toolkit Reference Guide</i> .	X	N	X
Version Manager WebDAV	The server that supports the Version Manager WebDAV implementation and Meritage. See Chapter 1, "About Version Manager Servers" on page 10 , and the <i>Serena PVCS Version Manager Administrator's Guide</i> .			X
Documentation	The Version Manager manuals in PDF format.	X	N W	X
Workstation Install	Part of a Network Installation, it allows users to run a shared copy of Version Manager. See "About Network/Workstation Installs" on page 33 .		N W	
Sample Project Database	A Version Manager project database that contains sample data that illustrates the use of Version Manager features. See the <i>Serena PVCS Version Manager Getting Started Guide</i> .	X	N	X
Command-Line Interface	The archive-centric command-line. See the <i>Serena PVCS Version Manager Command-Line Reference</i> .	X	N W	X
File Server	The server that accesses archives, metadata archives, revisions, and other files on behalf of Version Manager users (as opposed to each client directly accessing the archives via the file system). See Chapter 1, "About Version Manager Servers" on page 10 .			X
PCLI Command Line Interface	The project-centric command-line. See the <i>Serena PVCS Version Manager PCLI User's Guide and Reference</i> .	X	N	X

NOTE Items in the Network install-type column that are marked with an **N** will be available for use on the system from which the Network install is performed. Those marked with a **W** will also be shared with systems that do a Workstation install from the shared network location.

Click the **Next** button.

- 9 **Eclipse Installation Page:** If you chose the **Plugin for Eclipse 3** or the **Plugin for Eclipse 3 (rich integration)**, the Eclipse Installation page appears. Do any of the following to specify the location of your Eclipse-based IDEs:
 - To add installation paths to the list, click the **Add** button and browse to the IDE's installation location using the resulting dialog box.

- To remove installation paths from the list, select them and click the **Remove** button.

**NOTE**

- Installations of Rational Application Developer 6 will automatically be included in the list. Use the **Add** button to include installations of Eclipse.
- See the readme for information on supported sub-versions of Rational Application Developer 7.

Click the **Next** button.

- 10 Serena Single Sign On Server Configuration Page:** If you chose the **Serena Single Sign On (SSO) Server**, the Serena Single Sign On Server Configuration page appears. If you wish to use user ID and password based SSO login (requires an LDAP server), complete the following fields:

- **Host Name:** The host name or IP address of your LDAP server.
- **Port:** The port number of your LDAP server. Typically LDAP servers are configured to use port 389; 636 for SSL.
- **Base DN:** The base from which to search for users.
- **Search Filter:** The search filter you want to use. The default for Active Directory Server is:
(`& (objectClass=user) (sAMAccountName={0})`)
- **Bind User DN:** The full user DN of a user with permission to query the LDAP server.
- **Password:** The LDAP password for the above user.



IMPORTANT! If you wish to use user ID and password based SSO login but you **Skip** the Serena Single Sign On Configuration page of the installation wizard, you must manually edit the LDAP connection information in the `Configuration.xml` file. See the *Serena PVCS Version Manager Administrator's Guide*.

Click the **Next** button.

- 11 Select Program Folder Page:** Accept the default name and location for Version Manager Start menu shortcuts, or specify a new one.

Click the **Next** button.

- 12 Ready to Install the Program Page:** Click the **Next** button to begin installing files (or **Back** to change your installation choices).

A progress page displays while the files install.

- 13 InstallShield Wizard Complete Page:** By default, the following options are selected. Change these settings as needed:

- **Check to view the PVCS Version Manager Readme file:** Opens the readme in your default browser.
- **Register online for a Serena Online Services (SOS) account:** Opens your default browser to the sign up page of the Serena support web site. Online registration provides the following benefits:

- Activates your technical support account, allowing us to more efficiently assist you if you need to contact us.
- Allows you to subscribe to our monthly e-mail newsletter on the latest Serena product developments.
- Provides a brief overview of the online resources you can access from the Serena web site, including technology partner sites, and live chat sessions.

14 Click the **Finish** button.

Silent Installation

Silent Server Installation Script

Use the following script to perform a silent Windows server installation:

```
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-DlgOrder]
Dlg0={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdWelcome-0
Count=9
Dlg1={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdLicense2Rtf-0
Dlg2={2F3900A5-667B-4043-8467-9E3DBB97486F}-FLEXLM
Dlg3={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdCustomerInfo-0
Dlg4={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdSetupType-0
Dlg5={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdComponentTree-0
Dlg6={2F3900A5-667B-4043-8467-9E3DBB97486F}-SSO
Dlg7={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdSelectFolder-0
Dlg8={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdStartCopy2-0
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-SdWelcome-0]
Result=1
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-SdLicense2Rtf-0]
Result=1
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-FLEXLM]
szServer=27000@flexserver
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-SdCustomerInfo-0]
szName=WIN10TEST
szCompany=TEST
nvUser=1
Result=1
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-SdSetupType-0]
szDir=C:\Program Files (x86)\Serena\
Result=303
[{2F3900A5-667B-4043-8467-9E3DBB97486F}-SdComponentTree-0]
szDir=C:\Program Files (x86)\Serena\
Component-type=string
Component-count=19
Component-0=CM
Component-1=APPSERVER64
Component-2=DEVINT_COMMON
Component-3=INETSS064
Component-4=SSO_GUI
Component-5=TESTDIRECTOR
Component-6=TOMCAT_COMMON64
Component-7=VM_COMMON
```

```

Component-8=VM_COMMON32_64
Component-9=VM
Component-10=SS064
Component-11=DEVINT
Component-12=INET64
Component-13=WEBDAV64
Component-14=DOC
Component-15=SAMPLEDB
Component-16=CMDLN
Component-17=FILESERVER64
Component-18=PCLI
Result=1
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SSO]
ldap_host_name=test
ldap_port=389
ldap_user=test
ldap_pwd=test
ldap_search_base=test
ldap_search_filter=(&(objectClass=user)(sAMAccountName={0}))
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdSelectFolder-0]
szFolder=Serena\PVCS Version Manager 8.6.0
Result=1
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdStartCopy2-0]
Result=1

