Installation and Administration Manual
Oracle AutoVue 20.0.0, Client/Server Deployment
# Contents

PREFACE ............................................................................................................................... 7
Audience ................................................................................................................................. 7
Documentation Accessibility ............................................................................................... 7
   Accessibility of Code Examples in Documentation ......................................................... 7
   Accessibility of Links to External Web Sites in Documentation .................................. 7
   TTY Access to Oracle Support Services ......................................................................... 7
Related Documents .............................................................................................................. 7
Conventions ......................................................................................................................... 8

INTRODUCTION .................................................................................................................. 9
Main Features ....................................................................................................................... 9
   Server Scalability and Clustering .................................................................................. 9
   Accurate and Streamed Rendering ................................................................................ 9
   Server-based Client Configuration ............................................................................... 9
   AutoVue Key Features and Capabilities ....................................................................... 10
   Integrations and OEM Needs ....................................................................................... 10
Why Oracle for OEM Implementation ............................................................................... 10
Product Architecture ......................................................................................................... 11

SYSTEM REQUIREMENTS ................................................................................................ 12
Server ................................................................................................................................. 12
   Windows ....................................................................................................................... 12
   Linux ............................................................................................................................ 12
Client .................................................................................................................................. 12
Application Servers .......................................................................................................... 13
Web Server ......................................................................................................................... 13

SECURITY RECOMMENDATIONS ...................................................................................... 14
Installation ......................................................................................................................... 14
Running AutoVue as a Service ......................................................................................... 14
File Permissions ................................................................................................................ 14
Deployments ...................................................................................................................... 14
Integrations with AutoVue ............................................................................................... 14
Secure Communication ...................................................................................................... 14
VueServlet ......................................................................................................................... 15

INSTALLATION PREREQUISITES .................................................................................... 16
Upgrading AutoVue ........................................................................................................... 16
Prerequisites for Installing on Linux OS .......................................................................... 16

AUTOVUE INSTALLATION ............................................................................................... 18
Installing AutoVue Server ............................................................................................... 18
Deploying the VueServlet ............................................................................................... 20
   Deploying in an Integrated Environment .................................................................... 21
   Deploying in a Non-Integrated Environment ............................................................. 21
   VueServlet Parameters ............................................................................................... 23
Configuring AutoVue startup script to start Jetty ......................................................... 23

Configuring AutoVue Server .......................................................................................... 24
   Configuration Options in jvueserver.properties ......................................................... 24
   Configuration Options in VueServer.ini ..................................................................... 28
   Configuring the File Open Dialog ............................................................................... 30
## AUTOVUE

**Installing AutoVue Client Components** .......................... 31  
  - Installing in an Integrated Environment .......................... 31  
  - Installing in a non-Integrated Environment ....................... 31  
**Configuring the AutoVue Client** ................................... 33  
  - AutoVue Applet Parameters ......................................... 34  
  - Scripting the Applet .................................................. 38  
**Verifying Your AutoVue Installation** ............................. 43  
**Client-Side Installation** .................................................. 44  

### STARTING AUTOVUE SERVER

- Starting AutoVue on Windows OSes .................................. 45  
- Starting AutoVue on Linux OSes ...................................... 45  
- Shutting Down AutoVue Server ...................................... 46  
- Running the AutoVue Server as a Service ......................... 46  
  - On Windows OSes .................................................. 46  
  - On Linux OSes ...................................................... 47  

### THE AUTOVUE SERVER CONSOLE

- Diagnostics Button ....................................................... 50  
- Process Pool ............................................................... 50  

### AUTOVUE DEPLOYMENT OPTIONS AND SCENARIOS

- AutoVue in Online/Offline Mode ................................... 51  
- Adding Multiple AutoVue Servers in a Cluster .................. 51  
  - Adding an Additional Server ...................................... 52  
  - Configuring Multiple Servers in a Cluster ...................... 52  
- Configuring for Failover ............................................... 53  

### DEBUGGING AUTOVUE

- Logging for the AutoVue Server .................................... 54  
- Debugging the Servlet ................................................ 54  
- Debugging the Client ................................................. 56  

### APPENDIX A: NON-INTERACTIVE INSTALLATIONS

- Installation ................................................................. 57  
- Uninstallation ............................................................ 59  

### APPENDIX B: VUESERVLET DEPLOYMENT

- Tunneling through J2EE-enabled Application Servers .......... 60  
  - Deploying the WAR File ........................................... 60  
- Tunneling with non-J2EE Application Servers .................. 62  
  - Setting up VueServlet ............................................. 62  
  - Tunneling using Jetty ............................................... 63  
- Tunneling using Microsoft IIS ........................................ 64  

### APPENDIX C: CUSTOMIZING THE GUI

- Choosing the GUI File ............................................... 65  
- Modifying the GUI File ................................................ 65  
  - Structure and Syntax of GUI Files ................................ 65  
  - GUI Configuration Syntax ........................................ 66  
- UNC File Names .......................................................... 71  

### APPENDIX D: CONFIGURING A DIRECTORY-BROWSING Servlet for the AutoVue Client

### APPENDIX E: IDENTITY MANAGEMENT SYSTEM

### APPENDIX F: USAGE MONITORING

### APPENDIX G: AUTOVUE MOBILE
APPENDIX I: LIST OF INI OPTIONS .................................................................82

- allusers.ini and default.ini Options ............................................................82
- Acrobat PDF Options .....................................................................................82
- Allegro Options .............................................................................................83
- AutoCAD Options ..........................................................................................83
- Autodesk DWF Options ..................................................................................84
- Autodesk Inventor Options ............................................................................85
- Cadence Options ...........................................................................................86
- Cadkey Options .............................................................................................86
- CATIA Options ................................................................................................86
- CATIA 4 Options ...........................................................................................86
- CATIA 5 Options ...........................................................................................87
- CGM Options ..................................................................................................87
- DirectModel (JT) Options ..............................................................................88
- Excel Options ..................................................................................................88
- Gerber Options ...............................................................................................88
- HPGL/HPGL2 Options ....................................................................................90
- IFC Options ......................................................................................................91
- JPEG Options ...................................................................................................92
- JPEG 2000 Options ........................................................................................92
- ME10/OneSpace Designer Drafting Options ..................................................92
- Microsoft Outlook Options .............................................................................93
- MicroStation Options .....................................................................................94
- NC-Drill Options ............................................................................................96
- OrCAD Layout Options ...................................................................................96
- Pro/ENGINEER Options ...............................................................................97
- SolidWorks Options .......................................................................................98
- STEP Options ..................................................................................................98
- Text Options .....................................................................................................98
- TIFF Options ...................................................................................................99
- Visio Options ....................................................................................................99
- Word Options ...................................................................................................99
- General Options ..............................................................................................100
  - Base Font .......................................................................................................105
  - UI Color Options ............................................................................................105
- AutoVue Mobile Options ................................................................................106
  - Company Wide Policy ..................................................................................107
- 3D Options .......................................................................................................107
  - 3D PMI Options .............................................................................................109
  - 3D Export Options .........................................................................................111
  - 3D Color Options ...........................................................................................111
- ECAD Options ................................................................................................112
- Markups ...........................................................................................................114
  - Markup Options ............................................................................................114
  - Markup Font Options .....................................................................................116
- Overlay Options ..............................................................................................116
Preface

The Oracle AutoVue Installation and Administration Manual describes how to install and configure Oracle AutoVue.

Audience

The Oracle AutoVue Installation and Administration Manual is directed at any user whose task is the installation, configuration, administration, and maintenance of Oracle AutoVue.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

Related Documents

For more information, see the following documents in the Oracle AutoVue documentation library:

- User's Manual
- Release Notes
- Acknowledgments
- Supported Formats List
- Product Limitations
- Product Variations - Feature Matrix
- Performance Related INI Options
- DMAPI Manual
# Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in the text.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
<tr>
<td><code>[root directory]\[sub directory]</code></td>
<td>In Windows and Linux OSes, directory hierarchy is written with backward slashes (<code>\</code>) and forward slashes (<code>/</code>), respectively. In this document, unless mentioned otherwise, directory hierarchy for Windows and Linux OSes are written with the backward slash.</td>
</tr>
<tr>
<td><code>&lt;angular brackets&gt;</code></td>
<td>Indicates required entries but are not to be included in the entered information.</td>
</tr>
<tr>
<td><code>{curly braces}</code></td>
<td>Indicates mandatory information.</td>
</tr>
<tr>
<td><code>[square brackets]</code></td>
<td>Indicates optional syntactical elements.</td>
</tr>
<tr>
<td>`</td>
<td>`</td>
</tr>
<tr>
<td><code>...</code></td>
<td>Indicates that information may be repeated.</td>
</tr>
</tbody>
</table>
Introduction

Oracle’s AutoVue Enterprise Visualization is the industry leading solution for viewing, reviewing, and collaborating on technical documents and information across the enterprise. AutoVue delivers industrial-strength, Web-based viewing, markup, real-time collaboration and back office integration capabilities; connecting people, information and processes in a secure, efficient and flexible manner. Organizations can extend the reach of technical information to a broader set of enterprise users and optimize internal business processes, driving innovation, operational efficiency and business excellence.

Main Features

Server Scalability and Clustering

AutoVue is designed to provide server scalability to support a growing number of users. If there is an increase in the numbers of users, additional servers can simply be added. This can be done online without interrupting service. Accommodating additional users is simply a matter of monitoring AutoVue server load and adding more servers, if necessary. The load is efficiently balanced across the AutoVue server cluster. Increasing the capacity may be as simple as adding one more machine, making it a cost and resource efficient way to accommodate growth.

Accurate and Streamed Rendering

During the viewing process, documents available for viewing are rendered on the server or servers and an intelligent and displayable data stream is delivered to the client. In this manner, AutoVue eliminates any concerns about security since the original document with its proprietary data is not transferred to the client machine. During the transmission of the viewable data, AutoVue utilizes different compression and streaming algorithms in order to achieve a quick and responsive feedback to the client side for large and multi-page documents.

AutoVue embeds several different rendering schemes in order to accommodate 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 keeps all necessary information for querying purposes (in other words, 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.

Server-based Client Configuration

The server defines the user interface capabilities and the feature set provided to the client. The server has complete control over what functions and user interface are made available to the client. For example, users may be granted or denied rights to perform printing, marking up, or any other functionality available in AutoVue depending on their access permissions. Moreover, multiple language support is provided “out-of-the-box” within AutoVue, and users using different languages will be served with a localized user interface from the same applet.
AutoVue Key Features and Capabilities

- **View hundreds of document types:**
  a. View and markup a wide array of document types—including 3D and 2D CAD, EDA, Office, PDF, and graphics files—all without the authoring application.

- **Accelerate viewing of complex CAD files:**
  a. Begin viewing and working on complex 3D assemblies and multi-page 2D CAD documents when only a fraction of the data has been streamed.

- **Add markups and comments:**
  a. Manage and track comments from all reviewers.

- **Collaborate in real-time:**
  a. Initiate real-time collaboration sessions with team members across the globe.
  b. Enable team members to create simultaneous markups.
  c. Identify all team members and controller’s markups with color-coded markups and chat.
  d. Create an audit trail and capture session information such as meeting, subject, date and time, participants, transcript of session events, and a complete chat record.

- **Enforce server-based privileges and permissions:**
  a. Manage and control users’ access permission level, and define the user-interface capabilities and feature set from the server.

- **Scale to meet the needs of an extended enterprise:**
  a. Add servers to accommodate additional users.

- **View and markup files in offline mode:**
  a. The offline mode option in AutoVue provides you with the ability to view and markup files when you do not have access to the AutoVue server or backend Document Management System (DMS).

Integrations and OEM Needs

AutoVue is customizable and has been designed to provide an extensive set of APIs for integration with Document Management Systems (DMS), Product Lifecycle Management (PLM), Knowledge Management, Product Data Management (PDM), Product Portfolio Management (PPM), Portals, Enterprise Resource Planning (ERP), supply chain, and project management Web-centric solutions.

AutoVue can be closely integrated into various backend systems using a complete and flexible integration development kit (ISDK). ISDK has been designed to provide a transparent integration scheme, where a client is able to review a DMS document or a remote file with no knowledge of the underlying technology. In certain cases where the integrator might want to have complete control of user interface and functionality, we offer the View and Markup beans.

Detailed information about AutoVue integration possibilities can be obtained from Oracle Corp.

Why Oracle for OEM Implementation

Oracle develops the AutoVue product. Several articles and reviews have described AutoVue as the “best” engineering viewing solution available on the market today. Please connect to [http://www.oracle.com/autovue/index.html](http://www.oracle.com/autovue/index.html) for more information. The AutoVue family of products provides for the most accurate and complete viewing and markup needs.

Oracle owns the technology embedded within AutoVue. Therefore, Oracle can provide timely and knowledgeable customer support.
Product Architecture

Oracle’s Web viewing technology is based on a multi-tiered client-server architecture. Communication between the different levels is through standard communication mechanisms.

