Oracle® AutoVue for Agile PLM

Installation and Configuration Guide

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Preface

Oracle Agile PLM is a comprehensive enterprise PLM solution for managing your product value chain. Oracle AutoVue for Agile PLM delivers visualization capabilities for many document types, including business documents such as Office and Graphics, as well as technical document types such as 2-D/3-D Computer Aided Design (CAD) and Electronic Design Automation (EDA). The Oracle AutoVue for Agile PLM Installation and Configuration Guide describes how to install and configure Oracle AutoVue for Agile PLM.

Audience

This document is directed at any user whose task is the installation and administration of Oracle AutoVue for Agile PLM.

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Related Documents

Oracle's Agile PLM documentation set includes Adobe® Acrobat PDF files. The Oracle Technology Network (OTN) Web site
http://www.oracle.com/technetwork/documentation/agile-085940.html contains the latest versions of the Agile PLM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Agile PLM Documentation folder available on your network from which you can access the Agile PLM documentation (PDF) files.

Oracle’s AutoVue for Agile PLM documentation set is available at
http://www.oracle.com/technetwork/documentation/agile-085940.html#autovue

For more information on Oracle AutoVue products, refer to the Oracle AutoVue documentation set available at
http://www.oracle.com/technetwork/documentation/autovue-091442.html

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

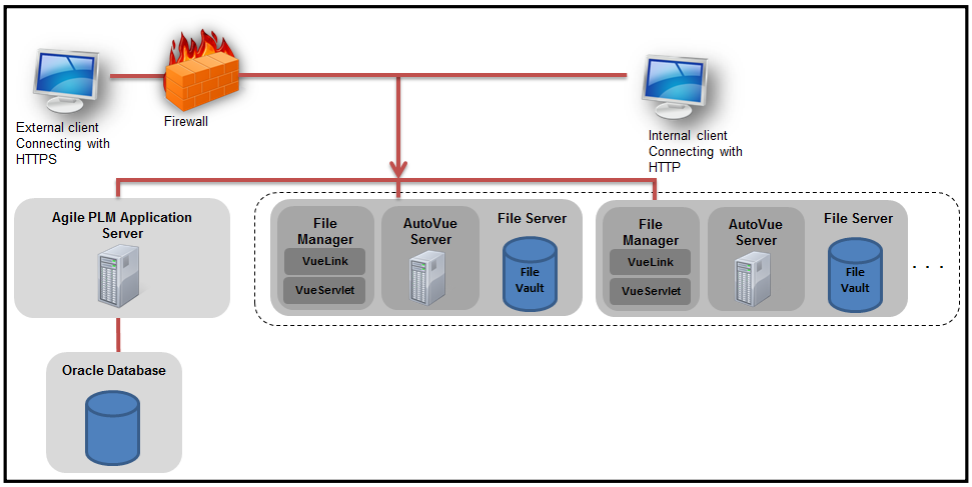
Introduction

Oracle AutoVue for Agile PLM is an Enterprise Visualization solution designed to provide viewing, digital annotation and collaboration capabilities to Agile PLM. Oracle AutoVue delivers visualization capabilities for many document types, including business documents such as Office and Graphics, as well as technical document types such as 2-D/3-D Computer Aided Design (CAD) and Electronic Design Automation (EDA). Hence, one of the main benefits of AutoVue for Agile PLM is that users can view numerous file types stored in Agile PLM without having the native application that created the file installed on their desktop machines. Another advantage of AutoVue for Agile PLM is that it decreases bandwidth requirements and improves response time through the use of streaming files. Streaming files contain file data and provide the benefit that AutoVue for Agile PLM can access the streaming files much faster than it can native files.

The VueServlet provides a connection between the AutoVue server and Agile PLM using standard HTTP/HTTPS protocols.

The following diagram and steps describe a typical configuration of how AutoVue for Agile PLM integrates with Agile PLM.

Figure 1–1 Architecture Diagram



1. Log onto the Agile PLM with web browser.
2. A link appears next to each file stored in Agile PLM.
3. When you click this link, the AutoVue client is launched and you may view that file inside the web browser window.

4. In Agile PLM, the AutoVue client communicates with the AutoVue server through servlet tunneling for HTTP or HTTPS connection. The Vuelink can communicate with Agile PLM to handle any request made by the AutoVue server like getting the files that the user requested for.

2
Architecture

This chapter discusses the architecture of AutoVue for Agile PLM.

AutoVue for Agile PLM is designed to provide server scalability to support increasing demand for file viewing and markup on intranets and the Internet. Adding capacity is as simple as adding one more "server". The servers automatically divide up the load in a "peer-to-peer" fashion to avoid any bottlenecks. In Agile PLM, there is a 1-to-1 relationship between the File Manager and AutoVue server. As a result, you can add another server (under a load-balancer with the File Manager and AutoVue client libraries installed) to increase the capacity. However, with sufficient CPU and memory resources on the server, you can also increase the number of processes in the AutoVue server to improve scalability.

AutoVue for Agile PLM embeds several different rendering schemes to accommodate multiple environments. These schemes allow the server to take into account issues such as network bandwidth, load balancing between server and client, server configuration and performance, intranet/extranet/Internet use, and file size and format to be viewed. However, in all rendering options, AutoVue for Agile PLM keeps all necessary information for querying purposes; the "intelligence" of drawings is preserved. For example, users can perform text searches on text and CAD files, or perform queries based on drawing attributes in a CAD file.

Note: Agile PLM is a Web application server with a browser-based client and configures access through the VueServlet, exclusively.

2.1 Components of Agile PLM

The components of AutoVue for Agile PLM include the:

- Agile Application Server
- File Manager
- AutoVue server
- AutoVue client libraries

2.1.1 Agile PLM Application Server

The Agile PLM Application Server is the center of the Agile PLM system, and manages data stored in the Agile PLM database. The Agile PLM Application Server runs on industry-leading J2EE application servers. The application server connects to the components in a persistence layer where product content is stored. All Agile PLM data is contained or organized in business objects that are set up by the administrator, and specified and used by the enterprise's Agile PLM users. Business objects is a general

term that implies objects created from the classes available to the enterprise, but other entities in Agile are also objects, such as workflows, searches, reports, and so forth.

2.1.2 File Manager

The File Manager stores all documents, drawings, and other files within the Agile PLM system. A File Manager provides a place to store and retrieve files locally or remotely. Due to the geographically dispersed nature of the global enterprise, multiple Agile PLM File Managers can be deployed in a distributed configuration for efficient distribution of product content. Agile PLM File Manager is made up of two main components: the File Manager Web application and the file vault. The file vault is the file system where the actual files reside. The file vault can be located on the same server as the Web application or on a dedicated storage system.The File Manager can be installed on the same machine as the Agile PLM Application Server but is, typically, installed on a separate machine. The File Manager can also be installed in a cluster and distributed across geographic regions.

2.1.3 AutoVue Components (Server and Client Components)

The installation involves AutoVue for Agile PLM installed on a server, to which client machines are connected to access and view documents. An AutoVue for Agile PLM solution has several components: the AutoVue server, an application server hosting the VueServlet, a Web server or an application server hosting AutoVue client libraries, and the AutoVue client. In the case of AutoVue for Agile PLM installation, the AutoVue for Agile PLM Servlet (VueServlet) is packaged and deployed as part of the File Manager installation. The VueServlet is also deployed on the File Manager and tunnels the requests to the Agile PLM Application Server using HTTP protocol.

The AutoVue client is a Java-based applet that is the main entry point to AutoVue's capabilities. The AutoVue client libraries are delivered by Agile PLM (typically, the File Manager).

3

Prerequisites

This chapter discusses the prerequisites of installing AutoVue for Agile PLM.

3.1 Pre-requisites for Installing AutoVue for Agile PLM

Prior to installing AutoVue for Agile PLM, there are certain prerequisites that must be met. The following prerequisites are common to Windows and Linux OSes.

- It is recommended that you install the AutoVue server component with each File Manager.
- The machine that is hosting the AutoVue server must have a color depth of at least 16-bits. If the machine has a lower color depth, you may run into discrepancies in color or filling when viewing, printing or converting from AutoVue.
- Ensure that the AutoVue server has permission to write to the operating system's temporary directory. To ensure temporary files are created in protected locations on Linux, the scripts jvueserver and jvueserver_debug have been changed to set new temporary directory. This it does by setting environment variable TMPDIR (by default, TMPDIR="/tmp/autovue"), and the new temporary folder to the permissions 700 (owner can read, write and execute).

  The AutoVue server administrator is responsible for setting this environment variable for security.

  1. If setting TMPDIR="/tmp", AutoVue will create temporary files in non-secure location /tmp, and log a security warning, such as "SECURITY WARNING: Incorrect or insecure temp folder (/tmp), using global temp directory".
  2. If a temporary folder is set to one owned by another user, AutoVue will prompt "AutoVue temporary folder $TMPDIR is owned by a different user", and exit.
  3. If a temporary folder on Linux is set to one without 700 permission, AutoVue will prompt "AutoVue temporary folder $TMPDIR has incorrect permissions", and exit.
- If you are using a load balancer, ensure that the load balancer is configured to enable session stickiness (also referred to as session persistence). Session stickiness is normally achieved through the use of browser cookies.
- For performance reasons, it is recommended that the applications' streaming file cache directory is excluded from real-time virus scans. If virus scans are enabled, there is a performance impact on it and the impact is tied to the kind of operations done by the virus scan. It is also recommended that you run scheduled virus scans at a time when the server is not heavily in use.

- All server machines should obey the following conditions:
  - Have the same fonts installed.
  - If SSL is enabled, have identical certificates in their JVM repositories
  - If an AutoVue server farm is configured, then ensure that the jvueserver.rmi.host.* is set to the same entries for all the servers in the farm. If a new server is added to the farm and the entries of jvueserver.properties of the existing servers are not updated, this new server will not be allowed to connect to the farm. When this happens, a warning is logged in the server logs.
- It is recommended to install only one instance of the AutoVue server per physical machine.

The following sections describe Windows-specific and Linux-specific prerequisites.

3.1.1 Windows Prerequisites

- AutoVue for Agile PLM installs the AutoVue Document Converter print driver on Windows operating systems. Ensure that the print spooler service is enabled and that you have the permissions to install print drivers on the AutoVue server machine.

3.1.2 Linux Prerequisites

To correctly install AutoVue for Agile PLM on a Linux OS, it is recommended that you have basic knowledge of Linux and its administration. Note that you can install AutoVue for Agile PLM on Linux only in the GUI mode.