```

Silent Client Installation Script

Use the following script to perform a silent Windows client installation:

```

[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -DlgOrder]
Dlg0={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdWelcome-0
Count=9
Dlg1={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdLicense2Rtf-0
Dlg2={2F3900A5-667B-4043-8467-9E3DBB97486F} -FLEXLM
Dlg3={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdCustomerInfo-0
Dlg4={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdSetupType-0
Dlg5={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdComponentTree-0
Dlg6={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdSelectFolder-0
Dlg7={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdStartCopy2-0
Dlg8={2F3900A5-667B-4043-8467-9E3DBB97486F} -SdFinish-0
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdWelcome-0]
Result=1
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdLicense2Rtf-0]
Result=1
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -FLEXLM]
szServer=27000@flexserver
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdCustomerInfo-0]
szName=WIN10TEST
szCompany=WINTEST
nvUser=1
Result=1
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdSetupType-0]
szDir=C:\Program Files (x86)\Serena\
Result=301
[ {2F3900A5-667B-4043-8467-9E3DBB97486F} -SdComponentTree-0]

```

```
szDir=C:\Program Files (x86)\Serena\  
Component-type=string  
Component-count=12  
Component-0=CM  
Component-1=DEVINT_COMMON  
Component-2=SSO_GUI  
Component-3=TESTDIRECTOR  
Component-4=VM_COMMON  
Component-5=VM_COMMON32_64  
Component-6=VM  
Component-7=DEVINT  
Component-8=DOC  
Component-9=SAMPLEDB  
Component-10=CMDLN  
Component-11=PCLI  
Result=1  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SdSelectFolder-0]  
szFolder=Serena\PVCS Version Manager 8.6.0  
Result=1  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SdStartCopy2-0]  
Result=1  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SdFinish-0]  
Result=1  
bOpt1=0  
bOpt2=0
```

Running a Silent Installation

- 1 Create a new file called `silent.iss` and save it to a local folder.
- 2 Add the server or client script (see above) to `silent.iss`.
- 3 Run the silent installation command, for example:

```
setup.exe /s /f1"C:\install\VM\silent.iss"
```

Silent Uninstall Script

```
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-DlgOrder]  
Dlg0={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdWelcomeMaint-0  
Count=4  
Dlg1={2F3900A5-667B-4043-8467-9E3DBB97486F}-AskYesNo-0  
Dlg2={2F3900A5-667B-4043-8467-9E3DBB97486F}-SAMPLEDB_UNINSTALL  
Dlg3={2F3900A5-667B-4043-8467-9E3DBB97486F}-SdFinish-0  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SdWelcomeMaint-0]  
Result=302  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-AskYesNo-0]  
Result=1  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SAMPLEDB_UNINSTALL]  
nDelete=1  
[ {2F3900A5-667B-4043-8467-9E3DBB97486F}-SdFinish-0]  
Result=1  
bOpt1=0  
bOpt2=0
```


About Network/Workstation Installs

A workstation install enables users to run a shared copy of Version Manager on a network. This saves disk space on local workstations and ensures that everyone is running the same version of the product.

Although the Version Manager installation is shared amongst users, each user can still choose how they want Version Manager to behave (such as the default size of windows and panes, whether dialogs are automatically dismissed, and which project databases are opened at startup). These settings are automatically stored on the user's machine the same way they are for a Local install.

A Network/Workstation install is a two stage installation process:

- 1 The administrator performs a Network install from a Windows computer to a mapped network drive. This creates the shared Version Manager installation and the workstation install files necessary to connect individual user systems to the shared Version Manager installation.
- 2 Each user accesses the network location and runs the workstation install to connect their individual computer to the shared network installation. See "[Connecting a Workstation to the Shared Install](#)" on page 35.

Network Installation Options and Considerations

This section and the following sub-sections describe options and install considerations that you should be familiar with before initiating a Network install:

- Determine the network location for the install and verify that all users have access to the location.
- Verify that all users use the same drive mapping for the network location and that the workstation from which the network copy will be installed uses this same drive mapping.
- Install Version Manager to the network from a local workstation. Do not install the program directly at the network server console.



NOTE If you are patching a Network Install, see "[Patching a Network/Workstation Install that Used the 'Local Copy of Java Packages' Option](#)" on page 37.

IDE Client with FrontPage Server Extensions

If you want to use the IDE client with IDEs that use FrontPage Server Extensions, you must install the Interface *directly* to the web server. Because of this, you cannot simultaneously install workstation installation components to a network server and install the IDE client for use with a web server. See "[About IDE Client Installs for use with FrontPage Server Extensions](#)" on page 37.

Silent Workstation Installs

After you have performed a network installation of Version Manager, you can prepare a silent workstation setup template to simplify setup for your users. A silent workstation installation allows users to set up workstations using the options you predefine.

To prepare a silent setup, you need to create a response file by running the workstation setup program on your network. Use the `/r` flag to create the `setup.iss` template with all the installation options saved in the Windows directory. When you have completed running the Setup program, copy the `setup.iss` file to the workstation setup directory on your network and instruct your users to run the setup program with the following command-line option from their individual workstations:

```
Install_Dir\vm\workinst\setup.exe /s
```

File Server Access for Workstation Installs

If you will be using a Version Manager File Server, you can ease client setup by predefining a network location for the `SERVERS.INI` file. Look in the `ISLV.INI` file under the `[PVCSGUI_6.5]` heading for the `pvcs.fileserver.path=` entry. For more information about the Version Manager File Server, see the *Serena PVCS Version Manager Administrator's Guide*.