At the highest level this structure is as follows:

More than one server can be used to perform intelligent load-balancing — the servers automatically divide the load in a peer-to-peer fashion to avoid any bottlenecks.

AutoVue uses JAVA’s applet technology for the client. Clients can be a standard Web or ASP page that embeds the applet, or they can be standalone applications.
System Requirements

The following are certified by Oracle Corp.

Server

Windows

- Windows Server 2003 32-bit
- Windows Server 2003 64-bit (AutoVue running in 32-bit mode)
- Windows Server 2008 32-bit
- The installation requires about 400MB of free space.

Linux

- Red Hat Enterprise Linux 5.4 (x86)—32-bit only
- Red Hat Enterprise Linux 5.4 (x86)—64-bit (AutoVue running in 32-bit mode)
- Oracle Enterprise Linux 5.4 (x86)—32-bit only
- Oracle Enterprise Linux 5.4 (x86)—64-bit (AutoVue running in 32-bit mode)
- The installation requires about 400MB of free space.

Client

Clients running the following Java Virtual Machines:

- J2SE 5.0 update 19
- J2SE 6.0 update 14
- JRE 1.4.2 update 19

The following OSes and browsers:

- Microsoft Internet Explorer (6.0, 7.0, and 8.0)—32-bit only, and FireFox 3.0—32-bit only) on Windows OS
- Safari 4.0, Firefox 3.0 on Apple MAC OS X 10.5
- Firefox 3.0 on RedHat Enterprise Linux 5
- Firefox 3.0 on Ubuntu 8.04
- Firefox 3.0 on Solaris 10 Sparc
Application Servers

The VueServlet has been certified on the following application servers:

Refer to "Appendix B: VueServlet Deployment" for more information on application servers.

- Tomcat 5.x and up
- WebSphere 6.1 and up
- WebLogic 8.x and up
- Oracle Application Server 10g R3 and up
- Jetty 6.0 and up

Web Server

AutoVue generally works with any Web server. The following Web servers are certified:

- Windows IIS
- Apache v2 on Windows and Linux OSes
- Oracle HTTP Server on Windows and Linux OSes

The AutoVue installer detects whether a Web server is installed on the AutoVue Server machine. If one of the certified Web servers are found, the required AutoVue client components are installed. However, if you want install AutoVue client components manually, or are using an integration with AutoVue, refer to the "Installing AutoVue Client Components" section for information on installing the client components.
Security Recommendations
This section provides security recommendations for installing or configuring AutoVue.

Installation
It is recommended that you install and run AutoVue Server as a secure user to ensure that direct access to the server and files on the server is restricted. Users connecting to AutoVue Server via the client can still view files and generate streaming files.

Running AutoVue as a Service
When running AutoVue Server as a service we recommend that it is run as a named user and not run as Local System Account, as the local system account has more privileges than a named account.

File Permissions
If configuring a server:// directory to use with AutoVue, it is important to note that any user connecting to AutoVue has access to the files contained in the server:// directory. Do not use the server:// protocol if you need to restrict access to files located at the server:// directory.

Deployments
The DMS_PRESERVE_COOKIES applet parameter is used when AutoVue is deployed in a cluster environment or when an integration with AutoVue relies on setting cookies and having the client pass them back as part of the request.

As of AutoVue version 20.0.0, the DMS_PRESERVE_COOKIES applet parameter has been updated to allow integrators to specify the exact list of cookies that the AutoVue client should pass on to the AutoVue Server and/or the integration/VueLink servlet. We recommend that you update your deployment to leverage this enhancement to DMS_PRESERVE_COOKIE and specify only those cookies that are necessary for your deployment/integration to work.

Integrations with AutoVue
• Ensure that the Original URL to a file does not contain sensitive information such as user information, server information. Use the DMSARGS applet parameter to set this sensitive information.
• Ensure that the HTML pages that invoke the applet parameter do not include the USERNAME applet parameter. AutoVue Server queries the CSI_UserName property at the beginning of a session. Ensure that your integration returns this property to AutoVue Server.
• AutoVue version 20.0.0 has security enhancements. The ISDK for AutoVue 20.0.0 leverages these security enhancements. We encourage integrators to upgrade their integrations to use the new ISDK to benefit from these security enhancements.

Secure Communication
You can “tunnel” all communications between the AutoVue Server and client through HTTPS which uses SSL. This ensures a secure connection. To implement this, the applet should communicate with the server through a servlet which should be referenced through HTTPS.
VueServlet

We recommend that you set the ServerInfo parameter of the VueServlet to False. When set to True, if a user accesses the VueServlet page, the server IP address is displayed.
Installation Prerequisites

Upgrading AutoVue

If you are upgrading your AutoVue installation from either an older version or a different product variation, you must uninstall it before proceeding with the new installation. Before uninstalling, make sure to save a backup copy of any specific settings and content that you would like to push forward into your new installation. This can include the following:

- AutoVue Server settings from the `jvueserver.properties` file and `VueServer.ini` file (located in the `\bin` directory of your AutoVue Server installation)
- AutoVue user profiles and customized GUI files (located in the `\bin\Profiles` directory of your AutoVue Server installation)
- Global user settings from the `allusers.ini` file and default user settings from the `default.ini` file (located in the `\bin` directory of your AutoVue Server installation)
- Intellistamp attributes and settings from the `dmstamps.ini` file (located in the `\bin` directory of your AutoVue Server installation)
- Custom logging settings from the `log4j.properties` file (located in the `\bin` directory of your AutoVue Server installation)
- Markup files, if markups are being managed by AutoVue server (located in the `\bin\Markups` directory of your AutoVue Server installation)
- Custom markup symbol libraries (located in the `\bin\Symbols` directory of your AutoVue Server installation)
- On Linux installations of AutoVue backup the `jvuew_config` file located in the `<AutoVue Server installation>/config` directory.

If you decide to move these settings/contents forward to your new installation of AutoVue, they can be copied to the same relative locations in your new installation. However, for the AutoVue Server settings in `jvueserver.properties` (the global user settings in `allusers.ini` and default user settings in `default.ini`) and the customized GUI settings, it is best to manually copy the specific settings that you would like to keep as the new installation of AutoVue may have important new settings.

Prerequisites for Installing on Linux OS

To correctly install AutoVue on a Linux OS, it is recommended that you have basic knowledge of Linux and its administration.

1. Run the update agent, `up2date`, to download the latest Xvfb and Mesa files.
   **Note:** The AutoVue Server installer does not detect whether Xvfb or Mesa are installed.

2. Install Xvfb version 6.8.2 or later.
   Make sure you install the Xvfb with XRender and GLX extensions.

3. Install the latest Mesa package (recommended version is 6.5.1 or later).
   **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.

   - If you have an older version of Wine, you need to uninstall it and then install the package that is certified with this release of Oracle AutoVue.
• Install Wine as a root user by running the following:

```
#rpm -i wine-av-20040914-20.i386.rpm
```

**Note:** This version of Wine is installed in the `/usr/av` directory.
AutoVue Installation

Note: We recommend that you review "Security Recommendations" and "AutoVue Deployment Options and Scenarios" before proceeding with the AutoVue installation.

This chapter describes how to install AutoVue on Windows and Linux OSes.

The AutoVue installation consists of the following steps:

1. "Installing AutoVue Server"
2. "Deploying the VueServlet"
3. "Configuring AutoVue Server"
4. "Installing AutoVue Client Components"
5. "Configuring the AutoVue Client"
6. "Verifying Your AutoVue Installation"
7. "Client-Side Installation"

Note: If you want to install AutoVue in non-interactive mode, refer to "Appendix A: Non-Interactive Installations".

Installing AutoVue Server

To install AutoVue Server, do the following:

1. Download the Oracle AutoVue Media Pack and extract its contents.
2. Run the AutoVue installer executable:
   - On Windows OSes, the installer is deploy_server.bat
   - On Linux OSes, the installer is jInstall_lin.bin.
   Note: You might need to grant execute permissions for the installer on Linux. To do so, run chmod +x jInstall_lin.bin.
3. Select a language from the installation dialog and then click OK.
4. Click Next to begin installation.
5. Specify the installation directory and then click Next.
   Windows OS Example: C:\Program Files\jVue
   Linux OS Example: /home/apps/jvue
6. Click an installation set icon and then click Next:

<table>
<thead>
<tr>
<th>Installation Set</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Standard]</td>
<td>Installs the most common AutoVue features. Note that this set does not install the sample drawing files or API examples.</td>
</tr>
<tr>
<td>![Custom]</td>
<td>You can select the features to install. Select this installation set to install the sample drawing files and API examples.</td>
</tr>
</tbody>
</table>

If you selected the Custom install set continue to step 7, otherwise proceed to step 8.

Oracle Corp.
7 Select which of the following features to install and then click **Next**:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Files</td>
<td>Installs Oracle AutoVue. The option is selected by default.</td>
</tr>
<tr>
<td>Administration Documentation</td>
<td>Installs Oracle AutoVue system administration documentation. The option is</td>
</tr>
<tr>
<td></td>
<td>selected by default.</td>
</tr>
<tr>
<td>User Documentation</td>
<td>Installs AutoVue end-user documentation. The option is selected by default.</td>
</tr>
<tr>
<td>Example Client Application</td>
<td>Installs a sample AutoVue client application. The option is selected by</td>
</tr>
<tr>
<td></td>
<td>default.</td>
</tr>
<tr>
<td>Sample Files</td>
<td>Installs drawing sample files.</td>
</tr>
<tr>
<td>API Examples</td>
<td>Installs examples of how Oracle AutoVue features can be added to third-party</td>
</tr>
<tr>
<td></td>
<td>applications using APIs.</td>
</tr>
</tbody>
</table>

8 For Windows OS installations, select one of the following locations to create shortcuts and then click **Next**.

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a new Program Group</td>
<td>Creates a shortcut in the Program group of the Start menu. For example, Oracle</td>
</tr>
<tr>
<td></td>
<td>AutoVue. This is the default option.</td>
</tr>
<tr>
<td>In an existing Program Group</td>
<td>Adds a shortcut to an existing Program group. For example, Accessories.</td>
</tr>
<tr>
<td>In the Start Menu</td>
<td>Adds a shortcut in the Start menu.</td>
</tr>
<tr>
<td>On the Desktop</td>
<td>Adds a shortcut on the Desktop.</td>
</tr>
<tr>
<td>In the Quick Launch Bar</td>
<td>Adds a shortcut to the Quick Launch bar.</td>
</tr>
<tr>
<td>Other</td>
<td>Adds a shortcut to the specified location.</td>
</tr>
<tr>
<td>Don’t create icons</td>
<td>Shortcuts are not created.</td>
</tr>
</tbody>
</table>

To create icons for all users of AutoVue, select **Create Icons for All Users**.

9 Specify a host name or IP address for the AutoVue Server and then click **Next**.

**Example:** hostname1.domain.com

10 Specify the hostname and port of the Web server and then click **Next**.

**Example:** hostname1.domain.com:80

11 Specify the document root of the Web server. If IIS or Oracle HTTP Server or Apache Web Server is installed, the installer detects the installation and auto-populates the document root. If you are using a web server that is not one of these, you can choose the Custom radio button and enter the document root of this web server in the text area. Click **Next** when done.

<table>
<thead>
<tr>
<th>Web Server Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle HTTP Server</td>
<td><strong>Document root example:</strong> C:\product\10.1.3.2\companionCDHome_1\ohs\htdocs</td>
</tr>
<tr>
<td>Apache Web Server</td>
<td><strong>Document root example:</strong> /var/apache/htdocs</td>
</tr>
<tr>
<td>Microsoft IIS</td>
<td><strong>Document root example:</strong> C:\inetpub\wwwroot</td>
</tr>
<tr>
<td>Custom</td>
<td>If you are using another Web server, you can specify the document root for</td>
</tr>
<tr>
<td></td>
<td>this Web server.</td>
</tr>
</tbody>
</table>

Oracle Corp.
12 Specify the path to the sample HTML and client Jar files relative to the document root of the Web server.

Default value: jVue

Note: Sample HTML pages and client Jar files are installed in this directory in the root of the Web server’s tree. For example, http://hostname1/jVue/…

13 Review the pre-installation summary and then click Install.

14 Once the installation program is finished on a Windows OS, the installer prompts if you wish to register AutoVue as a Windows service. If you wish to register AutoVue Server as a Windows service, select Yes and click Next to continue.

Note: If you wish to setup AutoVue Server as a service on a Linux OS, you must do so manually after the installation is complete.

Note: If you choose to skip this step on a Windows OS, you can manually register AutoVue as a service later. Refer to the Installation and Administration manual for instructions.

15 If you chose to register AutoVue as a Windows service, the installer prompts for an account name and password. This is the account that will be used to startup AutoVue Server as a service. Enter the account name and password and click Next to Continue.