Note: To install packages on a Linux system you must have appropriate administrative privileges

- It is recommended to install AutoVue for Agile PLM using the same user account used to install Agile PLM.

  If the drawings you are accessing from AutoVue (or any of the external references) reside on a mounted drive, ensure that the drive is mounted with the `noserverino` parameter.
- Install the core fonts from `http://corefonts.sourceforge.net/`. These fonts are required for viewing files that use some specific fonts.
- Ensure that the pre-requisite libraries for Linux are installed. For the most up-to-date list of libraries, refer to the Oracle Support Document 967083.1 (Prerequisite Library Names for AutoVue Web Version on Linux) at: `https://support.oracle.com/epmos/faces/DocumentDisplay?id=967083.1`
- The following must be installed on the Linux machine:
  - The Xvfb, libXfont and Mesa packages. The Mesa package must be 32-bit.
  - The following 32-bit libraries must be installed on the 64-bit machine:
    - libGL.so.1 (yum install mesa-libGL.i686)
    - libGLU.so.1 (yum install mesa-libGLU.i686)
    - libz.so.1 (yum install zlib.i686)
    - libbz2.so.1 (yum install bzip2-libs.i686)

  * libXt.so (yum install libXt.i686)
  * libXp.so (yum install libXp.i686)

- Make sure to run the YUM update command for a package before installing it.

```
# yum update <package_name/s>
```

- Install the latest Xvfb by running the following command:

```
# yum install Xvfb
```

> **Note:** For Linux 5.x, install Xvfb version 6.8.2 or later. Make sure you install the Xvfb with XRender and GLX extensions.

- Install the latest Mesa package (recommended version is 6.5.1 or later) by running the following command:

```
# yum install mesa-libGLU
```

> **Note:** In the event you want to use an earlier version of Mesa, it is acceptable to use the version that is included in the repository of the supported Linux distribution.

- Install the 32-bit libsane and libXP packages, if not already installed.
- Install the WINE RPM package. To do so, install wine-av-20040914-24.i386.rpm from http://oss.oracle.com/AutoVue.
  - If you have an older version of WINE, you need to uninstall it and then install the package that is certified with your version of Oracle AutoVue.
  - Install WINE as a root user by running the following:

```
#rpm -i wine-av-20040914-24.i386.rpm
```

> **Note:** This version of WINE is installed in the */usr/av* directory.

3.2 Additional Guidelines for Security

The following prerequisites are common to Windows and Linux OSes, and is essential for security purposes.

- Shutdown all applications (including the AutoVue server) before you run the installer for the AutoVue for Agile PLM installation.
- When upgrading, if the installer prompts you to reboot the machine before or after the un-installation, you must reboot the machine in order to get a successful installation. If you fail to reboot when prompted, the application installation may be left in an unusable state.
- In a multi-AutoVue server deployment, it is recommended to install AutoVue in the exact same folder path on each server.

3.3 Default Locations

The first two components – Agile PLM application server and File Manager, are installed using the Agile PLM installer, while the third component, AutoVue Server, is installed using the AutoVue for Agile PLM installer.

The default location of the components of AutoVue for Agile PLM is provided in the Table 3–1, " Default Location of AutoVue for Agile PLM Components".

Table 3–1 Default Location of AutoVue for Agile PLM Components

Component	Select this while installing	Default Location
Agile PLM application server	In the Choose Install Component(s) window, select **Application Server** check box.	AGILE_HOME/agileDomain
File Manager	In the Choose Install Component(s) window, select **File Manager** check box.	AGILE_HOME/FileManager
AutoVue Server	Select the AutoVue Server component.	AGILE_HOME/AVS

4

AutoVue Hardware and System Requirements

This chapter discusses the hardware, and system requirements for installing Oracle AutoVue for Agile PLM.

4.1 Hardware Requirements

Table 4–1 Hardware Requirements

Component	Oracle-Certified Hardware Requirements

Server	**Note**: The AutoVue Server can be very CPU, I/O, memory and graphics intensive. Ensure that the machine hosting AutoVue Server has sufficient resources for it and any other applications running on the machine.
	▪ 8 GB of RAM
	▪ Quad-core processor
	▪ 400 MB of disk space for installation
	▪ At least 30 GB of free disk space:
	  ▪ 20 GB for streaming files (if you configure a larger size for the AutoVue cache directory, ensure that the additional disk space is available).
	  ▪ Additional space required for managing markup symbols, user profiles, and markups.
	  ▪ AutoVue also stores temporary files. It stores files at %TEMP% path on Windows operating systems. On the Linux operating system, the temporary files are stored at the default location ie the /tmp/autovue folder. These files are generally deleted after processing is complete. Ensure that there is available disk space for AutoVue temporary files.

Table 4–1 (Cont.) Hardware Requirements

Component	Oracle-Certified Hardware Requirements
Client	▪ Minimum requirements for your operating system (OS): ▪ 1 GHz CPU ▪ 1 GB of RAM It is recommended that the Java Virtual Machine (JVM) used for the AutoVue client is configured for a maximum memory of 256 MB. If loading larger documents, you may need to increase this memory to a higher value (for example, 512 MB). ▪ The AutoVue client is a Java applet and as such works on most operating systems and browsers that support Java applets. To see what is certified by Oracle, refer to Section 4.2, "System Requirements". ▪ When running the AutoVue client on machines with non-Windows operating systems (OSes), ensure that these machines have a graphics card that supports OpenGL. This is necessary for loading 3D models. ▪ On Windows machines, it is recommended to have a graphics card with OpenGL support. In the absence of an adequate graphics card driver, Windows uses its OpenGL capability which is slower as compared to having a graphics card that supports OpenGL.

Important: It is recommended to allocate 2 GB per doc server if the documents are of low complexity. For 3D files, it is recommended to allocate 4 GB of memory per doc server.

4.2 System Requirements

This section details system requirements for the Oracle AutoVue line of products and integrations.

4.2.1 Platforms

The following platforms are certified for AutoVue installation and/or hosting.

Table 4–2 Oracle-Certified Operating Systems

Platform	AutoVue for Agile PLM[1]	AutoVue Client/Server Deployment[1]	AutoVue Desktop Deployment
Windows Server 2012 R2, 2012 —64-bit	x	x	
Windows Server 2008 R2—64-bit	x	x	
Windows 8.1, 8, 7, VISTA—64-bit			x
Oracle Linux 5.8 and up (x86), 6.X (x86) and 7.X (x86)[2] 64-bit (AutoVue running in 32-bit mode)	x	x	
Red Hat Enterprise Linux 5.8 and up (x86), 6.X (x86), and 7.X (x86)[2] 64-bit (AutoVue running in 32-bit mode)	x	x	

[1] The installation requires about 400MB of free space. Additional space will be required by AutoVue for storing other data such as streaming files and markups.

[2] AutoVue is supported on a 64-bit Linux operating systems (OS), but will run in 32-bit mode. All prerequisites libraries should be in 32 bit, with the exception of the X Windows base package (xorg-x11-server-Xorg) along with the Xvfb package xorg-x11-server-Xvfb. These should be the same architecture (64-bit) as the OS.

4.2.2 Client Platform

The following platforms are certified for the AutoVue client.

Table 4–3 Oracle-Certified Client Platforms

Platform	AutoVue for Agile PLM	AutoVue Client/Server Deployment
Windows OSes: Windows Vista— 64-bit Windows 7— 64-bit Windows 8— 64-bit Windows 8.1—64-bit ■ Internet Explorer 9 ■ Internet Explorer 10 ■ Internet Explorer 11 ■ Firefox 31 ESR ■ Chrome	x	x
Apple OS X 10.10 ■ Safari 8.0[1] ■ Firefox 31 ESR	x	x
Solaris 10 (Sparc) ■ Firefox 31 ESR	x	x
Java Virtual Machine		
■ Java SE 7 update 45 and higher - 32-bit and 64-bit	x	x
■ Java SE 8 update 11 and higher - 32-bit and 64-bit	x	x
■ Java JDK 1.6 update 41 (and up)[2] - 32-bit and 64-bit		
■ Java JDK 1.7 update 15 (and up)[2] - 32-bit and 64-bit		

[1] When launching AutoVue from a Mac client, certain configurations may be required. For more information, refer to Oracle Support Document 1662405.1 (Getting Message "Select a temporary directory" When Printing With AutoVue) which can be found at: https://support.oracle.com/epmos/faces/DocumentDisplay?id=1662405.1

[2] For AutoVue ISDK Filesys Sample, Skeleton and Web Services Client.

4.2.3 Integrations

The following integrations have been certified for this release of AutoVue.

Table 4–4 Oracle-Certified Integrations

Integrations	AutoVue for Agile PLM	AutoVue Client/Server Deployment
Agile PLM 9.3.5, 9.3.4, 9.3.3, and 9.3.2	x	

4.2.4 AutoVue for Agile PLM Integration Components

AutoVue for Agile PLM integration components can be installed on the following OSes:

- Oracle Solaris (SPARC and x64)
- Linux (Oracle, Red Hat Enterprise, SUSE)
- Microsoft Windows
- HP-UX Itanium
- IBM AIX (POWER)

For supported versions, refer to the "Agile Product Lifecycle Management Capacity Planning Guide" on OTN
http://www.oracle.com/technetwork/documentation/agile-085940.html

5

Installation Checklist

This chapter discusses the installation checklist that needs to be followed before installing AutoVue for Agile PLM solution.

AutoVue for Agile PLM can be deployed in a number of scenarios. An AutoVue installation consists of installing the AutoVue server, VueServlet, File Manager, and AutoVue client components. Refer to the following sections for more information.

5.1 Deployment Scenarios

The different components that have to be selected for deployment scenarios of AutoVue for Agile PLM are provided in the following table.

Table 5–1 Deployment Scenarios

Deployment	Configuration Steps during installation
Agile PLM application server and File Manager on one machine	Select the AutoVue server and AutoVue client libraries check box in the Choose Install Component(s) window.
Agile PLM application server and File Manager on different machines	Install AutoVue server and AutoVue client libraries separately. Client libraries should be installed on any machine that has a File Manager as well as on the standalone application server or the admin server if in a cluster. The AutoVue Server should be installed on all machines having a File Manager.

5.2 Installation Checklist

To install the AutoVue for Agile PLM solution:

> **Note:** Stop all the Agile Application Servers and File Managers before installing the AutoVue Client Libraries.

- On a machine with only the Agile PLM application server installed in AGILE_HOME, run the AutoVue for Agile PLM installer and then select **AutoVue Client Libraries** check box from the Choose Install Component (s) window. The AutoVue Server is always installed with all File Managers only.