NOTE If you perform a clean install of the Version Manager Server (with fileserver, WebDAV or I-Net services) and the file "servers.ini" does not exist in the system, the installer will create this file with a sample configuration containing only localhost record.

If the file "servers.ini" is not empty and contains any fileserver configuration record, it will be left as is and no new configuration parameters will be added.

Example of the sample fileserver configuration:

```
[FileServer]
pvcs.fileserver.0=http://localhost:8080/serenafs/FileServer;
```

Copying Files Locally

You can choose to copy some files to the local workstations to improve performance. These files include Java packages that can be located anywhere on the user's workstation. To copy files locally, choose the **Local Copy of Java Packages** feature during the Workstation install and specify the target directory for the files.



NOTE If you are preparing a silent workstation install and wish to copy files locally, make sure that the target directory for the Java packages exists on your users' workstations.

Performing a Network Install

Before users can perform workstation installs to share a single Version Manager installation, the administrator must install Version Manager to a network location.

To perform a Network install:

- 1 Start the Version Manager installer and select **Network** as the installation type. See ["Installing Version Manager" on page 25](#).

- 2 Select the features you would like to install. Be sure that **Workstation Install** is selected.



NOTE

- Only features that are installed as part of the Network install will be available for use by workstations.
- Also, not all features of a Network install are available for sharing with Workstation installs. See the table of install features in [Step 8 on page 27](#).

- 3 (Optional) After the Version Manager installer has completed, configure the Workstation installer for use as a silent installer. See "[Silent Workstation Installs](#)" on [page 33](#).

Connecting a Workstation to the Shared Install

After the administrator has installed Version Manager to a network location, you can set up your workstation to use it.

To run the workstation setup program:

- 1 Launch the Workstation installer by doing one of the following:
 - If your administrator has prepared a silent install, run the following command from the Windows Run dialog or a command prompt:


```
MappedDrive:\vm\workinst\setup.exe /s
```

The workstation install will now run to completion without prompts or further user interaction. You are done with this procedure!
 - Else, use Windows Explorer to navigate to the location of the Network install (*MappedDrive:\vm\workinst*) and double-click the *setup.exe* file.

The Welcome page of the installer appears. Click the **Next** button and proceed to Step 2.
- 2 **License Agreement Page:** Select the option to accept the license agreement, and click the **Next** button. The Choose License Server page appears.
- 3 **License Server Page:** Do one of the following:
 - Select the **Specify License Server** option and enter the name or IP address of the Serena license server in the **Host Name** field.
 - Select the **Install a 30 day evaluation license** option.

Click the **Next** button.
- 4 **Customer Information Page:**
 - a Complete the **User Name** and **Company Name** fields.
 - b Do one of the following:
 - To make the installation available to anyone who can log in to the computer, select **Anyone who uses this computer (all users)**.

- To make the installation available to only yourself, select **Only for me**.



IMPORTANT! If you are limiting access to only one user, make sure you are logged in as the that user. If not, exit the installation program and log in to Windows as the correct user.

c Click the **Next** button.

5 Select Features Page: Select the features that you want to install:

- **Desktop Client:** The Version Manager graphical user interface. See the *Serena PVCS Version Manager Getting Started Guide* and the *Serena PVCS User's Guide*.
- **SCC/COM IDE Client:** Development Interface for version management within SCC and COM compliant integrated development environments (IDEs). See the *Serena PVCS Version Manager IDE Client Implementation Guide*.



IMPORTANT! If using with FrontPage Server Extensions, see "[About IDE Client Installs for use with FrontPage Server Extensions](#)" on page 37.

- **Documentation:** The Version Manager manuals in PDF format.
- **Command Line interface:** The archive-centric command-line. See the *Serena PVCS Version Manager Command-Line Reference*.
- **Local Copy of Java Packages:** Copies some key Version Manager files locally to improve performance. See "[Copying Files Locally](#)" on page 34.



NOTE

- Only features that were installed as part of the Network install will be available for selection here.
- Also, not all features of a Network install are available for sharing with Workstation installs. See the table of install features in [Step 8 on page 27](#).

Click the **Next** button.

6 Destination Location Page: Accept the default Destination Folder or click the **Browse** button to select a different location.

7 Select Program Folder Page: Accept the default name and location for Version Manager Start menu shortcuts, or specify a new one.

8 Start Copying Files Page: Review the settings and click **Next** to begin installing files (or **Back** to change them).

A progress page displays while the files install.

9 InstallShield Wizard Complete Page: By default, the following options are selected. Change these settings as needed:

- **Check to view the PVCS Version Manager Readme file:** Opens the readme in your default browser.
- **Register online for a Serena Online Services (SOS) account:** Opens your default browser to the sign up page of the Serena support web site. Online registration provides the following benefits:

- Activates your technical support account, allowing us to more efficiently assist you if you need to contact us.
- Allows you to subscribe to our monthly e-mail newsletter on the latest Serena product developments.
- Provides a brief overview of the online resources you can access from the Serena web site, including technology partner sites, and live chat sessions.