16 Click Done to quit the installer.

AutoVue Server is installed in the specified directory.

Note: If there are any warnings or errors, refer to the installation log file, install.log, located in the <AutoVue Installation Folder>\bin directory.

**Deploying the VueServlet**

The Oracle-developed VueServlet allows the AutoVue client to communicate with the AutoVue Server using the standard HTTP protocol. This has two advantages:

- The client and AutoVue Server can generally communicate across firewalls since the standard HTTP ports (for example, 80) are used.
- The client can be configured to use the HTTPS protocol to communicate with the VueServlet. This ensures that all communications are secure.

When tunneling is configured, the AutoVue client encodes requests from the HTTP/HTTPS protocol and attempts to invoke the servlet on the specified server. The servlet decodes the parameters included in the request and forwards the request to the AutoVue Server using a socket connection. The servlet also replies to the client machine using the same HTTP/HTTPS protocol. You can deploy the VueServlet with any application server you choose. For a list of application servers that are certified by Oracle, refer to "System Requirements".

Note: The VueServlet is pre-configured with the Jetty that is shipped with AutoVue Server.

When deploying the VueServlet, your deployment steps depend on whether you have integrated AutoVue into a DMS or whether you are using it in a non-integrated environment.
Deploying in an Integrated Environment

In most cases, when AutoVue is integrated with a DMS, the VueServlet is deployed on the application server that hosts the integration servlet and/or the DMS.

In order to deploy the VueServlet in these environments, follow these steps:

1. Identify where the VueServlet.jar is located in your integration/VueLink deployment.
2. Shut down the application server where the integration/VueLink is deployed.
3. If the VueServlet is deployed in a WAR file, extract the contents of the WAR file.
4. Replace VueServlet.jar from the extract with the VueServlet.jar file from the current release.
5. Modify any of the configuration parameters for the VueServlet as needed. Refer to section "VueServlet Parameters" for more information.
6. Re-create the WAR file (if you had to extract it in step 3).
7. Restart the application server.
8. Redeploy the WAR file.

Deploying in a Non-Integrated Environment

To deploy the VueServlet with your J2EE-enabled application server, you must first create and then deploy a war file. The following steps explain how to do this:

1. Create a directory.
   
   **For Example:** C:\csiwar

2. In the folder C:\csiwar, create a sub-directory WEB-INF.
3. In WEB-INF, create a directory lib: C:\csiwar\WEB-INF\lib
4. Copy vueservlet.jar to C:\csiwar\WEB-INF\lib.
5. Create a deployment descriptor. The deployment descriptor should be stored as a file named web.xml in the WEB-INF directory.
   
   - The following is the mandatory header for the web.xml document. It defines the document as an XML file and relates the file syntax to the DOCTYPE resource specified.

```xml
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE web-app PUBLIC "://Sun Microsystems, Inc./DTD Web Application 2.2/EN" "http://java.sun.com/j2ee/dtds/web-app_2_2.dtd">
```
• Use the following code to specify the deployment descriptor needed to deploy the VueServlet.

```xml
<web-app>
  <servlet>
    <servlet-name>com.cimmetry.servlet.VueServlet</servlet-name>
    <servlet-class>com.cimmetry.servlet.VueServlet</servlet-class>
    <init-param>
      <param-name>JVueServer</param-name>
      <param-value>hostname:5099</param-value>
    </init-param>
    <init-param>
      <param-name>Verbose</param-name>
      <param-value>0</param-value>
    </init-param>
  </servlet>
  <servlet-mapping>
    <servlet-name>com.cimmetry.servlet.VueServlet</servlet-name>
    <url-pattern>/servlet/VueServlet</url-pattern>
  </servlet-mapping>
</web-app>
```

The `<servlet-name>` parameter is how the servlet is known within the XML file.
The `<servlet-class>` parameter is the fully qualified Java programming language class name of the Servlet.
The `<url-pattern>` parameter is how the servlet is referenced from a Universal Resource Indicator (URI).

**Note:** The parameter structure must follow the order in the DTD definition. For example, all `<servlet>`s must be defined before any `<servlet-mapping>`s can be specified.

6 Update `hostname` in `web.xml` with the name of the AutoVue Server machine.

7 Specify additional configuration parameters for the VueServlet at this point. Refer to section "VueServlet Parameters".

8 To create the WAR file, use the "jar" utility from the Java™ Development Kit distribution. If you are in the root directory you created for the WAR contents (C:\csiwar), use the following command:
   `jar cvf VueServlet.war WEB-INF`

9 Deploy VueServlet.war using any J2EE compliant application server.

10 After the VueServlet is deployed, to access the content, enter the following into your Web browser address field:
    `http://host:port/context/servlet/VueServlet`
    The `<context>` parameter can be set in the deployment phase or set automatically by the application server. Some application servers allow you to specify the context name, but generally the WAR file name is used as the context.

11 Update the JVUESERVER applet parameter in the Web pages that embed the AutoVue applet to include the full URL of the servlet (something like `http://servername/servlet/VueServlet`).
The exact steps to set up the VueServlet on your application server depend on the software you are using. Refer to "Appendix B: VueServlet Deployment" for information on setting up the VueServlet for common servlet engines.

### VueServlet Parameters

The following table describes VueServlet initialization parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DebugLevel</td>
<td>Set the debug output category.</td>
<td>0</td>
</tr>
<tr>
<td>EnableSSL</td>
<td>Set to <strong>True</strong> to enable secure socket connection to AutoVue servers.</td>
<td>False</td>
</tr>
<tr>
<td>JVueServer</td>
<td>A semicolon separated list of AutoVue server host names. This parameter is</td>
<td><code>localhost</code></td>
</tr>
<tr>
<td></td>
<td>used by the VueServlet to connect to AutoVue servers through socket</td>
<td><code>name:5099</code></td>
</tr>
<tr>
<td></td>
<td>connection. The <strong>JVUESERVER</strong> parameter needs to be set to the hostname:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>port value used when starting the AutoVue Server. You can specify more than</td>
<td></td>
</tr>
<tr>
<td></td>
<td>one hostname:port separated by semi-colons (;) for fail-over. In other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>words, if one machine is down the servlet will try the next machine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If JVueServer is not specified, it defaults to localhost:5099. The servlet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>assumes that AutoVue server is running on the same machine as the Web</td>
<td></td>
</tr>
<tr>
<td></td>
<td>server and communicates through port 5099.</td>
<td></td>
</tr>
<tr>
<td>InvokerCount</td>
<td>Set number of simultaneous connects to AutoVue server per channel per server</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(2 channels per server).</td>
<td></td>
</tr>
<tr>
<td>ServerInfo</td>
<td>Set to <strong>True</strong> to include AutoVue server info on VueServlet status page.</td>
<td>True</td>
</tr>
<tr>
<td>Verbose</td>
<td>Set to <strong>TRUE</strong> to enable debug output. Set to <strong>FALSE</strong> to disable debug</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td>output.</td>
<td></td>
</tr>
</tbody>
</table>

### Configuring AutoVue startup script to start Jetty

As of AutoVue version 20.0.0, Jetty does not startup automatically when AutoVue starts up. If you wish to use Jetty that ships with AutoVue, you can start Jetty manually by:

- running “startJetty.bat” located at `<AutoVue Installation Folder>\bin\jetty\bin` on Windows installations of AutoVue
- running “startJetty” located at `<AutoVue Installation Folder>\bin\jetty\bin` on Linux installations of AutoVue
- selecting the “Start VueServlet on Jetty” shortcut from the AutoVue programs group on Windows installations of AutoVue

If you wish to automatically startup Jetty when AutoVue Server starts up, you can do so by editing `jvueserver.properties` and uncommenting the lines beginning with:

```properties
#servlet-engine.classpath=
#servlet-engine.jre=
#servlet-engine.cmdline=
```

The next time you start up AutoVue Server, Jetty will startup along with AutoVue.
Configuring AutoVue Server

This section describes how to configure AutoVue Server. If you wish to modify the ports that AutoVue Server is running on, or if you wish to set up a server farm or perform any other server configuration, refer to the following sections. AutoVue’s server configuration parameters are located primarily in two configuration files: jvueserver.properties and VueServer.ini. They are both located in the <AutoVue Installation Folder>in directory.

Note: You must stop the AutoVue Server before modifying jvueserver.properties and VueServer.ini.

Configuration Options in jvueserver.properties

The jvueserver.properties file contains the configuration settings for the startup and operation of the AutoVue Server.

Modifying RMI and Socket Ports

By default, AutoVue Server opens a socket connection to clients on port 5099 and an RMI registry port on 1099. The RMI port is also used to for communication with other servers when AutoVue is set up in a server farm.

You can use different ports for RMI and socket. To change these ports, you need to modify the jvueserver.properties file located in the \bin subdirectory of the AutoVue Server installation directory.

Edit the following lines in jvueserver.properties:

```
jvueserver.rmi.port=1099
jvueserver.socket.port=5099
```

This new socket port needs to be properly reflected in the JVUESERVER parameter specified in the VueServlet descriptors that point to this server.

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 and socket ports, where \(n\) is the processPoolSize value specified in jvueserver.properties. You should verify that the required ports are open and not in use by any other process. The netstat –a program displays which ports are in use.

Configuring for a Proxy Connection

If your AutoVue Server uses a proxy server to connect to the Internet, then the proxy server name must be specified in jvueserver.properties.

Example:

```
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. It is recommended that, except for the proxy settings, you do not change the default settings.

Setting Backward Compatibility Options

Release 20.0.0 contains enhanced encryption of the authorization block. To allow for backward compatibility for 19.3 VueLinks/integrations, AutoVue provides the following parameter in jvueserver.properties:

```
dms.vuelink.version = [19.3]
```
This parameter allows you to continue using your existing integrations with release 19.3. In the next release of AutoVue, this backward compatibility option will be turned off. It is important that you update your integrations to implement the enhanced encryption of the authorization block.

### Configuring AutoVue Host Name

If you rename your server machine name after you install AutoVue, you must modify `jvueserver.properties` and update this parameter:

```properties
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.

### Enabling NTLM Authentication

To support NTLM authentication, set the following parameter in `jvueserver.properties` to `TRUE`:

```properties
jvueserver.ntlm.enable = [TRUE | FALSE]
```

**Note:** The default value is `FALSE`.

### Configuring Process Pool Size

In `jvueserver.properties`, you can set the process pool size with the following parameter:

```properties
jvueserverx.nt.processPoolSize = [integer]
```

This specifies the number of secondaries (or DocServers) to startup when AutoVue Server starts up. The default value is `4`.

### Configuring Streaming Files

This section provides streaming files parameters that can be configured.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>jvueserver.metacache.enable</code></td>
<td>Set to false to disable creation of streaming files on the server. When set to false, dedicated streaming file process will not start.</td>
<td>TRUE</td>
</tr>
<tr>
<td><code>dms.save.metafile</code></td>
<td>Specify whether or not streaming files are saved in the DMS. Set to <code>TRUE</code> to save streaming files in DMS. Set to <code>FALSE</code> so that streaming files will not be saved in DMS.</td>
<td>TRUE</td>
</tr>
<tr>
<td><code>jvueserver.metacache.process</code></td>
<td>Flag for using separate process for streaming file generation. If false, DocServers themselves handle streaming file generation.</td>
<td>TRUE</td>
</tr>
<tr>
<td><code>jvueserver.metacache.threshold</code></td>
<td>DocServer load that forces streaming file creation in a designated process.</td>
<td>0</td>
</tr>
</tbody>
</table>
Configuring for Collaboration

When using the Collaboration feature in AutoVue, you can configure the following parameters in the `jvueserver.properties` file. For example, you can choose to enable the Collaboration feature on the server, and/or you can specify the protocol to use for collaboration.

### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>jvueserver.collaboration.enable</code></td>
<td>[TRUE</td>
<td>FALSE] True enables collaboration mode on the server. False disables the mode.</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.protocol</code></td>
<td>[rmi</td>
<td>jxta] Specify the protocol to use for collaboration.</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.tcp.port</code></td>
<td>[integer] BaseTCP port to be used. <strong>Note:</strong> The configuration parameters below need to be changed when using more than one server cluster in a server farm.</td>
<td>9700</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.id.min</code></td>
<td>[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 <code>jvueserver.collaboration.id.min + jvueserver.collaboration.id.range</code> of the first server. Otherwise, an ID overlap may occur.</td>
<td>0</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.id.range</code></td>
<td>[integer] Range of ids given to users and collaboration sessions by this server. This will limit the number of simultaneous connections.</td>
<td>100000</td>
</tr>
</tbody>
</table>

For additional streaming file configuration, see section "Configuring Streaming File Storage Options".