> **Note:** If running the AutoVue for Agile PLM installer on a machine with the Agile PLM application server and/or File Manager installed then the "AutoVue client libraries" component will be displayed and is selected by default. The "AutoVue Server" component is always displayed and selected by default.

- On a machine with only the File Manager installed in AGILE_HOME or with both the application server and File Manager installed in AGILE_HOME, run the AutoVue for Agile PLM installer and then select **AutoVue Server and AutoVue Client Libraries** check box from the Choose Install Component (s) window.
- On a machine designated for only the AutoVue server (that is, there is no AGILE_HOME folder installed), run the AutoVue for Agile PLM installer and install only the AutoVue server.
- After installation, remember to redeploy your File Manager and run the MetaFilesRemover utility.

5.3 Additional Recommendations

Following are recommendations to ensure that the AutoVue for Agile PLM integration works correctly:

- Install the AutoVue client libraries on the application server machine.

> **Note:** Only required on the Admin server in an application server cluster.

- Re-deploy the File Manager after installing the AutoVue client libraries.
- Re-deploy the application server after installing the AutoVue client libraries.
- Run the MetaFilesRemover tool after upgrading to a different AutoVue for Agile PLM version.

6

Installing and Upgrading AutoVue for Agile PLM

This chapter describes how to install AutoVue for Agile PLM on Windows and Linux OSes. The AutoVue for Agile PLM installer updates the Agile PLM Application Server and File Manager components for Agile PLM version 9.3.5, 9.3.4, 9.3.3 and 9.3.2 on all platforms. It also installs the AutoVue server component on Windows or Linux.

Note: When upgrading your installation of AutoVue for Agile PLM, do not cancel the installation process once it has begun. Canceling the installation may leave your current installation of AutoVue for Agile PLM unusable.

6.1 Upgrading from earlier versions

You must run the AutoVue for Agile PLM installer on the application server and all File Managers as well as the machine where you wish to install the AutoVue server. Select the AutoVue Server option in the installer if you wish to install the AutoVue server, and select the AutoVue Client Libraries option if you are running the installer on an application server or File Manager. If it is required to install the AutoVue server on the same machine with the application server and File Manager, then both the AutoVue Server and the AutoVue Client Libraries options must be selected in the installer.

Note: Before updating the AutoVue client libraries, ensure that you stop the file server and any additional Agile processes.

6.1.1 Upgrading from AutoVue for Agile PLM Version 20.2.x

If you are upgrading from AutoVue for Agile PLM 20.2.x, you do not need to run the uninstaller before you install AutoVue for Agile PLM 21.0.0. You can just run the installer for AutoVue for Agile PLM 21.0.0. The installer detects if AutoVue for Agile PLM 20.2.x is installed on your machine. If it is installed, the installer backs up required data, uninstalls version 20.2.x and then installs 21.0.0 to the same location. If you already have 20.2.x, with codebase (client JAR files) set in Jetty, the installer will upgrade to AutoVue for Agile PLM 21.0.0.

- If installing on a Linux OS, make sure you have the correct version of WINE installed. The version of WINE compatible with AutoVue for Agile PLM 21.0.0 is wine-av-20040914-24.i386.rpm. You can download this version of WINE from http://oss.oracle.com/AutoVue.

Note: It is recommended to delete all cached and streaming files when updating AutoVue for Agile PLM.

Below is the list of data that is migrated if you are upgrading:

- Settings in jvueserver.properties are migrated to the new version.
- The installer upgrades the previous configuration settings from allusers.ini and jvueserver.properties when you install the new version.
- Any changes made to default.ini and allusers.ini are migrated to the new version.
- AutoVue for Agile PLM user profiles are left as is.
- The following are left as is since they are read by the new version of AutoVue:
  - Server-managed markups
  - Any stamps and stamp libraries
  - Intellistamps and definitions
- On Linux, changes made to <AutoVue for Agile PLM Install Root>/config/jvuew_config are left as is since this will be read by the newer version of AutoVue.
- Custom log settings: If you had custom log settings, these are migrated to the newer version of AutoVue for Agile PLM.
- Changes made to markup policy file are migrated to the newer version of AutoVue for Agile PLM.
- Any changes made to format-specific files such as color maps, font maps, fonts are migrated to the newer version.

The following are not migrated and must be migrated manually:

- GUI files: If you created custom GUI files, you must make sure to migrate the GUI settings. In order to migrate GUI, it is recommended that you run a diff utility between your current version's default.gui and your custom GUI. Identify what GUI components have been updated. Manually apply these settings to 21.0.0 GUI file.

6.1.2 Upgrading from AutoVue for Agile PLM Version 20.x or Earlier

If you are upgrading AutoVue for Agile PLM from version 20.x or earlier, you must manually move your configuration settings from your version to AutoVue for Agile PLM 21.0.0. You must first uninstall any service packs that are installed for that version of AutoVue for Agile PLM and then uninstall your previous version before installing the new version of AutoVue for Agile PLM. Before you uninstall, you must backup all required data. Once you install 21.0.0, you must migrate your past data to 21.0.0. Below is what you need to backup and migrate manually:

- Custom settings in jvueserver.properties
- Custom settings in VueServer.ini. As of version 20.1, settings in VueServer.ini have been migrated to jvueserver.properties. Refer to the *Oracle AutoVue 20.1 Release Notes* for a mapping of VueServer.ini option to jvueserver.properties parameter.
- Custom settings in default.ini and allusers.ini should be backed up and migrated to the new version.

- User-specific INI files should be backed up and copied over to the Profiles folder of the new installation.
- GUI files: If you created custom GUI files, you must make sure to migrate the GUI settings. In order to migrate GUI, it is recommended that you run a diff utility between your current version's default.gui and your custom GUI. Identify what GUI components have been updated. Manually apply these settings to 21.0.0 GUI file.
- Custom log settings: If you had custom log settings, apply them manually on the new version of AutoVue.
- Stamp attributes and settings from the dmstamps.ini file (located in the <AutoVue for Agile PLM Install Root>\bin directory) should be copied over manually to the new version
- Markup files, if markups are being managed by the AutoVue server (located in the <AutoVue for Agile PLM Install Root>\bin\Markups directory) should be backed up and copied over to the new version of AutoVue.
- Custom markup symbol libraries (located in the <AutoVue for Agile PLM Install Root>\bin\Symbols directory) should be backed up and copied over to the new version of AutoVue.
- If MarkupPolicy.xml located at <AutoVue for Agile PLM Install Root>\bin was modified, it should be backed up and changes to the policy should be manually applied to the new version.
- On Linux installations of AutoVue for Agile PLM, backup the jvuew_config file (located in the <AutoVue for Agile PLM Install Root>/config directory) if it was modified and apply the changes manually to the new version.
- Any changes made to format-specific files such as color maps, font maps, fonts must be backed up and these changes should manually be applied to the new version.

6.2 Installing on Windows platform

To install AutoVue for Agile PLM on Windows Platform:

1. Download Oracle AutoVue 21 for Agile PLM Media Pack listed under the product Oracle Agile Applications product pack from Oracle Software Delivery Cloud or edelivery (`http://edelivery.oracle.com`) to a temporary directory and extract its contents.
2. For Windows run the `setup_av_win.exe` from the temporary directory.
3. Proceed to Section 6.2.1, "Running the Installation Program".

6.2.1 Running the Installation Program

The installation program prompts you to enter specific information about the system and configuration. See the Table 6–1, " Installation Instructions" for what you have to do during the installation.

Table 6–1 Installation Instructions

In this window...	Perform the following action...
Welcome to AutoVue for Agile PLM Installation	Click **Next** to proceed with the installation.

Table 6–1 (Cont.) Installation Instructions

In this window...	Perform the following action...
Customer Information	Enter the **User Name** and **Company Name**. Click **Next**.
Choose Install Component (s)	If running the AutoVue for Agile PLM installer on a machine with the Agile PLM application server and/or File Manager installed then the "AutoVue client libraries" component will be displayed and is selected by default. The "AutoVue Server" component is always displayed and selected by default. Click **Install**. **Note**: Refer to Section 5.1, "Deployment Scenarios" to determine what components are required for your installation.
Installation Location	Enter the location or folder where you want to install the selected AutoVue components in the **Specify where to install the selected AutoVue component(s)** box. Click **Next.** If a supported AGILE_HOME exists then the default Installation Location is the directory AGILE_HOME/AVS and this would be the AutoVue Server home directory.
AutoVue Server	Enter the host name and the port number of the AutoVue server that Agile File Manager will connect to. Click **Next**. **Note**: Ensure that you enter fully qualified machine/domain name for the Host Name. Example: host.domain.com (machinename.domainname).
AutoVue Product	Choose the AutoVue product that you have licensed. The options are: ■ AutoVue 2D Professional for Agile ■ AutoVue Electro-Mechanical Professional for Agile Click **Next**.
Choose Shortcut Folder	Here you can choose where you want to create the product icons. Following are the options: ■ In a new Program Group ■ In an existing Program Group ■ In the Start Menu ■ On the Desktop ■ In the Quick Launch Bar ■ Other ■ Don't create icons **Note**: In case you select the Create Icons for All Users, then the product icon appears as a short cut for all users. Click **Next**.
Pre-Installation Summary	Review the Product Name, Install Folder, Shortcut Folder, Product Features, Disk Space Information (for Installation) and additional information before continuing with the installation. After the review, click **Install**.
Install Complete	Click **Finish** to complete the installation.

Note: Before installing the AutoVue client libraries, remember to stop the file server and any additional Agile processes.

After installing on the Application Server: After installing the AutoVue client libraries, redeploy the application.ear file and restart the application server.

For instructions on restarting the application server, refer to either the *Installing Agile PLM on Oracle Application Server* or the *Installing Agile PLM on Oracle WebLogic Server* manuals.

After installing on the File Manager: After installing the AutoVue client libraries, redeploy the webfs.war file (Filemgr web application) on the File Manager.

6.3 Installing on Linux platform

To install AutoVue for Agile PLM on Linux platforms:

1. Uninstall any previous versions of AutoVue.
2. Run the Red Hat Update Agent, yum up2date, to download the latest Xvfb and Mesa files.

   Note: Both the AutoVue installer and the AutoVue for Agile PLM installer do not detect the installation of Mesa or Xvfb.