10 Click the **Finish** button.

Patching a Network/Workstation Install that Used the "Local Copy of Java Packages" Option

If you patch a Network Install, you need to do *one* of the following to update the local workstations *if* the Workstation Installs used the **Local Copy of Java Packages** option:

- Rerun the Workstation installer on each workstation.
- OR
- Copy the patched `vm.jar` file from the Network Install to each Workstation Install. The file is in the following directory in both the Network and Workstation installs:

`vm\common\lib`

About IDE Client Installs for use with FrontPage Server Extensions

To set up the Version Manager IDE client for use with IDEs that use Microsoft FrontPage Server Extensions, you must complete the following steps:

- 1** Install FrontPage server extensions onto your web server.
- 2** Install the Serena PVCS Version Manager IDE client directly to your web server.

Install FrontPage Server Extensions

For step-by-step information on installing FrontPage server components, follow the installation instructions that come with FrontPage.

For information on configuring your web server to work with Version Manager projects, see the *Serena PVCS Version Manager IDE Client Implementation Guide*.

Install the Version Manager IDE Client

When you install the IDE client, you must select a default project database for your Interface projects. For FrontPage, the default project database must be located locally on

the web server. By default, if you do not select one, Version Manager creates a database for you.



IMPORTANT! To work with FrontPage web projects, you must install the Version Manager IDE client directly onto your web server. Do not install it from a client workstation.

To install the IDE client to your web server:

- 1 Begin the installation procedure as described in the section "[Installing Version Manager](#)" on page 25.
- 2 When prompted to select the type of installation in the Setup Type window, select the **Local** option.
- 3 When prompted to select the Version Manager components to install, select the following, and then click the **Next** button:
 - **Desktop Client:** Which is required to create and manage a Version Manager project database for use with the IDE client.
 - **SCC/COM IDE Client:** Which contains the client for version management within integrated development environments (IDEs).
 - **Documentation:** (optional) Which includes the *Version Manager IDE Client Implementation Guide*.



NOTE Because you must install the IDE client directly to your web server to work with FrontPage web projects, you cannot simultaneously install the Workstation installation component.

- 4 When you are prompted to select a default project database for your IDE client projects, do one of the following:
 - Accept the default and click the **Next** button. By default, when you install the IDE client, Version Manager creates a default project database named IDE Project Database under: C:\Users\All Users\Serena\VM\vmdevint.
 - Click the Browse button to select or create a different default project database, and then click the Next button.



NOTE You must place the default project database on a drive that physically resides on the web server. You can change the default project database by reinstalling the IDE client and selecting a different database.

- 5 Follow the installer prompts to complete the installation.

Post Install Configuration

See the following sections for information on configuring Version Manager for use once it is installed.

See the Administrator's Guide

See the *Serena PVCS Version Manager Administrator's Guide* for information on configuring Version Manager. Topics covered there include:

- Configuring Version Manager servers: File Server, Web Server, WebDAV Server, and SSO Server
- Security and user administration
- Configuring projects and project databases
- Configuring clients to access project databases on file servers

Chapter 3

Installing on UNIX/Linux

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Before Installing

Before initiating the Version Manager installer, ensure that the target system is in the necessary state. See the following sections.

Third Party Dependencies

The following third party dependencies should be installed prior to installing Version Manager:

- compat-libstdc++-33.i686
- libXext.i686
- libXtst.i686
- libXrender.i686
- zlib.i686
- nss-softokn.i686
- mesa-libGL.i686
- openmotif.i686
- libXp.i686
- libXmu.i686

Stop Version Manager Servers

If any of the following Version Manager servers are installed to the target system:

- File Server
- Web Server Application
- WebDAV Server
- Serena Single Sign On (SSO) Server

Then you **MUST** stop the Version Manager Application Server and any third-party servers being used with it.

To stop the application server:

- 1 Change to the following directory:
`/Install_Dir/vm/common/bin`
- 2 Enter the following command:
`./pvcsstop.sh`

Disable Anti Virus Software

Before installing, disable any anti virus software. In particular, disable any anti virus software that scans files in real-time as you access them. Such real-time scanning software may hang the installer during the creation of the sample database.

Disable Font Substitution in Exceed or Other X Servers

If you use Exceed, you must configure it NOT to use font substitution. If font substitution is enabled, many dialog controls will not display correctly. Some may be unusable.

When you install Exceed, it enables font substitution by default. This may also apply to other X server software.



NOTE The procedure below is for Exceed 10. For other versions or for other X server software, consult the product's documentation.

To disable font substitution in Exceed:

- 1 Launch Xconfig.
- 2 Select **Font Management**.
- 3 Select the Advanced Settings tab.
- 4 Deselect the **Automatic Font Substitution** checkbox.



NOTE The following two steps are optional, but recommended.

- 5 Select the **Local Fonts First** checkbox.
- 6 Select the **Optimize for Java VM** checkbox.

Add Location of Web Browser to Path

To access the help system, view reports, and use the Version Manager Web client, you must add the location of a Web browser to your path. For example:

```
PATH=/apps/mozilla:$PATH; export PATH
```

Do not launch the browser by using a fully qualified path to its executable. Instead, let it be found using the PATH variable:

```
mozilla &
```

Setting Up a Browser on UNIX

To access the Version Manager help system and to view reports in an HTML browser, you must first define the location of the browser in Version Manager.

To define the location of a browser:

- 1 Start Version Manager.
- 2 Select View | Options.
- 3 Click the Applications tab to move it to the front.
- 4 In the **Browser Location** field, enter the path to the browser, such as `/usr/local/netscape/netscape`.
- 5 Click OK.

When you generate a report, Version Manager automatically launches the report in the browser you specified. The browser is also launched whenever you invoke the Version Manager help system.

Are You Installing the Integration to Eclipse?

See ["About Installing the Eclipse Plugin on Linux"](#) on page 53.

Have You Created a User and Group for Version Manager?

See ["About Creating User Accounts for Version Manager"](#) on page 49.

Will You Be Using setuid?

See ["About Adding Security with setuid"](#) on page 50.