Configuring Across Firewalls and Multiple AutoVue Servers

When using the Collaboration feature in AutoVue when behind a firewall or multiple AutoVue servers, you must configure the following parameters. For example, you can set a parameter to allow communication with servers that are not part of the server farm, or specify the external address and port for HTTP connections when behind a firewall.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>jvueserver.collaboration.protocol</code></td>
<td>[jxta] Protocol should be set to JXTA.</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.rendezvous.enable</code></td>
<td>[true</td>
</tr>
<tr>
<td><code>jvueserver.collaboration.rendezvous</code></td>
<td>[protocol:// IP_of_server_to_communicate_with:port] Specify the protocol, the IP address of other servers to communicate with, and the port for communication. For example: <code>jvueserver.collaboration.rendezvous=tcp:// ip1:port1;http://ip2:port2</code></td>
</tr>
</tbody>
</table>
Specify one of the following parameters when using network address translators in a firewall setup.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jvueserver.collaboration.jxta.allowExternal=</td>
<td>Set to true to allow other servers that are not part of the server</td>
</tr>
<tr>
<td>[true</td>
<td>false]</td>
</tr>
<tr>
<td>jvueserver.collaboration.tcp.server=[external_IP:port]</td>
<td>When using firewalls and Network Address Translators, specify the external address and port for TCP connections.</td>
</tr>
</tbody>
</table>

**Other Parameters in jvueserver.properties**

The following table describes the additional parameters in jvueserver.properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>jvueserver.inifile = file name</td>
<td>Specify the name of the Server startup INI file. Default is VueServer.ini in the bin directory in AutoVue Server’s installation directory.</td>
<td>VueServer.ini</td>
</tr>
<tr>
<td>jvueserver.markup.nativegui.type</td>
<td>Add Author, Date, and Markup Info columns to the Markup Files dialog box. 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.</td>
<td>0</td>
</tr>
<tr>
<td>jvueserver.preload = [string]</td>
<td>Pre-loader class name. Enable loading of specified java class prior to jvueserver startup.</td>
<td></td>
</tr>
<tr>
<td>jvueserver.rmi.objectPorts = [2020-2029]</td>
<td>Specify a range of ports to use, or leave commented for automatic allocation.</td>
<td></td>
</tr>
<tr>
<td>jvueserver.socket.timeout=&lt;integer&gt;</td>
<td>Specify the inactive time in seconds after which socket times out. When 0, there is no timeout.</td>
<td>0</td>
</tr>
</tbody>
</table>

**Configuring log4j Parameters**

This section provides log4j parameters that can be configured.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>jvueserver.log4j.configureandwatch = [TRUE</td>
<td>FALSE]</td>
<td>Set this to TRUE to be able to dynamically change log4j logging level.</td>
</tr>
<tr>
<td>jvueserver.log4j.configureandwatch.delay = integer</td>
<td>Time interval for waking up and detecting log4j configuration change.</td>
<td>60</td>
</tr>
</tbody>
</table>
Configuration Options in VueServer.ini

VueServer.ini contains directory configuration settings, server farm settings, and other settings for the AutoVue Server. It is located in the \bin subdirectory of the AutoVue Server installation directory

Windows OS Example: C:\Program Files\jVue\bin
Linux OS Example: /home/apps/jvue/bin

Configuring Global User Settings

The following global user settings can be configured in VueServer.ini.

[Users]

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory</td>
<td>Contains the directory in which user information is stored (users’ initialization files, users’ GUI files).</td>
</tr>
<tr>
<td>DefaultINI</td>
<td>Name of the default INI file</td>
</tr>
<tr>
<td>AllUsersIni</td>
<td>Name of the allusers INI file</td>
</tr>
</tbody>
</table>

The INI files allusers.ini and default.ini are stored in the directory specified under [Users]/Directory in VueServer.ini (the default is the directory of the VueServer.dll). The file default.ini is the default INI file for all users at the start. When you first log on, the contents of default.ini is copied to your own INI file ("username".ini). The contents of allusers.ini is then transferred to "username".ini when you connect to AutoVue. For a complete list of options, see "Appendix I: List of INI Options".

Configuring Markup Options

The following Markup options can be configured in VueServer.ini.

[Markups]

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory</td>
<td>Specifies in which directory the Markups 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. By default, the directory is the Markups subdirectory of the AutoVue server program directory. <strong>Note:</strong> This option is for server-managed Markups.</td>
</tr>
<tr>
<td>Permissions</td>
<td>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.</td>
</tr>
<tr>
<td>SymbolDir</td>
<td>Specifies in which directory the Markups symbol libraries are stored. By default, the directory is the symbols subdirectory of the AutoVue server program directory.</td>
</tr>
</tbody>
</table>

Configuring Streaming File Storage Options

The following streaming file options can be configured in VueServer.ini.
Configuring Server Viewable Local Files Options

The following server options can be configured in VueServer.ini.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory</td>
<td>Specifies in which directory to search for the local files. This key has to</td>
</tr>
<tr>
<td></td>
<td>be set to allow client to see server local files through the 'server://'</td>
</tr>
<tr>
<td></td>
<td>pseudo-protocol. Refer to the FILENAME description in &quot;Configuring the</td>
</tr>
<tr>
<td></td>
<td>AutoVue Client&quot;. By default no server files can be viewed. Setting this key</td>
</tr>
<tr>
<td></td>
<td>allows users to see ANY local file in the specified directory and</td>
</tr>
<tr>
<td></td>
<td>subdirectories. However, the server takes care of parent references in</td>
</tr>
<tr>
<td></td>
<td>paths (the “..” directory) to avoid security breaches.</td>
</tr>
<tr>
<td>Directory1</td>
<td>To specify multiple directories, specify Directoryn=[Path]. To access files</td>
</tr>
<tr>
<td>Directory2</td>
<td>at these locations, specify &quot;server://@n/...&quot;.</td>
</tr>
<tr>
<td>...</td>
<td>Directoryn</td>
</tr>
<tr>
<td>MaxLifeTime</td>
<td>Specifies the maximum number of days a file is kept in the AutoVue cache</td>
</tr>
<tr>
<td></td>
<td>directory. When the maximum life time is reached, the file is deleted from</td>
</tr>
<tr>
<td></td>
<td>the cache directory.</td>
</tr>
<tr>
<td>MaxNumFiles</td>
<td>Specifies the maximum number of files allowed in the AutoVue cache directory.</td>
</tr>
<tr>
<td></td>
<td>When the threshold is reached, the least recently used files are deleted.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The minimum value is 1000.</td>
</tr>
<tr>
<td></td>
<td><strong>Default:</strong> 64000</td>
</tr>
</tbody>
</table>

**Option Description**

**Directory**

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.

**ForceAscii=0/1**

Forces using ASCII characters in cached files names.

**Size**

Specifies, in Megabytes, the maximum size of the file cache. If not specified, or if value specified is less than 50 MB, a default of 51200 MB will be used.

**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.

**MaxNumFiles=[val]**

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. **Default:** 64000
Configuring Online Help Options

The following online help options can be configured in VueServer.ini.

[HELP]

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File_en</td>
<td>Entry specifies the URL to the English Help file.</td>
</tr>
<tr>
<td>File_xx</td>
<td>Entry specifies the URL to the Help file for the language “xx.”</td>
</tr>
<tr>
<td>File</td>
<td>Entry specifies the URL to the default Help file.</td>
</tr>
</tbody>
</table>

Configuring the File Open Dialog

The File Open dialog lets you browse and search backend systems. The dialog lets you browse multiple backend systems if AutoVue is integrated with multiple backend systems. You can search and browse backend systems even if your client has not already established a connection to the backend system, i.e., you can just launch the AutoVue applet and browse/search through your backend to locate a file to open in AutoVue. To enable this feature (browse/search when you have not yet established a connection with the backend system), you must create a file named vuelinks.xml with the following format:

```xml
<DMSList>
  <vuelink url="vuelink_url">
    <name>your_DMS_name</name>
    <DMSArgs>
      <DMSArg name="your_argument" value="your_value" />
    </DMSArgs>
    <seed>seed_url</seed>
  </vuelink>
</DMSList>
```

- The `<vuelink>` tag defines the URL location of the backend DMS system. Replace `vuelink_url` with the URL to your VueLink/integration servlet.
- The `<name>` tag defines the backend system button name to appear in the File Open dialog. Replace `your_DMS_name` with the name of your backend system.
- The `<DMSArgs>` tag defines arguments for the specified integration. Replace `your_argument` and `your_value` with any DMSArgs you may used with DMS integration.
- The `<seed>` tag defines the defines the URL format for retrieving a file from the backend system. Replace `seed_url` with a URL to a file from your backend system. This is generally the FILENAME URL that is passed to the AutoVue client when you view your DMS file in AutoVue.

**Note:** In your seed URL, you must replace any special characters with it’s character entity reference. For example: Replace `&` with `&amp;`.

For more information on the File Open dialog, refer to the User’s Manual.

**Note:** If you wish to use this feature (browse/search backend systems when you have not yet established a connection with the backend system) with VueLink for Documentum 19.2.x or 19.3.x, you will need a hot fix for the VueLink. Contact a Customer Support representative for a hotfix for your VueLink.
Installing AutoVue Client Components

When installing AutoVue client components, there are two things you must consider:

- Are you using AutoVue in an integrated environment?
- Are you using a Web server for AutoVue client components?

The following sections explain each scenario for installing AutoVue client components.

Installing in an Integrated Environment

In most cases, when AutoVue is integrated with a DMS, AutoVue client components are deployed with an application server that hosts the integration components and/or the DMS.

In order to deploy the current AutoVue client components in these environments, follow these steps:

1. Identify where the AutoVue client components are located in your integration/VueLink deployment.
2. Shut down the application server where the AutoVue client components are deployed.
3. If the AutoVue client components are deployed in a WAR file, extract the contents of the file.
4. Replace the following files in your integration environment (or extracted files) with files from the `<AutoVue Installation Folder>`\html directory:
   - jvue.jar
   - jogl.jar
   - gluegen-rt.jar
5. If you want to support an offline deployment of AutoVue, you must copy jInstall.exe (the installer for the Desktop Deployment) from your extracted Media Pack and AutoVueupdate.xml from the `<AutoVue Installation Folder>`\html directory to the same location as the AutoVue client components.
6. Update AutoVueupdate.xml and specify the full URL to jInstall.exe.
7. Re-create the WAR file (if you had extracted it in step 3).
8. Restart the application server.
9. Redeploy the WAR file.

Installing in a non-Integrated Environment

If you need to setup AutoVue client components manually perform the following steps:

1. Create a folder (for example, named jVue) on your Web server docroot.
2. Copy all files from the `<AutoVue Installation Folder>`\html directory to the directory you created on your Web server docroot.
3. Edit the files that embed the AutoVue applet and replace the following parameters with appropriate values. To use the sample HTML pages provided with AutoVue, you must update `frmApplet.html` and `batchPrint.html` and update the following parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODEBASE</td>
<td>Specify the URL to the AutoVue client files on your Web Server (the folder created above).</td>
</tr>
<tr>
<td></td>
<td>For example: <code>http://AutoVueClient:8080/jVue</code></td>
</tr>
</tbody>
</table>
Refer to "VueServlet Parameters" for more information on available parameters.

If are using the sample HTML pages that ship with AutoVue and you would like to access the sample files that ship with AutoVue, edit `frmFiles.html` and replace the values for the variable identified in table below with the appropriate value:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jVueSamples</td>
<td><strong>Note</strong>: This feature is optional. During AutoVue installation, you must select the Sample Files check box to include the sample files. Specify the URL to the AutoVue sample files on your Web Server. <strong>For example:</strong> <a href="http://AutoVueClient:8080/jVue/samples">http://AutoVueClient:8080/jVue/samples</a></td>
</tr>
</tbody>
</table>
Configuring the AutoVue Client

This section provides information on how the AutoVue client can be configured.

If you selected Example Client Application during AutoVue installation, you can view the test HTML page jVue.html. The test HTML page is strictly a sample Web page and is not a required component for your deployment. This sample Web page does, however, provide a good example of how to configure the AutoVue applet. The page consists of three frames: frmHeading.html, frmApplet.html and frmFiles.html.

Note: The frmFiles.html page only appears if you choose to install the sample files during AutoVue installation.

The HTML code responsible for the applet generation is held in frmApplet.html. The code in frmApplet.html holds the <APPLET> tag with the customizable parameters and provides a JavaScript method called setFile to allow frmFiles.html to dynamically change the file displayed in the applet, see "Scripting the Applet".

The connection scheme used in these examples is by default, servlet tunneling.
AutoVue Applet Parameters

AutoVue allows you to customize the client applet. For example, with the EMBEDDED parameter you can embed the applet into a Web page, or with the DMS parameter you can specify the DMS servlet that AutoVue Server uses to interface with a DMS.

The following table describes the customizable parameters in the AutoVue applet.