3. It is recommended that AutoVue is installed on the same user account used to install Agile PLM to avoid any library conflicts between AutoVue and Agile or Oracle database.
4. Install the pre-requisites as described in Section 3.1.2, "Linux Prerequisites."
5. Download Oracle AutoVue for Agile PLM Media Pack listed under the product Oracle Agile Applications product pack from Oracle Software Delivery Cloud or edelivery (`http://edelivery.oracle.com`) and extract its contents.
6. Launch the AutoVue for Agile PLM installer (Linux: `setup_av_lin.bin`).

   Note: It is recommended to run the AutoVue for Agile PLM installer UI on the server itself either through the primary display or, if installing remotely, by using vncserver.

7. Follow the instructions to proceed with the installation. Select the components you would like to install.
8. For information about any screen in the installer, click **Help**.
9. Click **Next** to proceed through the installer.

   Note: If you are installing on an Application Server or File Manager, select the **AutoVue Client Libraries** check box on the **Choose Install Components** panel.

10. Click **Done** to finish the installation.

6.4 Installing on other platforms

The AutoVue server can be installed on only Windows and Linux. However, Agile PLM application server and File Manager components can be installed on several

other platforms including Solaris (SPARC), Solaris (x64), AIX (POWER) and HP-UX (Itanium). You can install AutoVue Client Libraries on any of these platforms.

6.4.1 Installing AutoVue Client Libraries and Integration Components on Different Platforms

Oracle AutoVue Client Libraries and integration components can be installed on the following platforms:

Note: VueLink/VueServlet are delivered as part of the File Manager web application, and do not has to be installed separately. See Note in Section A.6, "Testing the VueServlet" for details.

Table 6–2 Platforms and the corresponding executable file

Platform	Executable File
Solaris (SPARC)	`setup_av_sol.bin`
Solaris (x64)	`setup_av_solx86.bin`
AIX (POWER)	`setup_av_aix.bin`
HP-UX (Itanium)	`setup_av_hpux.bin`

1. Download Oracle AutoVue 21 for Agile PLM Media Pack listed under the product Oracle Agile Applications product pack from Oracle Software Delivery Cloud or edelivery (`http://edelivery.oracle.com`).
2. Extract the media pack and run the executable file.
3. Follow the instructions to proceed with the installation.
4. For information about any screen in the installer, click **Help**.
5. Click **Next** to proceed through the installer.

Note: If you are installing on an Application Server or File Manager, select the **Upgrade AutoVue 20.2.x Client Libraries** check box on the **Choose Install Components** panel.

6. Click **Done** to finish the installation.

6.5 Installing AutoVue for Agile in Console Mode

To install AutoVue for Agile PLM in console mode:

1. Download Oracle AutoVue 21 for Agile PLM Media Pack listed under the product Oracle Agile Applications product pack from Oracle Software Delivery Cloud or edelivery (`http://edelivery.oracle.com`) to a temporary directory and extract its contents.
2. Run the `./setup_av_<platform>.bin -i console`.
3. Proceed to Section 6.5.1, "Running the Installation Program in Console Mode".

6.5.1 Running the Installation Program in Console Mode

Table 6–3 Installation Instructions

In this window...	Perform the following action...
Welcome to AutoVue for Agile PLM Installation	Press <Enter> to proceed with the installation.
Customer Information	Enter the **User Name** and **Company Name**. Press <Enter>.
Choose Install Component (s)	Enter a comma_separated list of numbers representing the features you would like to select, or deselect. To view a feature's Description, enter <NUMBER>. 1- AutoVue Server 2- AutoVue Client Libraries Press <Enter> after you have entered the number. **Note**: Refer to Section 5.1, "Deployment Scenarios" to determine what components are required for your installation.
Installation Location	Enter the location or folder where you want to install the selected AutoVue components in the **Specify where to install the selected AutoVue for Agile PLM component(s)**. Enter an absolute path, or press <Enter> to accept the default.
AutoVue Server	Enter the Host Name and Port Number of the AutoVue Server that Agile File Manager will connect to. Press <Enter>. **Note**: Ensure that you enter fully qualified machine/domain name for the Host Name. Example: host.domain.com (machinename.domainname).
AutoVue Product	Choose the AutoVue product that you have licensed. 1- AutoVue 2D Professional for Agile 2- AutoVue Electro-Mechanical Professional for Agile Enter the number of the desired choice. After entering your choice, press <Enter>.
Install Complete	After the installation is complete, you get the following message: All the selected components for AutoVue for Agile PLM have been successfully installed to the selected folder.

6.6 Configuring the File Manager

For information on how to configure and re-deploy the File Manager, refer to the "Configuring the File Manager" chapter of the *Agile Product Lifecycle Management Application Installation Guide* located on the Agile OTN site `http://www.oracle.com/technetwork/documentation/agile-085940.html`.

6.7 Upgrading from Earlier Version with MetaFilesRemover Utility

Note: If you are upgrading from an earlier version it is required to run the MetaFilesRemover utility on all File Manager machines.

If you are upgrading from an earlier version:

1. Remove the CMF files of the previous version on the file vault.
2. To remove the CMF files, unzip the MetaFilesRemover.zip file and run the MetaFilesRemover utility located at agile_home\agileDomain\tools.

   Usage: java -jar MetaFilesRemover.jar [-delete <*value*>] [-age <*value*>] [-size <*value*>] -basedir <*value*> -prefix <*value*> -serverURL <*value*> -username <*value*> -password <*value*> -dburl <value> -dbuserid <value> -dbpassword <value>

   where

   - **delete** deletes the metafiles.
   - **age** specifies the access time (day).
   - **size** specifies file size (KB).
   - **basedir** is the file vault location where the metafiles are removed.
   - **prefix** is the file name prefix.
   - **serverURL** is the location of the DMS service.

     For example, Server URL should be - `http://<ApplicationServerHostName>:7001/Agile/DmsService/DmsViewerAPIService`.
   - **username** is the DMS service username.
   - **password** is the DMS service password.
   - **dburl** is the database location (ex: hostname.us.oracle.com:1521:agile9).
   - **dbuserid** is the database user id.
   - **dbpassword** is the database password for this user.

6.8 Verifying your Integration

After you have installed the AutoVue client libraries and File Manager, you must verify that your integration works correctly with this version of AutoVue for Agile PLM. The following details the verification steps:

- Start the AutoVue server, application server, and File Manager.
- For each File Manager, verify the status of the VueServlet by accessing the File Manager configuration page:
  http://*fmhost*:*port*/Filemgr/Configuration

A

Configuring AutoVue for Agile PLM

This section details additional configurations that can be made to your installation of AutoVue for Agile PLM.

A.1 Security

During the viewing process, documents available for viewing are rendered on AutoVue for Agile PLM, and an intelligent and displayable data stream is delivered to the client. In this way, the AutoVue for Agile PLM implementation eliminates any concerns about security since the original document is not transferred to the client computer. While the viewable data is being transmitted, AutoVue for Agile PLM uses compression and streaming algorithms to achieve a quick and responsive feedback to the client side for large and multi-page documents.

The server has complete control over the functions available to clients. For example, users may be granted or denied rights to perform printing, redlining, or any other functions depending on their access permissions.

AutoVue for Agile PLM uses cookies to track the number of users. The cookie is a unique number assigned to each browser that defines a user as a single session, regardless of the number of files a user consecutively or simultaneously opens.

> **Note:** If you disable or refuse cookies in your browser, AutoVue for Agile PLM will continue to work. However, each new instance of the browser creates a new session in AutoVue for Agile PLM.

HTTPS can be used for secure communications if you tunnel all communications between the viewer client and the server through HTTPS, which uses SSL. The applet must communicate with the AutoVue server through the AutoVue for Agile PLM servlet and any Agile PLM communications that are tunneled are encrypted.

A.2 Starting AutoVue Server on Windows

Following is the procedure to start the AutoVue server on Windows:

1. Start the AutoVue server in the **Oracle AutoVue** Program Manager group.

   By default, when the server is started, the console is displayed and the server appears in the system tray.

   When you start the server as a service, you may not see the server console. To display the console, run the following command from the <AutoVue Install Root>\bin directory:

```
jvueserver_debug -u
```

Note: The AutoVue server starts up with a default ProcessPoolSize of 4. To modify the ProcessPoolSize, set the jvueserver.processPoolSize parameter in jvueserver.properties.

2. Start the application server and then start the File Manager.

Note: For information on starting AutoVue as a service, refer to Section A.5, "Running the AutoVue Server as a Service".

A.3 Starting AutoVue Server on Linux

Following is the procedure to start the AutoVue server on Linux:

1. Start the AutoVue server by entering the following:

   ```
   ./jvueserver
   ```

   This starts up the server console as long as the *DISPLAY* environment variable is properly set.

   When you start the server as a service, or when the *DISPLAY* environment variable is not set properly, you will not see the server console. To display the console, run the following command from the <AutoVue Install Root>/bin directory:

   ```
   ./jvueserver_debug -u
   ```

   Note: The AutoVue server starts up with a default ProcessPoolSize of 4. To modify the ProcessPoolSize, set the jvueserver.processPoolSize parameter in jvueserver.properties. Refer to Chapter A, "Configuring AutoVue for Agile PLM" for more information.

2. Start the application server and then start the File Manager.

3. The startup script for the AutoVue server on Linux OSes also starts up the Xvfb server. Xvfb is an X11 virtual framebuffer that helps the AutoVue server render files. The Xvfb server runs on port 909 by default. To modify this port and configure other Xvfb properties, open jvueserver.properties (located in the <AutoVue Install Root>/bin directory) and locate property names containing "xvfb".

   If you want the AutoVue server to continue running after you close the terminal window, or after you log out of the Linux machine, you must exit the shell (console window) used to start the AutoVue server before logging out of Linux. The server continues running even after you log off. To exit the shell, you must enter *exit* (do not exit by clicking the **Close** button).

   Note: For information on starting AutoVue as a service, refer to Section A.5, "Running the AutoVue Server as a Service".

A.4 Shutting Down the AutoVue Server

To shut down the AutoVue server, click **Shutdown** on the AutoVue server console. You can also shut down the AutoVue server through the command-line interface by entering the following command:

```
jvueserver_debug -u -shutdown
```

If you are running the AutoVue server as a service, you must shut it down as you would any service.

A.5 Running the AutoVue Server as a Service

When running the AutoVue server as a service, you must run it as a named user and not as Local System Account, as the local system account has more privileges than a named account.

A.5.1 On Windows OSes

The AutoVue server can be run as a Windows Service. The advantage of this is that it continues to run even after you log off of Windows. Before running the AutoVue server, first verify that it runs properly in "non-service" mode (for example, run by clicking the **Start AutoVue Server** button in the *Start* menu).