Are You Updating an Existing Version Manager Installation?

See [Chapter 1, "About Upgrading an Existing Installation"](#) on page 14.

If Only I had Known then What I Know Now... :-)

Have you reviewed [Chapter 1, "Planning Your Installation"](#) on page 7 and the Version Manager readme? We suggest that you take a quick look for topics that may apply to your install and usage scenario.

Installing Version Manager

The following procedure explains how to install Version Manager from the Serena PVCS Professional Suite DVD or from the downloaded installation file. For information on

obtaining the software, see [Chapter 1, "Obtaining the Version Manager Installer and Documentation"](#) on page 19.



IMPORTANT!

- You should install Version Manager using the same user ID you used for previous installations. Installing under a different user ID will most likely be incompatible with the permissions of existing archives in `setuid` mode. See ["About Adding Security with `setuid`"](#) on page 50.
- We suggest that you install Version Manager to UNIX as the user **pvcs** and that you make this user a member of a group named **pvcsgrp**. See ["About Creating User Accounts for Version Manager"](#) on page 49.

To install Version Manager:

1 Launch the Version Manager installer:

■ From DVD:

- a Insert the disc into a local drive.
- b If the drive is not mounted, you must mount it before continuing. See the documentation that came with your O/S.
- c Navigate to the location of the installation program by entering:
`cd drive_path/vm/unix`
- d Initiate the installer by entering:
`./vminst`

■ From downloaded files:

- a Copy the downloaded file to the target system or a network location accessible from it (the file is named like: `vmReleaseNumberOS.tar`).
- b Extract the contents of the tar file to an empty folder.
- c Navigate to the location to which you extracted the files.
- d Initiate the installer by entering:
`./vminst`

2 **License Agreement:** The license agreement appears. Press ENTER to accept the license agreement; otherwise, enter N and the installation stops.

3 **Review User and Group:** You should install Version Manager using the same user ID you used for previous installations. Installing under a different user ID will most likely be incompatible with the permissions of existing archives in `setuid` mode. See ["About Adding Security with `setuid`"](#) on page 50.

We suggest that you install Version Manager to UNIX as the user **pvcs** and that you make this user a member of a group named **pvcsgrp**. See ["About Creating User Accounts for Version Manager"](#) on page 49.

Press ENTER to continue.

4 **License Server:** Do one of the following:

- Enter the name or IP address of the Serena license server.
- Leave this blank for a 30-day evaluation license.

Click the **Next** button.

5 Features: Select the features that you want to install.

Feature	Description
Desktop Client	The Version Manager graphical user interface. See the <i>Serena PVCS Version Manager Getting Started Guide</i> and the <i>Serena PVCS User's Guide</i> .
File Server	The server that accesses archives, metadata archives, revisions, and other files on behalf of Version Manager users (as opposed to each client directly accessing the archives via the file system). See Chapter 1, "About Version Manager Servers" on page 10 .
Plugin for Eclipse 3 (rich integration)	Linux only. Rich integration for Eclipse-based IDEs, such as IBM Rational Application Developer (RAD). This newer plugin can integrate directly to Serena TeamTrack/SBM issue management and provides a more advanced source control integration than that available via the our older plugin. See "About Installing the Eclipse Plugin on Linux" on page 53 and the <i>Serena PVCS Version Manager IDE Client Implementation Guide</i> .
Web Server Application	The server that supports the Version Manager Web Client (as well as providing underlying services required by File Server, SSO Server, and WebDAV Server). See Chapter 1, "About Version Manager Servers" on page 10 .
Version Manager WebDAV	The server that supports the Version Manager WebDAV implementation and Meritage. See Chapter 1, "About Version Manager Servers" on page 10 , and the <i>Serena PVCS Version Manager Administrator's Guide</i> .
Documentation	The Version Manager manuals in PDF format.
Developer's Toolkit	The public API for developing applications that use Version Manager features. See the <i>Serena PVCS Version Manager Developer's Toolkit Reference Guide</i> .
Sample Project Database	A Version Manager project database that contains sample data that illustrates the use of Version Manager features. See the <i>Serena PVCS Version Manager Getting Started Guide</i> .
Serena Single Sign On (SSO) Server	The server that supports SSO and CAC (Common Access Card) login. NOTE If you already have a Serena SSO/CAC server, such as from an installation of SBM, you probably do not want to install this. See Chapter 1, "About Version Manager Servers" on page 10 .

- 6 After you have selected the components to install, do one of the following:
 - Press ENTER to continue the installation.
 - Enter **N** and press ENTER to reselect the components.
- 7 **Operating System:** The Setup program determines which UNIX/Linux operating system you have. Do one of the following:
 - Press ENTER to continue installing on the detected operating system.
 - Enter **2** to select a different operating system. This feature allows you to install different operating system versions of Version Manager on the same server.

You cannot create sample project databases for different operating system versions of Version Manager.
 - Enter **3** to exit the installation program.
- 8 **Installation Location:** Specify an installation directory by doing one of the following:
 - Press ENTER to accept the default, which is /usr/serena.
 - Enter an installation directory.
- 9 Confirm the installation directory path by pressing ENTER. If the directory does not exist, the installer asks if you want to create it.
- 10 **Ready to Install:** Do one of the following:
 - Press ENTER to confirm your platform and installation directory choices. The Setup program displays the progress of the installation and a successful completion message when finished.
 - Enter **E** and press ENTER to exit the Setup program.
- 11 **Web Server:** If you chose to install the Version Manager Web Server, you will be asked which web server should be configured for use with the Version Manager Web Server. Press ENTER to accept the default or **N** to select a different web server.
- 12 **LDAP Server Details:** If you chose the **Serena Single Sign On (SSO) Server**, the Provide LDAP Server Details for Installation screen appears. If you wish to use user ID and password based SSO login (requires an LDAP server), provide answers to the following prompts:
 - **Enter LDAP Server name:** The host name or IP address of your LDAP server.
 - **Enter its Port Number:** The port number of your LDAP server. Typically LDAP servers are configured to use port 389; 636 for SSL.
 - **Enter LDAP Search Base:** The base from which to search for users.
 - **Enter LDAP Search Filter:** The search filter you want to use. The default for Active Directory Server is:

(&objectClass=user)(sAMAccountName={0})
 - **Enter LDAP User Name:** The full user DN of a user with permission to query the LDAP server.
 - **Enter LDAP Password:** The LDAP password for the above user.