**Syntax:**

```html
<PARAM NAME=<name> VALUE=<type> >
```

Refer to "Basic Applet" for a sample applet definition.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CACHEUI</td>
<td>[TRUE</td>
<td>FALSE]</td>
</tr>
<tr>
<td>COLLABORATION</td>
<td>INIT:CSI_ClbSessionID=987654321; CSI_ClbDMS=dmsIndex; CSI_ClbSessionData= 123456789; CSI_ClbSessionSubject= Subject; CSI_ClbSessionType= public/private; CSI_ClbUsers=user1, user2,…</td>
<td>Initiate collaboration session.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionID= 987654321</td>
<td>DMS collaboration session ID.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbDMS=dmsIndex</td>
<td>DMS index.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionData= 123456789</td>
<td>DMS collaboration session data.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionSubject= Subject</td>
<td>Collaboration session subject.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionType= public/private</td>
<td>Collaboration session type.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbUsers=user1, user2,…</td>
<td>Invited users.</td>
</tr>
<tr>
<td></td>
<td>JOIN:CSI_ClbSessionID=987654321; CSI_ClbDMS= dmsIndex;CSI_ClbSessionData=123456789;</td>
<td>Join collaboration session in progress.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionID= 987654321</td>
<td>DMS collaboration session ID.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbDMS=dmsIndex</td>
<td>DMS index.</td>
</tr>
<tr>
<td></td>
<td>CSI_ClbSessionData= 123456789</td>
<td>DMS collaboration session data.</td>
</tr>
<tr>
<td>DMS</td>
<td><a href="http://name:port/dmsServlet">http://name:port/dmsServlet</a></td>
<td>Specifies the DMS servlet that the AutoVue server uses to interface with a DMS. This has precedence over any DMS entries specified in the Server’s VueServer.ini file.</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| DMSARGS              | String      | List of DMS arguments passed in as Applet parameters. Specify semicolon separated list of applet parameters. The value will be sent with every request to the DMS. Example:  
<PARAM NAME="DMSARGS" VALUE="ARG1;ARG2">  
<PARAM NAME="ARG1" VALUE="value1">  
<PARAM NAME="ARG2" VALUE="value2"> |
| DMS_PRESERVE.Cookies | [TRUE | FALSE|semi-colon separated list of cookies] | Set this parameter to **TRUE** if you want AutoVue client to pass on all cookies to the AutoVue Server and integration components. Set to **FALSE** if you do not want AutoVue client to pass on any cookies. Specify a semi-colon separated list of cookies that the AutoVue client should pass on to the AutoVue Server and integration components. **Default**: **FALSE**  
Example:  
<PARAM NAME="DMSARGS" VALUE="DMS_PRESERVE.Cookies">  
<PARAM NAME="DMS_PRESERVE.Cookies" VALUE="TRUE"> |
| EMBEDDED             | [TRUE | FALSE] | Set to **TRUE** to embed the Applet in the web page. **Default value**: **TRUE** |
| ENABLEEMF            | [TRUE | FALSE] | When set the to **TRUE**, document files are converted to EMF and sent to the client. The client then uses native code for rendering that EMF to the output. **Default**: **FALSE** |
| FILENAME             | URL         | Set it to the file to be opened at Applet’s start-up.  
upload://dir/…/file  
http://host/file  
ftp://host/file  
or...  
ftp://<user>:<password>@<ftpserver>/file  
server://dir/…/file | Will be understood as a client local file to be uploaded on the server to be viewed. Specify a HTTP URL for file open. Specify a FTP URL for file open. Will be understood as a server local file to be viewed. Server local files have to be located under subdirectories of the root directory specified in the VueServer.ini file under the **[Server]/Directory** key. If that key is not set, no file will be accessible. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMAT</td>
<td>[AUTO</td>
<td>TILED</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TILED</strong> uses a tiled-raster representation of documents to display file.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>AUTO</strong> uses adapted representations depending on the type of file viewed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When set to <strong>METAFILE</strong>, data is streamed to the client as a compressed metafile (CMF). Display lists are sent to the client and the client interprets and renders these display lists.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generally, Office documents are rendered in TILED mode, while 2D and Raster documents are rendered in METAFILE mode.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Default</strong>: AUTO</td>
</tr>
<tr>
<td>GUIFILE</td>
<td>String</td>
<td>The Graphical User Interface (GUI) definition file used. Using this parameter, Web servers can customize the GUI of the applet according to client credentials. GUI files are stored in subdirectories of the root directory specified in the [Users]\Directory key of the VueServer.ini file. The specification can also specify a local file using the “file://” convention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default for the [Users]\Directory key is &lt;bin dir&gt;\Profiles.</td>
</tr>
<tr>
<td>HEAVYWEIGHT</td>
<td>[TRUE</td>
<td>FALSE</td>
</tr>
<tr>
<td>JVUESERVER</td>
<td>Semicolon-separated list.</td>
<td>Specify the servlet connection to the AutoVue Server. Separate multiple values with a semi-colon.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Example:</strong> <a href="http://AutoVueServer:5098/servlet/VueServlet">http://AutoVueServer:5098/servlet/VueServlet</a></td>
</tr>
<tr>
<td>LIST USERS</td>
<td>[TRUE</td>
<td>FALSE]</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Default</strong>: TRUE</td>
</tr>
<tr>
<td>LOCALE</td>
<td>[DE</td>
<td>EN</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| LOGFILE      | String          | Specify full path to the log file for messages. **null** is for standard output.  
**Example:** C:\temp\clientlog.txt  
**Default:** null |
| ONINIT       | “myFunction();” | If the **ONINIT** parameter function is supplied, then the AutoVue client will call the specified JavaScript function on the originating HTML page as soon as the applet has loaded and initialized. This allows for an extremely high level of control and interaction between the HTML page and the Applet. Refer to "Advanced Scripting Functionality" for more information. |
| SESSIONXFONTPATH | [font path]    | Specify the font path to use to resolve fonts needed by the base file. |
| SESSIONXREFPATH | [xref folder path] | Specify the XRefs path to use to resolve external resources needed by the base file. |
| SWINGLAF     | String          | Specify a look and feel for Swing. For example,  
**com.java.swing.plaf.motif.MotifLookAndFeel**.  
If null, platform’s default look and feel will be used, obtained by **UIManager.getSystemLookAndFeel().**  
**Default:** null |
| USERNAME     | String          | Set it to the user name to be used for opening sessions on the AutoVue Server.  
If not set, the applet either gets the user name from the DMS if in an integrated environment or from system properties when not integrated. |
| VERBOSE      | OFF | ERROR | INFO | DEBUG | ALL | Set to **ERROR** to output all error messages.  
Set to **INFO** to display all informative messages.  
Set to **DEBUG** to display all debug messages.  
Set to **ALL** to display all messages.  
Set to **OFF** or **FALSE** to turn off verbosity.  
**Default:** OFF |
Scripting the Applet

Basic Applet

The basic definition needed for the applet is:

```html
<!-- BEGIN AutoVue Applet -->
<APPLET
   <!-- NAME is optional but useful to identify the object in JavaScript -->
   NAME="JVue"
   <!-- The name of the Applet Class (not to be changed) -->
   CODE="com.cimmetry.jvue.JVue"
   <!-- This specifies the location of jvue.jar, jogl.jar, and gluegen-rt.jar. The WEB Browser 
        will download these files from this location -->
   CODEBASE="http://www.webserver.com/jVue"
   <!-- Name of the JAR Archive containing the Applet. Used by Netscape (not to be changed) -->
   ARCHIVE="jvue.jar, jogl.jar, gluegen-rt.jar"
   <!-- Optional Sizing Parameters -->
   HSPACE="0" VSPACE="0" WIDTH="100%" HEIGHT="100%"
   <!-- MAYSCRIPT is required. This allows the Applet to read and write a cookie identifying 
     sessions on the Web Browser -->
   MAYSCRIPT>
   <!-- Set EMBEDDED to "true" for the Applet to appear within the WEB page. The default value is 
     "false" which causes the Applet to appear in a separate Window -->
   <PARAM NAME="EMBEDDED" VALUE="false">
   <!-- The VERBOSE parameter is optional. If set to "true" then diagnostic output appears in the 
     Browser's Java Console -->
   <PARAM NAME="VERBOSE" VALUE="false">
   <!-- Set FILENAME to specify the URL to load in the Applet. If not specified then the Applet 
     shows up with no file set initially -->
   <PARAM NAME="FILENAME" VALUE="http://www.webserver.com/jVue/samples/acad12.dwg">
   <!-- The JVUESERVER parameter specifies a semi-colon separated list of connection methods to 
     use to communicate with the AutoVue Server. Below: the client tunnels through the Servlet 
     installed under http://www.webserver.com/Servlet/VueServlet -->
   <PARAM NAME="JVUESERVER" VALUE="http://www.webserver.com/servlet/VueServlet">
   <!-- Name of the JAR Archive containing the Applet. Used by Internet Explorer -->
   <!-- Message for Browser that do not support Java -->
   <p><b>Requires a browser that supports Java.</b></p>
   </APPLET>
<!-- END AutoVue Applet -->
```
# Advanced Scripting Functionality

When integrating the AutoVue applet in dynamic Web pages all public API methods in the jVue class can be accessed through JavaScript.

Commonly used methods include:

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>createMobilePack(MobilePackOptions opts)</td>
<td>Generates the Mobile Pack according to specified options.</td>
</tr>
<tr>
<td>setFile(String url)</td>
<td>Set the file to be viewed in the applet.</td>
</tr>
<tr>
<td>setCompareFile(String url)</td>
<td>Switch to compare mode and compare the current file with a given one.</td>
</tr>
<tr>
<td>setDMSArg(String name, String value)</td>
<td>Set to add, modify, or remove parameters in the DMSARGS parameter list.</td>
</tr>
<tr>
<td>addOverlay(String url)</td>
<td>Add a given file as an overlay on the current file.</td>
</tr>
<tr>
<td>printFile(PrintProperties pProps)</td>
<td>Print the current file using options specified.</td>
</tr>
<tr>
<td>printFile(PrintProperties pProps, boolean UseDefaultPrinter)</td>
<td>Print the current file using the options specified, but do not prompt for the printer to use. <strong>Note:</strong> Control the prompting for the printer with the useDefaultPrinter parameter.</td>
</tr>
<tr>
<td>setMarkupMode(boolean enterMarkupMode)</td>
<td>Enter or exit Markup mode.</td>
</tr>
<tr>
<td>openMarkup(String markupID)</td>
<td>Open the specified Markup. If <code>MarkupID</code> = &quot;*&quot; then all Markups associated with the document are loaded. To open a local Markup specify the MarkupID as &quot;CSI_DocName=markupName&quot;. To open a DMAPI integrated Markup specify the MarkupID document ID as &quot;CSI_DocID=markupID&quot;.</td>
</tr>
<tr>
<td>collaborationInit(String sessionProperties)</td>
<td>Initiate collaboration session. <strong>sessionProperties</strong> - Property string describing collaboration session (has same format as applet’s COLLABORATION parameter’s INIT: format). <strong>See</strong> INIT in Applet Parameters for Collaboration.</td>
</tr>
<tr>
<td>collaborationJoin(String sessionProperties)</td>
<td>Join collaboration session in progress. <strong>sessionProperties</strong> - Property string describing collaboration session (has same format as applet’s COLLABORATION parameter’s JOIN: format). <strong>See</strong> JOIN in Applet Parameters for Collaboration.</td>
</tr>
<tr>
<td>collaborationEnd()</td>
<td>End current collaboration session.</td>
</tr>
<tr>
<td>crossProbe(String fileName)</td>
<td>Add a given file to the list of cross-probed files.</td>
</tr>
<tr>
<td>closeDocument()</td>
<td>Close current document.</td>
</tr>
</tbody>
</table>
Refer to the “JavaDocs” on the AutoVue applet and the VueBean for complete information on the public methods that are available.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>import3DFile(String fileName, HMatrix transform)</td>
<td>Import a 3D file. Specify file name and the transformation to apply to the imported entity.</td>
</tr>
<tr>
<td>setGUI(String guiFile)</td>
<td>Set GUI definition file. Specify the name of the GUI definition file.</td>
</tr>
<tr>
<td>setPage(int page)</td>
<td>Sets the page on the currently opened document. Specify the page number to set.</td>
</tr>
<tr>
<td>syncMobilePack(MobilePackOptions opts)</td>
<td>Synchronizes the Mobile Pack. The markups and intellistamp properties that were created/modified while disconnected are specified, and then checked into the backend system.</td>
</tr>
<tr>
<td>waitForLastMethod()</td>
<td>Pauses current thread until last invoked method finishes execution.</td>
</tr>
<tr>
<td>invokeAction(String actionClassStr)</td>
<td>Directly invokes an action that has no sub-actions (child actions).</td>
</tr>
<tr>
<td>invokeAction(String actionClassStr, String subActionStr)</td>
<td>Directly invokes a sub-action (child action) of the specified action.</td>
</tr>
</tbody>
</table>

Following is the mapping of a 4X4 transformation matrix:

\[
\begin{bmatrix}
X_{11} & X_{12} & X_{13} & X_{14} & X \\
X_{21} & X_{22} & X_{23} & X_{24} & Y \\
X_{31} & X_{32} & X_{33} & X_{34} & Z \\
X_{41} & X_{42} & X_{43} & X_{44} & 0.0
\end{bmatrix}
\]

where \((X, Y, Z)\) is the translation vector and the

\[
\begin{bmatrix}
XX & XY & XZ \\
YX & YY & YZ \\
ZX & ZY & ZZ \\
0.0 & 0.0 & 0.0 & 1.0
\end{bmatrix}
\]

represents the 3X3 rotation and scaling matrix.