To install the service, go to the \bin folder of the directory where you installed the AutoVue server and enter the following:

```
jvueserverX.exe -install<user information>
```

where <*user information*> is in the form "domain\username password". This ensures that the AutoVue server service runs as a named user instead of the local system account.

Note that the user account information entered must be registered in the *Log on as a service* local security policy. If the user information is not there, the Oracle AutoVue service will not start. To check or edit the security policy, perform the following steps:

1. Open the Windows Control Panel.
2. Double-click **Administrative Tools**.
3. Double-click **Local Security Policy**. The Local Security Settings window appears.
4. Expand **Local Policies** and then select **User Rights Assignment**.
5. Double-click **Log on as service**. The Log on as a service Properties window opens.
6. Verify that the user account is listed under the Local Security Setting tab. If not, click **Add User or Group** to add the user account information.

To remove the service, go to the <AutoVue Install Root>\bin directory and enter the following: Starting and Stopping the Service

```
jvueserverX.exe -remove
```

A.5.1.1 Starting and Stopping the Service

1. In the Control Panel select **Administrative Tools > Services**.

2. Select the **Oracle AutoVue Server** service.
3. Click **Startup**.
4. Select whether you want the service started automatically on re-boot or manually. The default is **Manual**.
5. If you select **Manual**, you can start the service by doing one of the following:
   - Click **Start** in the Services dialog

     or
   - Use the **sc.exe** utility.

     For example: `SC start "Oracle AutoVue Server"`

     or
   - Use the NET program.

     For example: `NET start "Oracle AutoVue Server"`

To shutdown the service, select the **Oracle AutoVue Server** service in the Services dialog and click **Shutdown**.

A.5.2 On Linux OSes

Oracle provides an *RC-Script* to manage the AutoVue server on Linux. The AutoVue server can be configured to startup automatically when the machine is restarted by following these steps:

1. Edit file *<AutoVue Install Root>/etc/jvueserver_rc* and locate the following lines:

```
AUTOVUEDIR=$USER_INSTALL_DIR$
AUTOVUEUSER=__JVUEUSER__
```

1. Replace `$USER_INSTALL_DIR$` with the path to AutoVue installation and `__JVUEUSER__` with the name of the user that will be running the AutoVue server.
2. Rename *jvueserver_rc* to *autovue*.
3. Login as a root and copy *autovue* to */etc/init.d* folder.
4. As root, go to the /etc/init.d folder and add AutoVue as a service:

```
chkconfig --add autovue
```

5. Configure *autovue* to startup automatically:

```
chkconfig autovue on
```

The AutoVue server now starts up automatically when the machine starts up.

To start the AutoVue service, manually, run

```
service autovue start
```

To stop the AutoVue service manually, run

```
service autovue stop
```

To remove the AutoVue service, run

```
chkconfig -del AutoVue
```

A.6 Testing the VueServlet

Note: The Agile View servlet (VueServlet) is packaged and deployed as part of the File Manager installation. The VueServlet is deployed on the File Manager and tunnels the requests to the Agile PLM Application Server using HTTP protocol. No additional configuration is required.

The VueServlet is used to access the AutoVue server across firewalls from external clients on standard HTTP/HTTPS ports.

You must ensure that the VueServlet has been loaded successfully and that the VueServlet communicates with the AutoVue server. Open a browser and type the following URL in the address bar:

```
http://FileManager_hostname:port/Filemgr/Configuration
```

If this page loads, it means that the File Manager was successfully started and initialized. To view the status of the VueServlet from this page, enter the following in the address bar of the browser:

```
http://FileManager_hostname:port/Filemgr/VueServlet
```

- If you specify this URL in the browser and receive the message "Page not found," check the following:
  - Ensure that the AutoVue server and File Manager were started successfully.
  - Check the URLs to make sure that you are specifying the correct File Manager hostname, port and path (for example, /Filemgr/Configuration and /Filemgr/VueServlet)

A.7 Managing Multiple Viewers for Load Balancing

The AutoVue server is designed to provide server scalability to support increasing demand for file viewing and markup on intranets and the Internet. It can run in a process pool on a single computer that improves the responsiveness for simultaneous connections and balances the load across a multi-CPU computer.

The default process pools four concurrent services. It is specified in the jvueserver.properties file located in the AutoVue server home folder at \\AGILE_HOME\AVS\bin:

jvueserverx.nt.processPoolSize=4

As a general rule, you should allow approximately 50 MB for each process in the pool. A process pool size of four services requires approximately 200 MB of RAM. On a computer with 256 MB of RAM, this allows the remaining RAM to run the operating system and other services. Increasing the RAM on a computer allows you to increase the number of services using the process pool.

The system allows you to add servers to support more users while the servers are online, without restarting or disconnecting existing servers. Adding capacity is as simple as adding one more server. When using multiple viewers, the load can be efficiently balanced across the servers by manually directing the viewer client requests to different viewers.

A.7.1 Client-Server Communications

For the AutoVue server the issue of using IP addresses for client-server communication at runtime (rather than hostnames or DNS names) is resolved because the File Manager also hosts the VueServlet. The VueServlet acts as a proxy for the AutoVue server, and it is placed on the intranet with other Agile server components. In addition, since the VueServlet is running on the File Manager with an Agile Web client, the Web proxies also forward external requests to the intranet. The VueServlet comes as part of the File Manager installation.

A.7.2 Removing AutoVue for Agile PLM

Follow these instructions to remove AutoVue for Agile PLM.

To remove AutoVue for Agile PLM on Windows:

1. Stop the AutoVue service.
   a. Open the Services dialog box.
   b. Select **AutoVue Server** and stop the service.
   c. Close the Services dialog box.
2. Choose to **Start** > **Settings** > **Control Panel**.
3. Double-click **Add/Remove Programs**.

   The Add/Remove Programs Properties dialog appears.
4. Scroll down the window and select **AutoVue for Agile PLM**.
5. Click **Change/Remove**.
6. Click **Uninstall**, and click **OK** to confirm the deletion.
7. Click **Exit**.

To remove AutoVue for Agile PLM from the Start menu:

1. Choose Start > All Programs > AutoVue for Agile PLM > Setup > Uninstall AutoVue.
2. Select and delete the installation folders from the location of Agile home directory.

To remove AutoVue for Agile PLM on Linux:

1. Stop the AutoVue server by clicking Shutdown on the View Server applet or killing the jvueserver process.
2. Go to the VIEWER_HOME/AVS/_uninst directory.
3. Run the uninstall_linux2.bin file to uninstall AutoVue for Agile PLM.

B

AutoVue Server Configuration Options

You can configure the AutoVue server by modifying jvueserver.properties located in the <AutoVue for Agile PLM Install Root>\bin directory. For example, the following sections describe options that can be configured if you wish to modify the ports that the AutoVue server is running on, or if you wish to set up a server farm or perform any other server configuration.

As of release 20.1, parameters from VueServer.ini are now set in jvueserver.properties file. For information on the migration of parameters to jvueserver.properties, refer to the *Oracle AutoVue Client/Server Deployment Release Notes*.

Note: You must restart the AutoVue server for the changes in jvueserver.properties to take effect.

B.1 Authentication Option

The options allows you to indicate that the AutoVue server has authentication enable and that users must enter login credentials in order to gain access to the server.

Table B–1 Authentication Option

Parameter	Description	Default
jvueserver.authentication.enable =[TRUE | FALSE]	Specify whether authentication is enabled for the AutoVue server. Oracle recommends to prohibit all unauthenticated connections to the AutoVue server.	TRUE

B.2 AutoVue Host Name Option

If you rename your server machine name after you install AutoVue, you must update this parameter:

```
jvueserver.hostname = [host name]
```

Note: This new server hostname must be properly reflected in the JVUESERVER parameter specified in the VueServlet descriptors that point to this server. You must set the correct static or resolvable IP address or hostname or fully-qualified hostname (FQDN) in the file jvueserver.properties.

B.3 RMI and Socket Ports Options

This section provides RMI and socket port parameters that may be configured. For example, the RMI port may need to be configured when setting up an AutoVue server farm, and the socket port may need to be modified to meet company policy requirements on the usage of ports within a certain range.

Table B–2 RMI and Socket Port Options

Parameter	Description	Default
jvueserver.rmi.objectPorts = [2020-2029]	Specify a range of ports to use, or leave commented for automatic allocation.	
jvueserver.socket.timeout= <*integer*>	Specify the inactive time in seconds after which socket times out. When 0, there is no timeout.	0
jvueserver.rmi.port = <*port value*>	The RMI port can be used to communicate with other servers when AutoVue is set up in a server farm. In certain situations you may need to modify the RMI port. For example, you must modify the port when the default port is used by other applications or when a company policy requires the usage of ports within a certain range. **Note**: These port numbers are not related to the HTTP port used by the Web server. AutoVue uses n+1 consecutive ports starting from the base RMI port, where n is the processPoolSize value specified in jvueserver.properties. You should verify that the required port is open and not in use by any other process. The `netstat -a` program displays which ports are in use.	1099
jvueserver.socket.port = <*port value*>	In certain situations you may need to modify the socket port. For example, you must modify the port when the default port is used by other applications or when a company policy requires the usage of ports within a certain range. This new socket port needs to be properly reflected in the JVUESERVER parameter specified in the VueServlet descriptors that point to this server. **Note**: This port number is not related to the HTTP port used by the Web server. AutoVue uses n+1 consecutive ports starting from the base socket ports, where n is the processPoolSize value specified in jvueserver.properties. You should verify that the required port is open and not in use by any other process. The netstat -a program displays which ports are in use.	5099
jvueserver.ssl.enable= [TRUE | FALSE]	Specify whether to enable/disable secure socket (SSL) connections for the server. This property is required when SSL connection is enabled for the VueServlet. Set to **FALSE** to disable SSL connections for the server. Set to **TRUE** to enable SSL connections for the server.	TRUE

B.4 Process Pool Size Option

The AutoVue server can run in a process pool on a single machine. The default process pool (DocServer) size is 4, and is set in the jvueserver.properties file.

Table B–3 Process Pool Size Option

Parameter	Description	Default
jvueserver.processPoolSize = [integer]	Set the process pool size to specify the number of DocServers to run when the AutoVue server starts up.	4

Creating a process pool helps improve the responsiveness when handling simultaneous connections and also helps balance the load across processors in a multi-CPU machine. As a rule of thumb, you should allow for a minimum of 200MB for each process in a pool, of which approximately 50MB is for the JVM and 128MB for the Java heap. As a result, a process pool size of 4 requires at least 1GB of RAM on the machine to run comfortably. The load is balanced across the pool on the single machine.