- You are prompted to confirm the entries you made above. Press **Y** and ENTER to confirm the entries or **N** and ENTER to go back and correct the entries.



IMPORTANT! If you wish to use user ID and password based SSO login but you skip the Provide LDAP Server Details for Installation screen, you must manually edit the LDAP connection information in the `Configuration.xml` file. See the *Serena PVCS Version Manager Administrator's Guide*.

13 Register online for a Serena Online Services (SOS) account: When installation is complete, you are prompted to register Version Manager online. Press ENTER to open your default browser to the sign up page of the Serena support web site. Online registration provides the following benefits:

- Activates your technical support account, allowing us to more efficiently assist you if you need to contact us.
- Allows you to subscribe to our monthly e-mail newsletter on the latest Serena product developments.
- Provides a brief overview of the online resources you can access from the Serena web site, including technology partner sites, and live chat sessions.



NOTE If you perform a clean install of the Version Manager Server (with fileserver, WebDAV or I-Net services) and the file "servers.ini" does not exist in the system, the installer will create this file with a sample configuration containing only localhost record.

If the file "servers.ini" is not empty and contains any fileserver configuration record, it will be left as is and no new configuration parameters will be added.

Example of the sample fileserver configuration:

```
[FileServer]
```

```
pvcs.fileserver.0=http://localhost:8080/serenafs/FileServer;
```


Silent Installation

Use the following script to perform a silent installation:

```
SILENT=1
SILENT_INST_DIR=/usr/serena
SILENT_INST_LIC_SERVER=27000@flexserver
VMUX_INSTALL=TRUE
VMFS_INSTALL=TRUE
RIDE_INSTALL=FALSE
VMIN_INSTALL=TRUE
WEBD_INSTALL=TRUE
BOOK_INSTALL=TRUE
DTKT_INSTALL=TRUE
SPDB_INSTALL=TRUE
SSOI_INSTALL=TRUE
SILENT_INST_ECLIPSE_DIR=/usr/eclipse
new_sso_server=10.10.10.10
new_sso_port=389
new_sso_sbase=CN=users,DC=vm,DC=local
new_sso_sfilter='(&(objectClass=user)(sAMAccountName={0}))'
new_sso_uname=vmuser@vm.local
new_sso_pwd=password
REG_SUPPORT=0
```

To automatically perform a silent install:

- 1 Create a new file called `silent.inst` and save it to the directory where the other installation files are located.
- 2 Add the parameters above to `silent.inst`.

About Creating User Accounts for Version Manager

Before you install Version Manager, we recommend that you create a user `pvc` and group `pvcgrp`. This will make it easier to administer Version Manager. You must login as `root` to complete this procedure.



IMPORTANT! You should install Version Manager using the same user ID you used for previous installations. Installing under a different user ID will most likely be incompatible with the permissions of existing archives in `setuid` mode.

Refer to the documentation for your operating system for more information on creating users and groups.

To create user accounts for Version Manager:

- 1 Log in as *root* and create an installation directory, such as:
`/usr/serena.`



NOTE If you are installing Version Manager for more than one platform, create a different directory structure for each platform to avoid overwriting program files. For example: `/usr/serena/aix`

- 2 Create the user who will own the executables in the installation directory, such as *pvcs*.
- 3 Create a specific group, such as *pvcsgrp*, or use an already existing group, and make it the primary group for all users of Version Manager.

If you are operating in a pure UNIX environment and the Version Manager executables are run in *setuid* mode, the user still needs to be a member of the *pvcsgrp* group, but the *pvcsgrp* group doesn't have to be the user's primary group. Only the *pvcs* user needs to have the *pvcsgrp* group name as the primary group.

- 4 Change the owner of `/usr/serena` to *pvcs*.
`chown pvcs /usr/serena`
- 5 Change the group of `/usr/serena` to *pvcsgrp*.
`chgrp pvcsgrp /usr/serena`
- 6 Change the directory permissions as needed, as shown in the following table:

User	Permission
user <i>pvcs</i>	read, write, and execute (7 or <code>u=rwx</code>)
group <i>pvcsgrp</i>	setuid: read and execute (5 or <code>g=rx</code>) nonsetuid: read, write, and execute (7 or <code>g=rwx</code>)
other users	read and execute (5 or <code>o=rx</code>)

For example:

```
chmod 755 /usr/serena
```

or

```
chmod u=rwx,g=rx,o=rx /usr/serena
```

About Adding Security with *setuid*

By default, Version Manager files are installed in *setuid* mode, which implements an additional level of security for your archives. The script that you run to start Version Manager on UNIX, *pvcsvmux*, calls the *pvcsvmsuid* program that has the *setuid* and

setuid privileges turned on by default. This script is located in the bin directory of the Version Manager installation location.



NOTE For information about turning off *setuid*, refer to the *Serena PVCS Version Manager Administrator's Guide*.

In *setuid*, users login as themselves, but Version Manager creates public archives as the user who owns the executables. We recommend that you create a user named *pvcs* for this purpose. This will be the only user with access to read and write to your archives.