The last row of the 4X4 transformation matrix should always be set to \((0.0, 0.0, 0.0, 1.0)\).
Example 1:
Use the ONINIT applet parameter to automatically load a document to view, load all associated Markups and print the results.

```<script>
<!-- Hide script from old browsers
function myFunction() {
    // The main Applet object.
    var myApp = window.document.applets["JVue"]; // Open the specified document
    myApp.setFile('http://www.machine.com/jVue/samples/acad12.dwg');
    // Load all markups
    myApp.openMarkup('*');
    // Create a PrintProperties class
    var pPropsClass =
        myApp.getClass("com.cimmetry.common.PrintProperties");
    // Instantiate the object
    var pProps = pPropsClass.newInstance();
    // Load default properties from the user’s preferences
    pProps.setProfile(myApp.getActiveVueBean().getProfile());
    // Specify the Top Center Header text: To specify a DMAPI
    // attribute use the syntax “%X<attribute_name>”
    pProps.getHeaders().setTopCenterText("My Header");
    // Specify scaling Fit-To-Page (PrintOptions.SCALING_FIT==0)
    pProps.getOptions().setScaling(0);
    // Print the extents of the drawing (PrintOptions.AREA_EXTENTS==0)
    pProps.getOptions().setArea(0);
    // Print the document using the default printer.
    myApp.printFile(pProps, true);
    // etc...
}
-->
</script>`
Example 2:
The frmFiles.html sample page that ships with the product makes use of the setFile() method to dynamically change the file in the applet.

This is easily extendible. Assuming that the HTML frame of the applet is named AppletFrame and that your CAD drawings are located at the URL http://myserver/CAD, creating four HRefs in a separate frame to dynamically call those methods will be done by adding the following lines to your HTML code:

```html
<a href="JavaScript:parent.AppletFrame.JVue.setFile('http://myserver/CAD/cad.dwg')"> View cad.dwg</a>
<a href="JavaScript:parent.AppletFrame.JVue.setCompareFile('http://myserver/CAD/oldcad.dwg')"> Compare to old version</a>
<a href="JavaScript:parent.AppletFrame.JVue.printFile(true)"> Print file</a>
```
Verifying Your AutoVue Installation

To verify your AutoVue Server installation:

1. Start AutoVue Server.
   Refer to "Starting AutoVue Server" for instructions.
   The AutoVue Server starts successfully if all processes appear as green (except for the Servlet process) in the AutoVue Server Console. Refer to "Configuring AutoVue Server" for more information.

2. Make sure your application server that hosts the VueServlet is configured correctly and starts up.
   If you are using Jetty that ships with AutoVue, you can start it up by running:
   • “Start VueServlet on Jetty” from the “AutoVue” programs shortcut on Windows OS
   • <AutoVue Installation Folder>/bin/Jetty/bin/startJetty on Linux OS

3. Verify that the VueServlet is working correctly by opening a URL to the VueServlet in your Web browser.
   **Example:** http://AutoVueServer:5098/servlet/VueServlet. As displayed in the following Oracle AutoVue Servlet tunneling page, “Connection State: OK” states that the VueServlet is configured correctly.

4. Once AutoVue Server and your application server start up, launch the example AutoVue client application by running:
   • <AutoVue Installation Folder>/bin/jvue.bat on Windows OS
   • <AutoVue Installation Folder>/bin/jvue on Linux OS

   **Note:** You must first update jvue.bat on Windows OS and jvue on Linux OS to point to the correct URL to the VueServlet. Edit the file in a text editor and set -param JVUESERVER="<URL to the VueServlet>"
The AutoVue applet should load successfully.

If your server does not start up, or if the AutoVue applet does not load, refer to "Debugging AutoVue" for information on troubleshooting your installation.

**Client-Side Installation**

There is no special configuration required on the client-side installation. The only requirement is a Java-compatible Web browser for a Web client. Generally, the software is installed on a Web/application server. It is automatically deployed onto the client machines when the applet is first loaded.
Starting AutoVue Server

This chapter discusses how to start and stop AutoVue Server on Windows and Linux OSes.

Starting AutoVue on Windows OSes

1. Start AutoVue Server by clicking Start AutoVue Server in the Oracle AutoVue, Web Version Program Manager group.
   By default, when the server is started, the console is displayed and the server appears in the system tray. To disable the console and to start up AutoVue Server only in the system tray, start the server with the following:

   ```
   jVueServerX -noconsole
   ```

2. Start the application server with which VueServlet is deployed.
   **Note:** If you are using Jetty, you must start it up by running the Start VueServlet on Jetty shortcut in the AutoVue programs group.

3. Make sure to start the Web server if you are using it for AutoVue client components.

Starting AutoVue on Linux OSes

1. Start AutoVue Server by entering the following:

   ```
   ./jvueserver
   ```
   This starts up the server console as long as the DISPLAY environment variable is properly set.
   **Note:** Run jvueserver_debug -u& if you need to start up the server console separately.
   **Note:** AutoVue Server starts up with a default ProcessPoolSize of 4. To modify the ProcessPoolSize, edit jvueserver.properties and set your ProcessPoolSize. Refer to "Configuring AutoVue Server" for more information.

2. Start the application server with which VueServlet is deployed.
   **Note:** If you are using Jetty, you must start it up by running startJetty from the <AutoVue Installation Folder>/jVue/bin/jetty/bin directory.

3. Make sure to start the Web server if you are using it for AutoVue client components.

The startup script for AutoVue Server on Linux OSes also starts up the Xvfb server. Xvfb is an X11 virtual framebuffer that helps AutoVue Server render files. The Xvfb server runs on port 909 by default. To modify this port and configuring other Xvfb properties, open the jvueserver.properties file (located in the \bin subdirectory of the AutoVue Server installation directory) and locate property names containing “xvfb”.

**Note:** 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 AutoVue Server before logging out of Linux. As a result, 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).
Shutting Down AutoVue Server

To shut down AutoVue Server, click Shutdown on the AutoVue Server console.

Running the AutoVue Server as a Service

On Windows OSes

AutoVue server can be run as a Windows Service. The advantage of this is that it will continue to run even after you log off of Windows. The AutoVue service is automatically registered with the Windows Service Control Manager if when installing AutoVue, you selected the option to install as a service. Before running the AutoVue service, 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 manually, go to the \bin directory of the directory where you had installed AutoVue server and type: jvueserver-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.

The service will be automatically unregistered and removed if you uninstall the product.

To manually remove the service, go to the \bin directory of the directory where you installed AutoVue Server and enter the following:

jvueserver -remove

Starting and Stopping the Service

1  In the Control Panel start the Services Control Panel applet.
2  Select the AutoVue Server service.
3  Click the 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 one of the following:
   •  Click Start in the Services dialog
      or
   •  Use the sc.exe utility.
      For example: SC start “AutoVue Server”
      or
• Use the NET program.  
  For example: `NET start "AutoVue Server"`

Once the Service has been started, it behaves exactly as if run in “non-service” mode. The AutoVue server icon appears in the System Tray. To stop the service click **Shutdown**.

### On Linux OSes

Oracle provides an “rc” script to manage AutoVue Server on Linux. AutoVue Server can be configured to startup automatically when the machine is restarted by following instructions below:

- Edit file `<AutoVue Installation Directory>/etc/jvueserver_rc` and locate the following lines:
  - `AUTOVUEDIR=$USER_INSTALL_DIR$
  - `AUTOVUEUSER=__JVUEUSER__`
  Replace `$USER_INSTALL_DIR$` with the path to AutoVue installation and `__JVUEUSER__` with the name of the user that will be running AutoVue Server.
- Rename `jvueserver_rc` to `autovue`.
- Login as a root and copy `autovue` to `/etc/init.d` folder.
- As root, go to the `/etc/init.d` folder and add AutoVue as a service:
  ```bash
  chkconfig --add autovue
  ```
- Configure `autovue` to startup automatically:
  ```bash
  chkconfig autovue on
  ```

AutoVue will now start up automatically when the machine starts up.
To startup 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
```
The AutoVue Server Console

The AutoVue Server console displays the user connection state (process, username, client IP and number of open documents) and the process pool state. On starting the server, the console is launched and the connection and process pool states are queried.

<table>
<thead>
<tr>
<th>Pool State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Process is not running.</td>
</tr>
<tr>
<td>Green</td>
<td>Process is running.</td>
</tr>
<tr>
<td>Yellow</td>
<td>Process is initializing.</td>
</tr>
<tr>
<td>Grey</td>
<td>Process is disabled by the user (applies only to servlet process).</td>
</tr>
<tr>
<td>Black</td>
<td>Process is not responding.</td>
</tr>
</tbody>
</table>

Click **Refresh** to update the console display to regenerate cached server information.

To stop running the AutoVue server and all attached processes, click **Shutdown**.

Any errors that occur during initialization are listed under **Output**.

Under **Processes**, \( \text{P} \) indicates the primary process; \( \text{S} \) indicates the servlet engine; \( 1, 2, 3 \ldots \) represent secondary servers (also called Document Servers or DocServers), and \( \text{M} \) represents the process for generating streaming files (only visible when \( \text{jvueserver.metacache.process} \) is set to \( \text{true} \) - the default value in \( \text{jvueserver.properties} \)). The number of secondary servers is set in the **processPoolSize** parameter in \( \text{jvueserver.properties} \).
Double-click on the session listed in the Console to see more information regarding the session. Information such as what document is opened by the user, which DocServer is processing the request is displayed.

![AutoVue Server Console](image)

**Diagnostics Button**

The diagnostics feature of the AutoVue Server console generates a report, JVueServerDiagnostics.out, to the `<AutoVue Install Root>/bin` directory and contains pertinent troubleshooting information. An Oracle Global Customer Support representative may require you to generate the report to identify problems you may have with your deployment of AutoVue.

**Process Pool**

The AutoVue Server can run in a process pool on a single machine. The default process pool size is 4 and is set in the `jvueserver.properties` file.

**Example:** `jvueserverx.nt.processPoolSize=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 approximately 50MB for each process in a pool. As a result, a process pool size of 4 requires approximately 200MB of RAM on the machine to run comfortably. The load is balanced across the pool on the single machine.
AutoVue Deployment Options and Scenarios

AutoVue in Online/Offline Mode

The offline mode option in AutoVue provides you with the ability to view and markup files when you do not have access to the AutoVue Server or backend DMS. Many AutoVue users require access to their files when they are not connected to their backend systems. For example, having offline access to files is essential when you need to review and add markups to a document during your regular commute or when bringing all your files when on a business trip.

Note: Going offline is supported from Windows-based clients only.

When you select the Work Offline option from the Server deployment of AutoVue, a predefined list of files and associated resources and markups are copied to your local system as offline files and a local installation of AutoVue is deployed. Once installation is complete you can continue working on your files with AutoVue in offline mode. For more information refer to the Oracle AutoVue User’s Manual.

When your AutoVue Server is running on a Linux environment, you will need to perform some additional configuration in order to support working offline from windows clients:

1. Copy autovueupdate.xml from <AutoVue Installation Folder>/html to the web server or the application server that you are using for AutoVue client components.
2. Download the AutoVue media pack for windows and extract the jInstall.exe for the Desktop deployment installation of AutoVue.
3. Copy this executable to the web server or the application server location where AutoVue client files are deployed.
4. Edit autovueupdate.xml and specify the URL to the AutoVue executable.
   Example: url='http://autovueserver1:80/AutoVue/jInstall.exe’

Adding Multiple AutoVue Servers in a Cluster

AutoVue Server is designed to be easily scalable. As the demand for viewing and marking up increases in an organization, AutoVue can easily accommodate the additional load by adding new servers. Each time a client connects to the cluster entry point (for example, the host specified in the JVUESERVER parameter of the APPLET) the overall load is calculated and the server with the least load in the cluster is selected for the client to use. You do not need to modify your HTML pages or stop your running servers to add a new server to the cluster.