File viewing requires memory on top of the amount for each process in the pool. Depending on the number of users and files loaded at any given time, the recommended minimum is 2GB per DocServer. Provisioning for 2GB of memory per process in the pool should be expected.

Note: Do not modify the DocServer memory settings in jvueserver.properties.

B.5 Proxy Connection Options

If the machine hosting the AutoVue server uses a proxy server to connect to the Internet, you must set the proxy setting to allow the request to go through. For example, AutoVue must connect to the Internet to retrieve required resources if missing from a file. To do so, the proxy server name must be specified in jvueserver.properties.

Note: If AutoVue is integrated with a DMS, you must also set the proxy setting to allow requests to go through as all machines on the internal network must pass through the proxy server.

```
jvueserver.http.proxyhost=my.proxyserver.com:80
jvueserver.ftp.proxyhost=my.proxyserver.com:80
```

Replace `my.proxyserver.com` with the name of the proxy server running on the server and the port with the appropriate port number.

B.6 Streaming Files Options

This section provides streaming files parameters that may be configured. By setting these parameters, you can specify whether to allow streaming file generation, the maximum lifetime of streaming files, and much more.

Table B–4 Streaming File Options

Parameter	Description	Default
jvueserver.metacache.enable = [TRUE | FALSE]	Specifies whether to generate streaming files. When set to **TRUE**, streaming files are stored in the location specified by the jvueserver.cache.directory parameter. When set to **FALSE**, streaming files are not generated. **Note**: Streaming file generation is not supported for PDF Portfolio files.	TRUE
Note: The following options can be set if jvueserver.metacache.enable=TRUE.		
jvueserver.metacache.pdf.enable = [TRUE | FALSE]	Set to **FALSE**: Streaming file is not generated for PDF. Set to **TRUE**: Streaming file is generated for PDF files. This configuration parameter should be set manually. It is recommended to set this option to **FALSE** as there is no benefit to enabling streaming files for PDF.	FALSE
jvueserver.dms.save.metafile = [TRUE | FALSE]	Specifies whether or not streaming files are saved in the DMS. Set to **TRUE** to save streaming files in DMS. Set to **FALSE** so that streaming files will not be saved in DMS.	TRUE
jvueserver.metacache.process = [TRUE | FALSE]	Flag for using a separate process for streaming file generation. If set to **FALSE**, the DocServers handle streaming file generation and the dedicated streaming file process does not start.	TRUE
jvueserver.metacache. threshold = [*non-negative integer]*	Specifies the DocServer threshold at which the streaming file DocServer handles the generation of streaming files. jvueserver.metacache.process must be **TRUE** for this option to take effect. Increasing this value allows the DocServer that loads a file to generate the streaming file. By default, the threshold is set to 0. That is, the streaming file DocServer generates the streaming files for all documents.	0
jvueserver.cache. directory=[directory path]	Specifies in which directory the cached files should be saved. A central cache information file named *cache.map* is stored in the same directory. By default, the directory is the *Cache* subdirectory of the AutoVue server program directory.	<AutoVue Install Root>\bin\Cache
jvueserver.cache. forceascii=[0|1]	Set to **1** to force the use of ASCII characters in cached files names. Set to **0** to leave characters as is. For example, you may want to use force ASCII characters if the server does not support file names with Unicode characters.	0

Table B–4 (Cont.) Streaming File Options

Parameter	Description	Default
jvueserver.cache.size= [value in MB]	Specifies, in Megabytes, the maximum size of the file cache. The default value is 20GB. If not specified, or if value specified is less than 50 MB, a value of 4GB will be used.	20480
jvueserver.cache. maxlifetime = *[number of days]*	Specifies the maximum number of days a file is kept in the AutoVue cache directory. When the maximum life time is reached, the file is deleted from the cache directory. **Note**: The minimum value is 1.	30
jvueserver.metacache. zipfile.enable = [TRUE | FALSE]	Specifies whether to generate streaming files from ZIP files. If set to TRUE, then streaming files are generated. If set to FALSE, no streaming files are generated. Note: This option will only take effect when the jvueserver.metacache.enable option is set to TRUE. Only one streaming file is allowed for a ZIP file. It is recommended that this setting is left unmodified when the deployment is integrated with a DMS.	FALSE
jvueserver.cache. maxnumfiles= *[value*]	Specifies the maximum number of files allowed in the AutoVue cache directory. When the threshold is reached, the least recently used files are deleted. **Note**: The minimum value is 1000.	64000

B.7 DMS Options

This section provides DMS parameters than may be configured. However, we recommend that you do not modify these parameters.

Table B–5 DMS Options

Parameter	Description	Default
dms.save.compress=[TRUE | FALSE]	Set to **TRUE** to compress save data transmitted to the DMS. **Note**: We recommend that you do not modify this parameter.	TRUE
dms.save.length= [TRUE | FALSE]	Set to **TRUE** so that the multipart save requests contain content length. **Note**: We recommend that you do not modify this parameter.	FALSE

Note: These options will be deprecated in the next release of AutoVue.

B.8 Collaboration Options

When using the collaboration feature in AutoVue for Agile PLM, you can configure the following parameters.

For example: You may choose to enable the collaboration feature on the server, and/or you can specify the protocol to use for collaboration.

Table B–6 Collaboration Options

Parameter	Description	Default
jvueserver.collaboration .dmsargsfilter=<regex>	This option filters out sensitive DMS arguments from the DocID that is passed to collaboration session guests. <regex>: The Java-style regular expression matching the entire DMS argument name. It is not case sensitive.	.*(SESSION|USERNAME|PASSWORD).*
jvueserver.collaboration .enable = [TRUE | FALSE]	Set to **TRUE** to enable collaboration mode on the server. Set to **FALSE** to disable collaboration mode. **Note**: If not using Real-Time Collaboration, set this parameter to FALSE.	TRUE
jvueserver.collaboration .tcp.port=[integer]	BaseTCP port to be used. **Note**: The configuration parameters below need to be changed when using more than one server cluster in a server farm.	9700
jvueserver.collaboration .id.min=[integer]	Minimum ID given to users and collaboration sessions by this server. Change this ID when you are running many AutoVue servers that must communicate together for collaboration. The second server must have a minimum ID of at least jvueserver.collaboration.id.min + jvueserver.collaboration.id.range of the first server. Otherwise, an ID overlap may occur.	0
jvueserver.collaboration .id.range=[integer]	Range of IDs given to users and collaboration sessions by this server. This will limit the number of simultaneous connections.	100000

B.9 NTLM Authentication Option

This section provides options for NTLM authentication.

Table B–7 NTLM Authentication

Parameter	Description	Default
jvueserver.ntlm.enable = [TRUE | FALSE]	To support NTLM authentication, set the following parameter in jvueserver.properties to **TRUE.**	FALSE

B.10 log4j and Diagnostics Options

This section provides log4j and diagnostics parameters that may be configured. These parameters can be set to configure the logging level and time interval for detecting log4j configuration changes, and the output diagnostics information.

Table B–8 Log4j and Diagnostics Options

Parameter	Description	Default
jvueserver.log4j.configurea ndwatch = [TRUE | FALSE]	Set this to *TRUE* to be able to dynamically change the log4j logging level.	FALSE

Table B–8 (Cont.) Log4j and Diagnostics Options

Parameter	Description	Default
jvueserver.log4j.configureandwatch.delay =[integer] seconds	Time interval for waking up and detecting log4j configuration change.	60
jvueserver.diagnostics.format=[xml | text]	Specify the output format for the AutoVue server diagnostics.	xml
jvueserver.diagnostics.period=[interval in minutes]	Specify the interval in minutes at which the AutoVue server diagnostics are generated.	No default; diagnostics are generated on demand.

B.11 Modified With JavaScript Option

This option allows administrators to define which INI options cannot be modified using JavaScript.

Table B–9 Modified with JavaScript Option

Parameter	Description	Default
jvueserver.profile.options.filter= <INI option>	This option allows administrators to define which INI options under the [OPTIONS] section cannot be modified using JavaScript. The option takes a regular expression string. **Example:** The default value for the option is "(XREFPATHS | XFONTPATHS | BKIMAGES)", which means that both XREFPATHS, XFONTPATHS and BKIMAGES cannot be modified using JavaScript.	(XREFPATHS | XFONTPATHS | BKIMAGES)
jvueserver.profile.markups.filter= <INI option>	This option allows administrators to define which INI options under the [MARKUPS] sections cannot be modified using JavaScript. The option takes a regular expression string. **Example:** The default value for the option is "SIGNOFFFILE", which means that SIGNOFFFILE cannot be modified using JavaScript.	SIGNOFFFILE

B.12 Reboot Option

The following table describes the reboot parameter for DocServers in jvueserver.properties. By setting this parameter, you can control the reboot time interval for DocServers.

Table B–10 Reboot Option

Parameter	Description	Default
jvueserver.reboot.timeout =<interval in minutes>	If a DocServer is idle for the time specified by this parameter, the DocServer is rebooted. The default time out is 30 minutes.	30

B.13 DocServer Timeout Option

The following table describes the DocServer timeout parameter for DocServers in jvueserver.properties. By setting this parameter, you can control the hang logs generation time interval for DocServers.

Table B–11 DocServer Timeout Option

Parameter	Description	Default
docserver.timeout=N (minutes), ClassName	Specify the timeout in minutes after which the AutoVue server hang logs are generated. It is possible to implement a custom action to invoke a hang situation. When implemented, replace ClassName with the name of the class implementing the custom action.	10

B.14 Recovery Attempt Option

The following table describes the recovery attempt parameter in jvueserver.properties. By setting this parameter, you can control the number of recovery attempts for the DocServer.

Table B–12 Recovery Attempt Option

Parameter	Description	Default
jvueserver.recovery .attempts=[integer]	Specify the number of recovery attempts for the DocServer when an exception is thrown. After this number of failed recovery attempts, the DocServer restarts.	5

B.15 DLL Version Option

The following table describes the extra libraries parameter that allows you to specify user-defined DLLs:

Table B–13 DLL Version Option

Parameter	Description	Default
jvueserver.version.ext ralibraries=DLL_ 1;DLL_2;DLL_3;...	Specify a semi-colon separated list of user-defined DLLs. AutoVue will list the versions of these DLLs in the Help > About dialog.	

B.16 File Format Information Option

On startup, AutoVue registers all of its components into a VueServer.ini file. You can specify an alternate path for VueServer.ini using this option.