When running in *setuid* mode, Version Manager creates all files as the user *pvcs*, except for workfiles, temporary files, and `$HOME/.islvr`. Access control privileges can be controlled by the Version Manager access control database. Individual users who are not *pvcs* will not have the ability to modify, add, or delete the files or directories unless they are using Version Manager commands.

Special Considerations

- If all project databases are accessed through the Version Manager File Server, *setuid* mode is not required. The File Server process performs file system operations as the user ID that was used to start the File Server. (So end-users do not need file system access to the repository.) See [Chapter 1, "About the Version Manager File Server" on page 11](#) and ["Disabling *setuid* Mode" on page 52](#).
- If you are not using the Version Manager File Server and you do not implement *setuid*, archives can be moved, renamed, corrupted, or deleted with basic UNIX commands by anyone with permissions to your archive directory.
- You can switch between *setuid* and non*setuid* modes only if you have reset permissions to `rwxrwxr_x` (775). All users must be in the same primary group. Alternatively, you can switch between modes if you reset the directory and/or executable permissions to `rwxrwsr_x` (2775). In this case, the users do not have to be in the same primary group, but *pvcsgrp* must be a secondary group. See ["About Creating User Accounts for Version Manager" on page 49](#) for more information.
- If you are working in a cross-platform environment (Windows and UNIX), you may not be able to use *setuid*. See ["Using *setuid* in a Cross-Platform Environment" on page 52](#).
- Version Manager 6.6+ *setuid* conflicts with 6.5 *setuid*. If Version Manager 6.6 (or higher) is installed on a workstation that also has Version Manager 6.5 installed, disable *setuid* on the 6.6+ installation. Note that sharing installations with releases of Version Manager earlier than 6.5 does not create *setuid* compatibility problems.
- To run Version Manager in *setuid* mode on Solaris, AIX, and Linux, you must run a script after installation to create symbolic links. See ["Using *setuid* Mode on Solaris, AIX, and Linux" on page 51](#).

Using *setuid* Mode on Solaris, AIX, and Linux

If you want to run Version Manager in *setuid* mode (default upon installation) on Solaris, AIX, and Linux, it is necessary to create symbolic links to the shared libraries of Version Manager on the operating systems Solaris, AIX and Linux. Depending on the OS, these links will be installed in the directory `/usr/lib` or `/usr/lib/secure`.

This is necessary to satisfy OS security requirements that prevent the use of shared libraries from arbitrary locations when an application is running in *setuid* mode. The links need to be created on every system where Version Manager is executed.

To help create these links, a script is included that will create the appropriate links for the OS that is being used.

To create the links:

Execute the following command as root:

```
Install_Dir/vm/OS/bin/vmlinklibs -add
```

Examples:

```
/usr/serena/vm/solaris/bin/vmlinklibs -add  
/usr/serena/vm/aix/bin/vmlinklibs -add
```

You can use the option `-verify` instead of `-add` to check if the correct links are already installed, and you can use the option `-delete` to remove previously created links.

To verify the links:

To verify that all executables are matching in setuid or non-setuid mode, you can execute:

```
Install_Dir/vm/OS/bin/vmsetsuid -verify
```

HP-UX does not require these links to run in setuid mode. See the *Serena PVCS Version Manager Administrator's Guide* for an explanation of the reasons for running Version Manager in setuid mode.

Disabling setuid Mode

You can take Version Manager out of setuid mode by executing the command:

```
Install_Dir/vm/OS/bin/vmsetsuid -unset
```

as the user who installed Version Manager. All relevant Version Manager executables will be taken out of setuid mode.

Setuid mode can easily be re-enabled by executing the command:

```
Install_Dir/vm/OS/bin/vmsetsuid -set
```

Using setuid in a Cross-Platform Environment

setuid may be available in a cross-platform environment depending on the method used to map files between UNIX and Windows.

Using setuid with Samba

Add or edit lines similar to the following in the Samba configuration file (usually `SMB.CONF`):

```
[serenavm]  
path = VM_Path  
force user = VM_ID  
force group = VM_Group  
read only = No
```

Where:

- *VM_Path* equals the location of the Version Manager project databases on the UNIX system.
- *VM_ID* equals the UNIX ID under which Version Manager was installed on the UNIX system.
- *VM_Group* equals the user group under which Version Manager was installed.



NOTE This example works only for a specific share. For information on using these settings in the [global] section of the Samba configuration file, see the Samba documentation.

Using setuid with NFS

If your NFS client does not allow mapping of user IDs and user groups, then you cannot use setuid on UNIX. To use setuid on UNIX, you must configure your NFS client to allow access by the *VM_ID* and *VM_Group* after authentication is complete. (As above, the *VM_ID* and *VM_Group* equal the ID and user group under which Version Manager was installed to UNIX.)

About Installing the Eclipse Plugin on Linux

In addition to Windows platforms, the Eclipse rich integration is supported on Linux.

Consider the following in preparing to install the integration:

- The user who runs the Version Manager installation **MUST** have read, write, and execute permissions to the Version Manager **AND** Eclipse installation directories.
See "[About Creating User Accounts for Version Manager](#)" on page 49 for more information on setting up permissions to install Version Manager.
- Since the integration cannot make use of setuid mode, you must choose one of the following approaches to allow Eclipse users to access the Version Manager archives:
 - Set up a Version Manager file server and access the archives through it. See [Chapter 1, "About Version Manager Servers"](#) on page 10.
 - Set the O/S permissions of the Version Manager project database directories so that the directories are readable and writable by all users of the integration to Eclipse. All users must have the same primary group and run Eclipse with a umask of 002. See the *Serene PVCS Version Manager Administrator's Guide* for more information on configuring security and limiting file system access to the archive files.