You can add more machines to the “server farm” and the load balances across all machines. Scaling to support more concurrent users can be easily achieved by adding more hardware while keeping the software configuration identical.
Adding an Additional Server

1. Add a new machine to the same network as the original AutoVue Server.

2. Install and configure the AutoVue Server software on the new server, going through the same steps as in the original installation.
   
   **Note:** All the AutoVue Servers in the cluster must be the same versions. If you install a patch or a service pack on one of the servers, you must do same for all the other servers.

3. Once installed, edit the VueServer.ini file located in the \bin directory on the cluster entry point machine and add the following entries in the [RMI] section:

   ```ini
   [RMI]
   MaximumLoad=100
   RMIIst1=jvueserver1.company.com:1099
   RMIIst2=jvueserver2.company.com:1099
   Etc.
   ```

   Where
   
   RMIIst1 is set to the name of the primary AutoVue server in the farm.
   
   RMIIst2 is the name of the second AutoVue server in the farm and so on.
   
   The entry MaximumLoad (default 100) is used by the load-balancing algorithm — it gives a rough estimate of the server capacity. On a powerful machine you may want to set it higher than on a lower-end server. This setting can vary from server to server and you may wish to set it in the VueServer.ini of the new server.

   **Example:** If you are running on a cluster of two machines with different performances, you can set MaximumLoad=100 for the faster machine and MaximumLoad=50 for the slower machine. This setting determines that the AutoVue Server on the faster machine can handle twice as many requests as the server on the slower machine. Note that this is not an indication of the number of connections that can be handled by a server.

   The following entries list all the servers in the server-cluster. Their IP address:RMI port identifies them. The RMI port is optional — if not specified it defaults to 1099:
   
   ```ini
   RMIIst1=machine1:rmiport1
   RMIIst2=machine2:rmiport2
   RMIIst3=machine3:rmiport3,
   and so on...
   ```

   **Note:** These modifications are needed only on the primary AutoVue Server machine. For fail-safe installation, repeat the customizations on all machines in the cluster.

   **Note:** If firewall is enabled on the machines where AutoVue Server is running, you might need to add java.exe and javaw.exe to the firewall exceptions.

   If you plan to use AutoVue’s Collaboration feature, see "Configuring for Collaboration".

Configuring Multiple Servers in a Cluster

When you have multiple servers in cluster, you can configure a network drive as shared storage for markups, symbols, and server directories. By doing so, you can centralize the configuration for the servers in the cluster.

These configuration are done in VueServer.ini. Refer to "Configuration Options in VueServer.ini" for information on the available options.
Configuring for Failover

In the event of a failure of an AutoVue Server, either when using a cluster or when using a standalone server, you can configure the VueServlet so that it directs requests to another AutoVue Server. When using a cluster, the failover server can be another server in the cluster. When using standalone installation, you must install another instance of AutoVue Server.

To configure VueServlet for failover, update the JVUESERVER parameter of the VueServlet and add the following:

;[secondary server hostname]:[secondary server socket port number]

Example:

```xml
<param-value>
hostname1:5099;hostname2:5099
</param-value>
```

Note: Failover can also can occur at the application server layer. For more information refer to the My Oracle Support Knowledge Base at [https://support.oracle.com](https://support.oracle.com).
Debugging AutoVue

Logging for the AutoVue Server

The configuration file `log4j.xml` (located in the `<AutoVue Install Root>\bin` directory) makes it possible to display class-level debugging information for AutoVue Server. The configuration file defines several appenders and output layouts, and can be configured for license usage logging. If you experience issues with AutoVue Server, you can provide logging information from `log4j.xml` to an Oracle Global Customer Support representative.

Refer to "Appendix H: Logging for the AutoVue Server" for information on the available appenders, output layouts, and logger information.

Debugging the Servlet

If the servlet URL is incorrect, you will see the usual HTTP error 404 (File not found) screen:

![HTTP ERROR: 404](image)

There are many reasons why you might get the above 404 error message. One common reason is that there is a typo in the VueServlet URL (as is the case with this example). Typos are also common in the case where the application server is case sensitive (for example, Tomcat).

Another possible root of the error is that the VueServlet was not properly installed on your application server. For details on setting up VueServlet, see "Deploying the VueServlet".
If the URL was found but the AutoVue Server could not be accessed, you will see the following HTML page:

Exceptions and errors may vary depending on the failure reason. If you see an error message similar to the screen above, it means that the VueServlet was installed properly but could not contact the AutoVue server.

This is generally caused by one of two reasons:

- The AutoVue server is not running.

or

- The hostname and/or socket port specified in the JVUESERVER init parameter of the VueServlet are not correct.
To enable debugging for the VueServlet, you must set the `VERBOSE` parameter to `TRUE` in the descriptor for the VueServlet.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
</table>
| Verbose=[TRUE|FALSE] | Set to **TRUE** to enable debug output.  
Set to **FALSE** to disable debug output.       | FALSE   |

To define the debug output category, you must set `DEBUGLEVEL` in `webdefault.xml`:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DebugLevel=[0-100]</td>
<td>Set the debug output category.</td>
<td>0</td>
</tr>
</tbody>
</table>

For a list of additional customizable parameters for VueServlet, refer to "VueServlet Parameters".

### Debugging the Client

In the event the applet fails to load, perform the following troubleshooting:

- Check that the application server hosting the VueServlet is running.
- Verify that AutoVue Server is running.
- Open the URL to the VueServlet in a Web browser to verify the connection.

For enabling debug information, refer to the following table:

**Note:** When the client applet is deployed on a Web page, the standard output is typically the Java console. You can direct the output to a text file by setting the `LOGFILE` parameter to the full path of an output file.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGFILE=string</td>
<td>Specify the full path to the log file for messages. <strong>null</strong> is for standard output.</td>
<td>null</td>
</tr>
</tbody>
</table>
| VERBOSE=[OFF | ERROR | INFO | DEBUG | ALL] | Set to **ERROR** to output all error messages.  
Set to **INFO** to display all informative messages.  
Set to **DEBUG** to display all debug messages.  
Set to **ALL** to display all messages.  
Set to **OFF** or **FALSE** to turn off verbosity. | OFF     |

For a list of additional customizable parameters for `frmApplet.html`, refer to "AutoVue Applet Parameters".
Appendix A: Non-Interactive Installations

Installation

To install AutoVue in non-interactive mode, you need to specify a configuration file that contains the required installation parameters. To do so, you must generate the configuration file manually following below syntax.

For Windows OSes:

```
#Specify Installation Directory
#----------------------------------
USER_INSTALL_DIR=C:\Program Files\AVServer

#Select Shortcut Folder
#----------------------
USER_SHORTCUTS=C:\Documents and Settings\Administrator\Start Menu\Programs\Oracle AutoVue

#Select Features (Available: ProgFiles,AdminDocs,UserDocs,Website,SampleFiles,APIEx)
#---------------------------------------------------------------------------------
CHOSEN_INSTALL_FEATURE_LIST=ProgFiles,AdminDocs,UserDocs,Website,SampleFiles,APIEx

#Specify host name for WV Server
#-----------------------------
JVUESERVER_HOST=avserver1

#Specify settings for Web Server
#--------------------------------
WEBSERVER_HOST=avserver1:80
WEBSERVER_DOCROOT=C:\inetpub\wwwroot
WEBSERVER_PATH=AutoVue

#Install AutoVue Server as Windows service
#-------------------------------------------
INSTALL_WIN_SERVICE=Yes
WIN_SERVICE_ACCOUNT=domain\username
WIN_SERVICE_PASSWORD=password
```
For Linux OSes:

```
#Specify Installation Directory
#-------------------------------
USER_INSTALL_DIR=/home/qa/AutoVue

#Select Features (Available: ProgFiles,AdminDocs,UserDocs,Website,SampleFiles,APIEx)
#-------------------------------------------------------------------------------------
CHOSEN_INSTALL_FEATURE_LIST=ProgFiles,AdminDocs,UserDocs,Website,SampleFiles,APIEx

#Specify host name for WV Server
#------------------------------
JVUESERVER_HOST=avserver

#Specify settings for Web Server
#-------------------------------
WEBSERVER_HOST=avserver
WEBSERVER_DOCROOT=/var/www/html
WEBSERVER_PATH=AVclient
```

Following are the installation parameters that you can specify in the configuration file:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USER_INSTALL_DIR={&quot;file path&quot;}</td>
<td>Specify the path where you want to install AutoVue Server.</td>
<td></td>
</tr>
</tbody>
</table>
| USER_SHORTCUTS={"file path"} | Specify the shortcut path.  
**Note:** This parameter is only for Windows OS installations. | |
| CHOSEN_INSTALL_FEATURES=
  ProgFile,AdminDocs,
  UserDocs,Website,SampleFiles,A
  PIEx | Specify the features to install.  
The comma-separated list can contain the following features:  
  ProgFile: Installs Oracle AutoVue.  
  AdminDocs: Installs Oracle AutoVue system administration documentation.  
  UserDocs: Installs AutoVue end-user documentation.  
  Website: Installs AutoVue client components onto a web server.  
  SampleFiles: Installs sample files.  
  APIEx: Installs examples of how Oracle AutoVue features can be added to third-party applications using APIs. | ProgFile, AdminDocs, UserDocs, Website |
| JVUESERVER_HOST={AutoVue Server host name} | Specify the AutoVue Server host name. | |
| WEBSERVER_HOST={Web server host name and port} | Specify the Web server host name. | |
| WEBSERVER_DOCROOT={Web server document root} | Specify the document root of the Web Server | |
| WEBSERVER_PATH={Path to AutoVue client files relative to DOCROOT} | Specify the path to the AutoVue client files relative to the document root. | |
| INSTALL_WIN_SERVICE={Yes|No} | Specify if you want to register AutoVue as a windows service.  
**Note:** This parameter is only for Windows OS installations. | |
After you specify the parameters for the configuration file, you can run the installation in non-interactive mode. Enter the following command lines:

**For Windows OSes:**

```
jInstall.exe -DSERVER=1 -i silent -f <full path to configuration file>
```

**For Linux OSes:**

```
jInstall_lin_bin -DSERVER=1 -i silent -f <full path to configuration file>
```

### Uninstallation

If AutoVue is installed in non-interactive mode, the uninstallation is automatically in non-interactive mode. Simply invoke the uninstaller for AutoVue:

**For Windows OSes:**

```
<AutoVue Installation Folder>\uninstall\uninstall.exe
```

**For Linux OSes:**

```
<AutoVue Installation Folder>/uninstall/uninstall
```
Appendix B: VueServlet Deployment

This section describes the steps to setup the VueServlet for several popular Application Servers/Servlet Engines. Generally, you can follow similar steps to deploy with any application server. Refer to your application server documentation for specific instructions.

Tunneling through J2EE-enabled Application Servers

This section provides instructions for deploying VueServlet for J2EE application servers.

Deploying the WAR File

This section provides generic instructions for deploying a WAR file, followed by instructions for deploying the WAR file with a specific application server.

Generic Steps to Deploy the WAR File

1. Launch the administrative console of your application server.
2. Select Install a new Web application.
3. Browse and select VueServlet.war.
4. Specify VueServlet for the context name.
5. Deploy VueServlet.war.

We provide you with instructions for deploying VueServlet.war with some application servers in the following section.

Deploying the WAR File with WebSphere 6.1 and up

1. Launch the administrative console and log on to the application server.
2. Select Applications and then Install new application.
3. Browse and select VueServlet.war.
4 Specify VueServlet for the context name and click Next.

5 Accept the default values in the screen that appears.

6 In the Install New Application screen, enter VueServlet for the Application Name and click Next.

7 Accept the default values in the remaining screens. Then click Finish.

8 To start the VueServlet application, go to Applications and then Enterprise Applications.

9 Select VueServlet and click Start.

To test the VueServlet, connect to:

http://<host name>:<port>/VueServlet/servlet/VueServlet

where <host name> is the name of your application server host machine and <port> is the port your application server is running on.

**Deploying the WAR File with WebLogic 8.x and up**

1 Logon to the Administrative Console for WebLogic.

2 Select Deployments from the tree.

3 Click on Install.

4 Browse to the folder containing VueServlet.war and select VueServlet.war.

5 Enter VueServlet for the Application Name.
6 Select the Server to which you wish to deploy VueServlet.
   **Example**: myserver
7 Click **Activate Changes**.
8 Select **Deployments** again and select the VueServlet application.
9 Click **Start** and select **Servicing all requests**.
   The application starts.

Once the deployment is successful, verify the deployment. To do so, connect to:
http://<host name>:<port>/VueServlet/servlet/VueServlet
where `<host name>` is the name of your Application Server host machine and `<port>` is the port your application server is running on.

**Deploying the WAR File with Oracle Application Server 10g R3**
1 Logon to Oracle Application Server Control.
2 From the Application tree, select **Home**.
3 Select the Application tab and then click **Deploy**.
   The Select Archive page appears.
4 From the Application Location field, click **Browse** to select `vueservlet.war`.
5 Click **Next**.
   The Application Attributes page appears.
6 Enter **VueServlet** for the **Application Name**.
7 Enter **VueServlet** for the **Context Root**.
8 Click **Next**.
   The Deployment Settings page appears.
9 Click **Deploy**.