Table B–14 File Format Information Option

Parameter	Description	Default
jvueserver.inifile =[file name]	Specify the INI file where AutoVue stores information on the file formats supported by AutoVue. By default, it is VueServer.ini located in the <AutoVue Install Root>\bin directory. **Note**: AutoVue saves certain memory management settings in this file. We recommend that you do not modify these options or the file.	VueServer.ini

B.17 Global User Options

The following global user settings may be configured. These parameters specify the directory in which user information is stored, and the names for global configuration files.

Table B–15 Global User Options

Option	Description	Default
jvueserver.users.directory	Contains the directory in which user information is stored (initialization files and GUI files).	<AutoVue installation directory>\bin\Profiles
jvueserver.users.defaultini	AutoVue provides a way to push certain INI settings to the user INI the first time the user accesses AutoVue. This is done by setting the required options in the default.ini file or in the file specified by autovue.users.defaultini parameter. This file should be located at <AutoVue installation directory>\bin directory.	default.ini
jvueserver.users.allusersini	AutoVue provides a way to push INI settings to the user profile every time a user accesses AutoVue. This is done by setting required options in allusers.ini (or the files specified by autovue.users.allusersini). This file should be at <AutoVue Installation Directory>\bin directory.	allusers.ini
jvueserver.users.timeout=[interval in seconds]	Specify the user session timeout in seconds. If the user session is idle for the specified time period, the session is closed.	1800

B.18 Markup Options

You can configure the Markup Files dialog, Markup Files directory, permissions, and markup symbols library by setting the following options.

Table B–16 Markup Options

Option	Description	Default
jvueserver.markup.nativegui.type	Add Author, Date, and Markup Info columns to the Markup Files dialog. **0**: Name column displays **1**: Enable Author **2**: Enable Date **4**: Enable Markup Info **Note**: These are ORed flags. For example: Enter **7** to enable all three columns.	0

Table B–16 (Cont.) Markup Options

Option	Description	Default
jvueserver.markups.directory	Specifies in which directory the Markup files should be saved. Markups are saved with random names in this directory, and the mapping between Markup files and their base file is held in a central map file named **markups.map**, stored in the same directory. Note that multiple servers should not share the same location for storing markups. **Note**: This option is for server-managed markups.	<AutoVue Install Root>\bin\Markups
jvueserver.markups.permissions	By default, all users can see the Markups of a file but only the owner of a Markup can modify it. The Permissions key can be used to change that behavior. Setting it to **0** allows all users to see and change Markup files. Setting it to **1** prevents all users from modifying the Markups.	1
jvueserver.markups.symbols.directory	Specifies in which directory the Markups symbol libraries are stored. By default, the directory is the **symbols** subdirectory of the AutoVue server program directory.	<AutoVue Install Root>\bin\Symbols

B.19 Online Help Options

You can specify the entry points for language-specific Online help by setting the following options.

Table B–17 Online Help Options

Option	Description
jvueserver.help.file_en	Entry specifies the URL to the English Help file. If Online Help does not exist for a language, AutoVue loads the English help file by default.
jvueserver.help.file_xx	Entry specifies the URL to the Help file for the language "xx."

B.20 Memory Optimization

AutoVue performs memory management when loading large files. If AutoVue memory hits a pre-defined threshold, AutoVue dumps the least recently used data from memory to the disk. This memory management scheme helps load larger models in AutoVue. Memory management is enabled by default. To disable it, you must set *jvueserver.memory.managed=FALSE* in jvueserver.properties. Refer to the following table for all memory management-related configurations.

In jvueserver.properties, you can set the following parameters to optimize memory or performance speed.

Table B–18 Memory Optimization

Parameter	Description	Default
jvueserver.memory.managed = [TRUE | FALSE]	This option orients the optimization in the product towards speed or memory. If set to **FALSE,** speed is optimized. If set to **TRUE,** memory is optimized. Setting this option to TRUE does not impact the loading of Office and Raster formats. **Note**: When this option is set to TRUE, AutoVue's memory manager dumps the least recently used components from memory onto disk when the process memory hits the threshold specified in jvueserver.memory.threshold. **Effect on Performance:** Performance speed is improved if value is set to FALSE. If loading large files, or files that require a lot of memory, we recommend that you set the option to TRUE to optimize memory usage.	TRUE
jvueserver.memory.threshold=*value*	Specifies the process memory threshold for AutoVue after which the memory manager dumps data. Specify value in MB. When set to 0, AutoVue calculates the memory threshold based on the following formula: **[(Total memory on the machine)/(n+1 where n is processpoolsize)]*1.2** The computed value does not exceed 1GB or the maximum memory size addressable for the process on the system multiplied by 0.8, whichever is less. **Note**: Minimum value is 256MB **Effect on Performance:** Performance speed is improved when the threshold is a larger value. To optimize memory usage, set a lower threshold.	0

AutoVue programmatically writes certain memory management options in VueServer.ini. These options should not be modified:

Table B–19 Memory Management Options (Not to be Modified)

Parameter	Description	Default
MNGMEMPAGESIZE= [num]	When memory management is enabled, specify the size of pages (memory) to allocate when storing the managed data. Each memory page is predefined. num = number of bytes used to allocate pages in memory. Minimum value: 8192 (8KB) Maximum value: 1048576 (1MB) **Note**: The memory pages are dumped to temporary dumping files located in the path defined in MNGTEMPFNAME.	131072 (128KB)

Table B–19 (Cont.) Memory Management Options (Not to be Modified)

Parameter	Description	Default
MNGTEMPFNAME=*[folder location]*	When memory management is enabled, specifies the location and name of the temporary dumping folder. If the temporary dumping folder does not exist, the folder is created and marked for deletion.	<AutoVue Install Root>\bin\avdump

B.21 Linux-Specific Options

The following section list Linux-specific parameters that can be configured in jvueserver.properties.

Note: It is not recommended that you change these options. Modifying these options will cause the AutoVue server to fail.

B.21.1 Preload Java Class Option

The following table describes java class preload parameter in jvueserver.properties.

Table B–20 Preload Java Class Option

Parameter	Description	Default
jvueserver.preload =[preloader class name]	Enables loading of specified java class prior to the AutoVue server startup.	com.cimmetry.jvueserver.util.UnixPreloader

B.21.2 Xvfb Options

AutoVue provides the following options to initialize Xvfb parameters. It is not recommended that you change these options.

Table B–21 Xvfb Options

Option	Description	Default
xvfb.display=<port number>	Specifies the initial port to use for Xvfb. In the event of a port conflict, modifying xvfb.display may resolve the issue.	909
xvfb.process	Specifies the name of process to start or kill Xvfb process.	Xvfb
xvfb.policy	If set, this contains path name to security policy file, used with Xvfb -sp option when the Xvfb process is started. **Note**: This is applicable for Linux 5.x.	
xvfb.colormap	If set, this contains path name to color map file, used with Xvfb -co option when the Xvfb process is started. **Note**: This is applicable for Linux 5.x.	
xvfb.args	These are arguments to be passed to Xvfb when it is started. Note that the default setting runs Xvfb on a non-listening port.	-nolisten tcp -cc 4 -screen 0 1280x1024x24 -pixdepths 1 8 15 16 24 32

Table B–21 (Cont.) Xvfb Options

Option	Description	Default
xvfb.new=[0 | 1]	Startup parameter. Set to **1** on Oracle Enterprise Linux (OEL) 6 and Red Hat Enterprise Linux (RHEL) 6. Set to **0** on Oracle Enterprise Linux (OEL) 5 and Red Hat Enterprise Linux (RHEL) 5.	0 for OEL 5 and RHEL 5 1 for OEL 6 and RHEL 6

B.21.3 WINE Options

AutoVue provides the following options to configure WINE parameters. It is recommended that you do not modify these options.

Table B–22 WINE Options

Option	Description
wine.dir	Specifies the directory where WINE is installed.
wine.config.dir	Specifies the directory where the WINE configuration files is location.
wine.config.file	Specifies the WINE configuration file name.

B.21.4 OEM Copyright Notice

AutoVue provides an option to append a custom copyright to the copyright in the Help About dialog:

Table B–23 OEM Copyright Notice Option

Parameter	Description	Default
oem.copyright.notice=	Specify a notice to add to the default Oracle copyright in the Help About dialog.	

B.22 VueServlet Configuration Options

The following table describes VueServlet initialization parameters that can be set in webdefault.xml when deploying on Jetty. If a context has a webdefault.xml descriptor, it is applied before the context's own web.xml file. For more information, refer to section Deploying VueServlet.

Table B–24 VueServlet Initialization Parameters

Parameter	Description	Default
DebugLevel=[0-100]	Set the debug output category. Values: 0: no logging 10: basic logging 20: HTTP connection information 100: debug	0
EnableSSL=[TRUE | FALSE]	Set to **TRUE** to enable secure socket connection to the AutoVue servers.	TRUE

Table B–24 (Cont.) VueServlet Initialization Parameters

Parameter	Description	Default
EnableEM=[TRUE | FALSE]	Specify whether or not to retrieve Oracle Enterprise Management information. Set to **TRUE** to retrieve information. Set to **FALSE** to disable information retrieving.	FALSE
JVueServer=[server hostnames]	A semicolon separated list of the AutoVue server host names. This parameter is used by the VueServlet to connect to the AutoVue servers through a socket connection. The JVueServer parameter needs to be set to the hostname:port value used when starting the AutoVue server. This port value must match the port set in jvueserver.properties. You can specify more than one hostname:port separated by semi-colons (;) for fail-over. In other words, if one machine is down the servlet will try the next machine. If JVueServer is not specified, it defaults to localhost:5099. The servlet assumes that the AutoVue server is running on the same machine as the Web server and communicates through port 5099. **Note**: The port listed in this option should match the port listed in the jvueserver.socket.port option in the jvueserver.properties file.	local hostname:5099
InvokerCount=[value]	Set the number of simultaneous connections from the VueServlet to the AutoVue server. If the number of pending requests at any given time exceeds this set value, then the remaining requests wait in a queue until a connection is free. **Note**: If this parameter is set too high, then it will cause an overload of requests and result in no connections being made.	100
ServerInfo=[TRUE | FALSE]	Set to **TRUE** to include the AutoVue server information on VueServlet status page. Set to **FALSE** to hide the AutoVue server information.	FALSE

C

ABV Configuration

Oracle also delivers an Augmented Business Visualization (ABV) framework, which enables the connecting of portions of documents back to business data in enterprise applications. When integrated with enterprise applications such as Agile PLM, it helps organizations create rich and actionable visual decision-making environments, making it easier for users to consume and understand data in the specific context of business. The solution enables the creation of change objects in Agile from AutoVue PLM via an ABV integration. When a user right-clicks a part in a 3D model in Agile from AutoVue PLM, options are listed to create various change objects (which the user has privileges to create) such as Create Engineering Change Request (ECR) or Create Engineering Change Order (ECO).