Installing the Plugin

To install the integration:

- 1 Login as a user who has read, write, and execute permissions to the Version Manager and Eclipse installation directories.
- 2 Run the installation script, *vminst*, and follow the prompts.

- 3 Select the **Plugin for Eclipse 3 (rich integration)** component when prompted to select the components to install. (Press the "N" key to clear the default selections. Use the Enter key to step through the list of components. Press the "X" key to select a component. Press the "Y" key when your selections are complete.)



NOTE You must also install the Desktop Client if the current version is not already installed.

- 4 Provide the path to the Eclipse IDE installation when prompted, specifically the location of the Eclipse directory.
- 5 Follow the prompts to complete the installation.

After You Install the Plugin

After the installation is complete, you must finalize the installation by configuring your operating system appropriately.

To finalize the installation:

- If you are not accessing all archives via a Version Manager file server, you must set the O/S permissions to allow all users access certain directories and files. See the section in the *Serena PVCS Version Manager Administrator's Guide* on Protecting Program Files and Project Data; apply the permissions as described for the Nonsetuid Group.
- You must source a profile file as described in Step 1 of "[Setting Up Your UNIX Environment for Version Manager](#)" on page 55.

Post Install Configuration

See the following sections for information on configuring Version Manager for use once it is installed.

See the Administrator's Guide

See the *Serena PVCS Version Manager Administrator's Guide* for information on configuring Version Manager. Topics covered there include:

- Configuring Version Manager servers: File Server, Web Server, WebDAV Server, and SSO Server
- Security and user administration
- Configuring projects and project databases
- Configuring clients to access project databases on file servers

Configuring a Different Web Server

You can configure a different Web Server to work with Version Manager after the installation has completed. To do so, run the command:

```
Install_Dir/vm/OS/bin/configure_inet Install_Dir
```

For example:

```
/usr/serena/vm/linux/bin/configure_inet /usr/serena
```

Setting Up Your UNIX Environment for Version Manager

Once you have installed Version Manager, you—or your UNIX administrator—must set up your UNIX environment before using Version Manager.

To set up environment variables for UNIX:

- 1 To enable use of the Version Manager command-line interface (CLI), you should source one of the Version Manager profile files that was generated during installation. Sourcing a profile file will add and/or modify environment variables in your current shell to enable use of the CLI.

Two profile files are available, `vmprofile` and `vmcshrc`. Which file you must use depends upon which shell you are running. These files are located in the `bin` directory below a directory named after your operating system, as in:

```
<VM_Install_Directory>/vm/<OS>/bin
```

For this shell...	Use this syntax...
C	<code>source <VM_Install_Directory>/vm/<os>/bin/vmcshrc</code>
Bash, Bourne, and Korn	<code>. <VM_Install_Directory>/vm/<os>/bin/vmprofile</code> NOTE The period (.) acts as the "source" command in these shells, so the leading period and space are required.

Since a sourced profile does not persist between logins, you should consider adding the source command to your start up script (`.cshrc` or `.profile`). This saves you from having to manually run the source command every time you log in to a shell from which you wish to use the CLI.

- 2 If you are using the desktop client, follow this procedure to setup your environment:
 - a Make sure the `DISPLAY` environment variable is set to the host name or IP address of the system used to view Version Manager. If it is not automatically assigned, you can assign it as follows:

For this shell...	Use this syntax...
C	<code>setenv DISPLAY host_name:0.0</code> or <code>setenv DISPLAY ip_address:0.0</code>

Korn	export DISPLAY= <i>host_name</i> :0.0 or export DISPLAY= <i>ip_address</i> :0.0
Bourne	DISPLAY= <i>host_name</i> :0.0 or DISPLAY= <i>ip_address</i> :0.0 export DISPLAY

- b** Edit the PATH environment variable in each user's start up script (*.cshrc* or *.profile*) as follows:

For this UNIX system...	Do this...
Solaris	Include the bin directory for OpenWindows in the PATH; for example, \$PATH:/usr/openwin/bin
All others	Include the path to the X11R6 bin directory; for example, \$PATH:/usr/bin/X11

- c For Solaris only:** You may need to set the environment variables OPENWINHOME, LD_LIBRARY_PATH, and XFILESEARCHPATH as indicated below.

For this shell ...	Use this syntax ...
C	setenv OPENWINHOME <i>openwindows_directory</i> setenv LD_LIBRARY_PATH \$OPENWINHOME/ lib:\$LD_LIBRARY_PATH setenv XFILESEARCHPATH \$OPENWINHOME/lib/%T/%N/%S
Korn or Bourne	OPENWINHOME= <i>openwindows_directory</i> export OPENWINHOME LD_LIBRARY_PATH=\$OPENWINHOME/lib export LD_LIBRARY_PATH XFILESEARCHPATH=\$OPENWINHOME/lib/%T/%N/%S export XFILESEARCHPATH

where *openwindows_directory* is the OpenWindows installation directory.

- d** If you are using an X Windows console to view Version Manager:
- In setuid mode and the console is physically connected to the system that is running Version Manager, then execute the command:

```
xhost +local:
```

- Running on another UNIX system, then execute the command:

```
xhost +
```

From the UNIX system that is physically connected to the console.

This procedure is necessary to ensure that Version Manager has the ability to access your screen. Otherwise, the X Windows subsystem will report "Connection refused by server" messages similar to the following example:

```
$ pvcsvmux
$ Xlib: connection to ":0.0" refused by server
Xlib: Client is not authorized to connect to Server
Exception in thread "main" java.lang.InternalError: Can't connect
to X11 window server using ':0' as the value of the DISPLAY
```


variable.

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