C.1 Configuring the ABV Framework

In order to configure the ABV framework, do the following:

1. Copy folder "abvpx" to what ever location from Agile installation location "apcm\integration\sdk\samples\".
2. Modify build.bat to set ANT_HOME to your location.
3. Modify custom.property file to set "wls.deploy.agilelib.dir" and "sdk.deploy.loc"; In installation case, use the installation proper location.
4. Run "build.bat" in command line.

D

Troubleshooting

In this chapter we discuss the common troubleshooting issues with AutoVue for Agile PLM.

D.1 Troubleshooting AutoVue for Agile PLM

This section provides information for troubleshooting your AutoVue for Agile PLM installation.

D.1.1 Enabling Client Verbosity

To enable detailed logging, you need to set certain parameters, and set the folder where the logs are stored.

D.1.1.1 Detailed WebLogic Logs

To enable detailed logging, set STARTMODE to false in $AGILE_HOME/agileDomain/bin/startAgile.sh.

Logs will be in $AGILE_HOME/agileDomain/servers/$HOSTNAME-AgileServer.

D.1.1.2 File Manager (Tomcat logs)

Edit $AGILE_HOME/FileManager/conf/server.xml and uncomment the following valve:

```
<Valve className="org.apache.catalina.valves.AccessLogValve" directory="logs"
prefix="localhost_access_log." suffix=".txt" pattern="%h %l %u %t &quot;%r&quot;
%s %b"/>
```

The log will be in $AGILE_HOME/FileManager/logs

D.1.1.3 File Manager VueServlet Logs

To enable logging for VueServlet, do the following:

- Stop Tomcat <Agile Install>/Filemgr/FileManager/bin/shutdown.sh
- Backup <Agile Install>/Filemgr/agileDomain/applications/webfs/WEB-INF/classes/log.xml
- Replace contents of <Agile Install>/Filemgr/agileDomain/applications/webfs/WEB-INF/classes/log.xml with

```
<?xml version="1.0" encoding="UTF-8" ?>
<!--!DOCTYPE log4j:configuration SYSTEM "log4j.dtd"-->
```

```
<log4j:configuration xmlns:log4j='http://jakarta.apache.org/log4j/'>

<appender name="webfs" class="org.apache.log4j.ConsoleAppender">
<layout class="org.apache.log4j.PatternLayout">
<param name="ConversionPattern" value="&lt;%d&gt; &lt;%c{1}:%p&gt; %m\n"/>
</layout>
</appender>

<appender name="viewer" class="org.apache.log4j.ConsoleAppender">
<layout class="org.apache.log4j.PatternLayout">
<param name="ConversionPattern" value="&lt;%d&gt; &lt;%c{1}:%p&gt; %m\n"/>
</layout>
</appender>

<appender name="metafile" class="org.apache.log4j.ConsoleAppender">
<layout class="org.apache.log4j.PatternLayout">
<param name="ConversionPattern" value="&lt;%d&gt; &lt;%c{1}:%p&gt; %m\n"/>
</layout>
</appender>

<appender name="cimmetry" class="org.apache.log4j.ConsoleAppender">
<layout class="org.apache.log4j.PatternLayout">
<param name="ConversionPattern" value="&lt;%d&gt; &lt;%c{1}:%p&gt; %m\n"/>
</layout>
</appender>

<category name="com.agile.webfs" additivity="false">
<priority value="debug" />
<appender-ref ref="webfs" />
</category>

<category name="com.agile.viewer" additivity="false">
<priority value="debug" />
<appender-ref ref="viewer" />
</category>

<category name="com.agile.metafile" additivity="false">
<priority value="debug" />
<appender-ref ref="metafile" />
</category>

<category name="com.cimmetry" additivity="false">
<priority value="debug" />
<appender-ref ref="cimmetry" />
</category>
</log4j:configuration>
```

- To make the change permanent, update webfs.war:
  - cd <Agile Install>/Filemgr/agileDomain/applications
  - Extract the log.xml from webfs.war:

    <Agile Install>/Filemgr/jdk/bin/jar -xvf webfs.war WEB-INF/classes/log.xml
  - Update log.xml
  - Update webfs.war: <Agile Install>/Filemgr/jdk/bin/jar -uvf webfs.war WEB-INF/classes/log.xml

- Restart Tomcat <Agile Install>/Filemgr/FileManager/bin/start_up.sh.

The output log with VueServlet data is in <Agile Install>/Filemgr/FileManager/logs/catalina.out

D.1.1.4 AutoVue Detailed Client/Server Logs

The AutoVue Client/Server Deployment allows verbose logging. This is applicable when integrated with Agile PLM. Following are the two stages to enable client logging when using the AutoVue Client/Server Deployment:

1. Modify user's AutoVue profile for VERBOSE debugging:
   - Edit <Agile Install>/avs/bin/profiles/<UserID>.ini by adding entry:

     [Logging]

     VERBOSE=DEBUG
2. Set up Java logging:
   a. Access the Java Control Panel:

      On Windows: From **Start**, select **Control Panel**, then **Java**.

      On Linux: Navigate to the JRE installation directory (meaning the JRE used by the web browser on the particular client machine), then into the 'bin' folder, then type ./ControlPanel.

   b. In the Java Control Panel that appears, click **Advanced** tab. In the Debugging option, select the check boxes-**Enable tracing** and **Enable logging**.

   c. In the Java Control Panel, click **Java** tab, and then select **View**. In the Java Runtime Environment Settings window that appears, in the "Runtime Parameters" text field enter the following line:

      ```
      -Djavaplugin.trace=true-Djavaplugin.trace.option=basic|net|cache|security|e
      xt|liveconnect|temp-Djavaplugin.logging=true
      ```

   d. Click **OK** in the Java Runtime Environment Settings window, and click **Apply** in the Java tab.

   e. After launching the Applet and doing the required tests the tracing and logging files will be dumped in the windows user profile. For instance, if the client is using:

      Windows XP: The files will be dumped in c:\Documents and Settings\<User Name>\Application Data\Sun\Java\Deployment\log

      Windows 7: The files will be dumped in C:\Users\User_Name\AppData\LocalLow\Sun\Java\Deployment

      Note: For more information, refer to the KM Note-`Doc ID 752589.1`

D.1.2 Errors Which May Occur While Using the AutoVue Server

Common errors that occur while using the AutoVue server are listed in the table below along with solutions.

While the Web or Java client tries to start the AutoVue server:

Table D–1 Problem and solution while trying to start the AutoVue server

Error	Reasons	Solution
jVue not found	Viewer Content URL in Admin > Server Settings > Locations > File Manager is incorrect. Incorrect client applet alias specified instead of mandatory "jVue."	Confirm that the Viewer Content URL is accessible and the jVue.jar file is listed.
An error occurred while connecting to the server. Restart the applet?	The AutoVue server or File Manager is down. Incorrect View Server URL in Admin > Server Settings > Locations > File Manager. The AutoVue server is configured incorrectly, or is unavailable	Confirm that the Viewer Server URL is accessible and returns a successful connection status.

When the Web Client or the Java Client tries to connect to a File Manager:

Table D–2 Problem and solution while connecting to a File Manager

Error	Reason	Solution
File not found	The File Manager is down. The VueServer.ini file points to incorrect File Manager.	Confirm that the File Manager is up and running.
File not found	File not present in the File Vault	No solution

If an attachment uses special fonts:

Table D–3 Problem and Solution if attachment used special fonts

Error	Reason	Solution
Fonts may not appear correctly or a file error may occur or an incorrect font substitution may occur with viewing or printing the attachment.	The computer where the Viewer is installed does not have the fonts installed.	The computer where Viewer is installed must have those special fonts installed locally. For fonts other than the ones used by the operating system, the user's profile should include a reference to the location of the fonts in the XFONTPATHS parameter.

D.1.3 Changing Port Numbers

Some AutoVue server port numbers can be changed in the event of a port conflict. It is important to change the port number in all referenced locations.

- Port 5099 is used for communication between the AutoVue server and its clients.

For the AutoVue server, go to the \AVS\bin folder and open the jvueserver.properties file. Locate the following port information:

* Socket port number

jvueserver.socket.port=5099

You can change port 5099 to another available port number.

If you are changing the AutoVue server port, update the port number in the VueServlet section of the web.xml file located at AgileHome\agileDomain\applications\webfs.war\WEB-INF\ on all viewer clients. Extract webfs.war file from AgileHome\agileDomain\applications, then open the WEB-INF folder for web.xml file.

- Port 2001 is used for RMI.

For the AutoVue server, go to the \AVS\bin folder and open the jvueserver.properties file. Locate the following port information:

* RMI Registry port number

jvueserver.rmi.port=2001

You can change port 2001 to another available port number.

Note: Refer to the AutoVue Installation and Configuration Guide for more information on port numbers.

D.2 Verify AutoVue Server

To verify the installation, do the following:

- Check the File Manager configuration. Refer to the "Testing File Manager Configuration Page" chapter of the *Oracle AutoVue for Agile PLM Testing Guide*.

E

FAQ

This appendix includes frequently asked questions pertaining to the installing and configuring of AutoVue for Agile PLM.

E.1 Linux

Q: When installing AutoVue on a a Linux 64-bit OS, the AutoVue installer does not show up and I receive the following notice:

```
Installer User Interface Mode Not Supported The installer cannot run in this
UI mode. To specify the interface mode, use the -i command-line option,
followed by the UI mode identifier. The valid UI modes identifiers are GUI,
Console, and Silent.
```

A: This issue may be attributed to the fact that you are missing the following 32-bit packages:

- libXmu.i686
- libXp.i686
- libXtst.i686

To resolve this issue, you must install these packages.

F

Feedback

If you have any questions or require support for AutoVue for Agile PLM please contact your system administrator.

If at any time you have questions or concerns regarding AutoVue for Agile PLM, please contact us.

F.1 General AutoVue for Agile PLM Information

Web Site	http://www.oracle.com/us/products/applications/autovue/index.html
Blog	http://blogs.oracle.com/enterprisevisualization/

F.2 Oracle Customer Support

Web Site	http://www.oracle.com/support/index.html

F.3 My Oracle Support AutoVue for Agile PLM Community

Web Site	https://communities.oracle.com/portal/server.pt

F.4 Sales Inquiries

E-mail	autovuesales_ww@oracle.com