**Deploying the VueServlet with Tomcat 5.x and up**
1 Copy `vueservlet.war` to your Tomcat `webapps` directory.
2 Restart Tomcat.
   The VueServlet is deployed automatically.

**Tunneling with non-J2EE Application Servers**

### Setting up VueServlet
Below are generic instructions for deploying the VueServlet with a non-J2EE application server.
1 Copy the file `vueservlet.jar` to your Servlet Engine’s `servlet` directory.
2 Add `vueservlet.jar` to your Servlet Engine’s CLASSPATH.
3 Create an alias for VueServlet to `com.cimmetry.servlet.VueServlet`. 

Oracle Corp.
4 If your AutoVue server is running on a different machine, specify the init parameter JVueServer to be my.jvueserver.com:5099 where my.jvueserver.com specifies the machine on which AutoVue server is running. 5099 is the default port that the server runs on. If you change the default, this should also be correspondingly changed.

5 For the changes to take effect, restart the servlet engine.

Note: The default socket port is 5099 (not 1099, that is used by RMI).

Tunneling using Jetty

1 Add VueServlet.jar to Jetty’s class path.

2 Edit startjetty.bat and add the full path to VueServlet.jar to the CLASSPATH variable.

3 Edit webdefault.xml and add the following:

```xml
<servlet id="VueServlet">
    <servlet-name>VueServlet</servlet-name>
    <servlet-class>com.cimmetry.servlet.VueServlet</servlet-class>
    <init-param>
        <param-name>JVueServer</param-name>
        <param-value>www.jvueserver.com:5099</param-value>
    </init-param>
    <init-param>
        <param-name>Verbose</param-name>
        <param-value>false</param-value>
    </init-param>
    <init-param>
        <param-name>DebugLevel</param-name>
        <param-value>0</param-value>
    </init-param>
    <load-on-startup>0</load-on-startup>
</servlet>
```

4 Replace www.jvueserver.com with the name of the machine on which AutoVue Server is running. 5099 specifies the socket port that the AutoVue Server uses. If the server is using a different socket port, specify the correct socket port.

5 Start Jetty and AutoVue Server.

6 Test that the VueServlet is installed properly; Open a Web browser and enter the URL to the VueServlet:

http://<machine name>:5098/servlet/VueServlet
Tunneling using Microsoft IIS

Microsoft’s IIS normally cannot execute servlets. Configuring IIS to use ISAPI redirector will let IIS send servlet requests to the application server. Follow the instructions for the third party J2EE/servlet engine to setup ISAPI redirection.
Appendix C: Customizing the GUI

Choosing the GUI File

By default, if the applet parameter `GUIFILE` is not set, the applet will use a default GUI specification for the menus and toolbars. However, this default GUI is the same as the one that would be generated with the configuration specified in the file `default.gui`. The location of this file is specified by the entry Directory in the [Users] section of the ini file (VueServer.ini).

To customize the default GUI configuration, modify `default.gui` and set the `GUIFILE` to this customized file. This way, you can even create several GUI files with specific functionalities (like “no compare mode”, “no printing”, and so on) and allow different clients to have different GUIs. A sample GUI file that allows viewing only (disabling Markup mode) is provided as `viewonly.gui`.

Modifying the GUI File

The GUI definition file structure is simple. It mainly describes which controls (corresponding to available actions in the applet, like Rotate, Open, and so on) are to be added to which context (like MenuBar, ToolBar, and so on), thus allowing users to have complete control over the functionality and the look of the applet interface.

The GUI to use on the AutoVue client can be specified in the `GUIFILE` applet parameters. Refer to "Configuring the AutoVue Client" for more information.

Structure and Syntax of GUI Files

AutoVue supports five modes: View, Compare, Markup, Collaboration, and Print Preview. A GUI file defines the graphical interface for each mode. Menu bars, toolbars, status bar and Right Mouse Button (RMB) menus are defined in this file. For some of these objects, location (north, south, west, east) may be specified. Toolbars are located in north, west or east. The status bar is always located at the bottom of the component (south).

Note: Popup menus may be added to menu bars. Menu items, popup menus or separators may be added to popup menus. Toolbars only accept buttons. Buttons or panes may be defined for the status bar. The RMB popup is processed as any other popup menu.

The following table lists each GUI file for each mode:

<table>
<thead>
<tr>
<th>Mode</th>
<th>2D</th>
<th>EDA</th>
<th>3D</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>VIEW</td>
<td>ECADMARKUP</td>
<td>SMVIEW</td>
</tr>
<tr>
<td>Markup</td>
<td>MARKUP</td>
<td>ECADMARKUP</td>
<td>MARKUP3D</td>
</tr>
<tr>
<td>Collaboration</td>
<td>COLLABORATION</td>
<td>ECADCOLLABORATION</td>
<td>COLLABORATION3D</td>
</tr>
<tr>
<td>Compare</td>
<td>COMPARE</td>
<td>COMPARE</td>
<td>COMPARE3D</td>
</tr>
<tr>
<td>Print Preview</td>
<td>PRINTPREVIEW</td>
<td>PRINTPREVIEW</td>
<td>PRINTPREVIEW</td>
</tr>
</tbody>
</table>
GUI Configuration Syntax

The most generic definition of a GUI file can be described through the symbols below:

- Words with CAPITAL LETTERS should be entered literally.
- The character ‘|’ is used as “or” (for example, a|b means a or b)
- The character ‘*’ means “zero or more occurrences of.”
- A GUI file can contain one or more “GUI configuration” blocks as shown in the following table:

### GUI Configuration Blocks

```plaintext
GUI_configuration =
BEGIN UI VIEW UI_mode_configuration  END
   (BEGIN UI COMPARE | MARKUP UI_mode_configuration  END)
```

*UI_mode_configuration =
(menu_bar_configuration | (toolbar_configuration)* | status_bar_configuration | RMB_popup_menu_configuration)

```plaintext
menu_bar_configuration =
MENUBAR BEGIN {popup_menu_configuration}* END
```

```plaintext
toolbar_configuration =
TOOLBAR NORTH|WEST|EAST BEGIN {button_control }* END
```

```plaintext
status_bar_configuration =
STATUSBAR SOUTH BEGIN {button_control | pane_control } * END
```

```plaintext
RMB_popup_menu_configuration =
RMB BEGIN {popup_menu_configuration | menu_item_control }* END
```

```plaintext
popup_menu_configuration =
POPUP IDS_{FILE|EDIT |VIEW |OPTIONS |HELP | VIEW_IMAGE |TOOLS |ENTITIES |MODIFY |HYPERLINK}
BEGIN {popup_menu_configuration | menu_item_control | SEPARATOR }* END
```

```plaintext
button_control =
BUTTON action_control`
```

```plaintext
menu_item_control =
MENUITEM action_control
```

```plaintext
pane_control =
PANE action_control
```

```plaintext
action_control =
control_name, control_key_list, permissions
```

**control_name**: For list of available control names refer to "Control Names".

**control_key_list**: For the control key list for different controls refer to "Control Names".
GUI Configuration Blocks

permissions: All action names need “PERM_READ”.

These are the exceptions to this rule:

- VueActionFilePrint needs: PERM_READ|PERM_HEADERS|PERM_WATERMARK
- VueActionOptionsBars needs: PERM_NONE
- VueActionHelp needs: PERM_NONE

Example:
To define a very basic user interface that only allows users, through menu items, to open or print a file and get the file information without changing watermark=headers/footers:

BEGIN UI VIEW
  MENUBAR BEGIN
    POPUP IDS_FILE BEGIN
      MENUITEM VueActionFileOpen, , PERM_READ
      MENUITEM VueActionFileProperties, , PERM_READ
      MENUITEM VueActionFilePrint, , PERM_READ
    END
  END
END

For a list of available Control Names and their functionality, refer to "Control Names".

Control Names

The following table lists available Control Names and their functionality.

<table>
<thead>
<tr>
<th>Control Name</th>
<th>UI* Modes</th>
<th>Functionality</th>
<th>Control Key List</th>
<th>Contexts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Popup Menu Toolbar Status Bar RMB</td>
<td></td>
</tr>
<tr>
<td>VueAction FileOpen</td>
<td>VC</td>
<td>When INI option EnableUniversalFilechooser is set to 0, invokes open URL dialog. When option is set to 1, the universal file chooser dialog (that supports URLs, local files, server:// protocol and DMS files) appears. Default for EnableUniversalFileChooser is 1.</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>VueAction FileUpload</td>
<td>VC</td>
<td>Upload local file when EnableUniversalFilechooser=0. Not available when EnableUniversalFileChooser=1.</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td>VueAction FileOpenUNC</td>
<td>VC</td>
<td>Open files using UNC names</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>VueAction FileMarkup</td>
<td>V</td>
<td>Switch to Markup mode</td>
<td></td>
<td>x x x x</td>
</tr>
<tr>
<td>VueAction FileCompare</td>
<td>V</td>
<td>Switch to compare mode</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Control Name</td>
<td>UI* Modes</td>
<td>Functionality</td>
<td>Control Key List</td>
<td>Contexts</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td>---------------------------------------------------</td>
<td>-----------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>VueAction</td>
<td>V</td>
<td>Select and modify overlays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FileOverlays</td>
<td>VCM</td>
<td>Show file properties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FileProperties</td>
<td>VCM</td>
<td>Modify print options and print a file</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FileMRU</td>
<td>V</td>
<td>List most recently used documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EditSearch</td>
<td>VM</td>
<td>Do search or repeat search</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewZoom</td>
<td>VCM</td>
<td>Apply zoom</td>
<td>In/Out/Previous/FullRes/FitBoth</td>
<td></td>
</tr>
<tr>
<td>ViewFlip</td>
<td>VCM</td>
<td>Apply flip</td>
<td>Vertical/Horizontal/Both</td>
<td></td>
</tr>
<tr>
<td>ViewRotate</td>
<td>VCM</td>
<td>Apply rotation</td>
<td>0/90/180/270</td>
<td></td>
</tr>
<tr>
<td>ViewContrast</td>
<td>VCM</td>
<td>Apply contrast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewAntiAlias</td>
<td>VCM</td>
<td>Apply anti alias</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewInvert</td>
<td>VCM</td>
<td>Apply invert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewPage</td>
<td>VCM</td>
<td>Go to next page, previous page or select page number.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewViewPoint</td>
<td>VC</td>
<td>Select view point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewXrefs</td>
<td>VCM</td>
<td>Select Xrefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewBlocks</td>
<td>VCM</td>
<td>Select layers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ViewViews</td>
<td>VCM</td>
<td>Select views</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Name</td>
<td>UI* Modes</td>
<td>Functionality</td>
<td>Control Key List</td>
<td>Contexts</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>VueAction ViewDrawing Info</td>
<td>VCM</td>
<td>Get entity’s drawing information</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ViewMeasure</td>
<td>VCM</td>
<td>Measure distance, cumulative distance, area, or calibrate</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ViewSpecialViewModes</td>
<td>VCM</td>
<td>Show special view modes</td>
<td>Pan and Zoom Window/ MagnifyWindow / MagnifyGlass</td>
<td>× ×</td>
</tr>
<tr>
<td>VueAction ToolsDrawing Info</td>
<td>VCM</td>
<td>Get drawing information for one entity, some entities or a block</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction OptionsBars</td>
<td>VCM</td>
<td>Hide or show toolbars or status bar</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ViewDrawing Info</td>
<td>VCM</td>
<td>Get entity’s drawing information</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction CreateMobile Pack</td>
<td>VM</td>
<td>Create a Mobile Pack</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ReplyMobile Pack</td>
<td>VM</td>
<td>Send Mobile pack with your default e-mail client</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction SyncMobile Pack</td>
<td>VM</td>
<td>Synchronize changes to Mobile Pack to backend system</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ShowRendition</td>
<td>VM</td>
<td>Show renditions in the Mobile Pack</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueActionFile Browse</td>
<td>VM</td>
<td>Opens the File Browse dialog when browsing documents from different sources (local, DMS, server, URL). The document is open as soon as it is single clicked. Available only when EnableUniversalFileChooser=1 (default).</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueActionFile Convert</td>
<td>VM</td>
<td>Converts file to different formats using convert options.</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueActionFile OpenNew Window</td>
<td>VM</td>
<td>Same as VueActionFileOpen, but opens file in new window.</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction ManageOffline Files</td>
<td>VM</td>
<td>Opens a dialog for managing offline files (adding, removing, and so on).</td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>VueAction WorkOffline</td>
<td>VM</td>
<td>Switches between offline/online modes.</td>
<td></td>
<td>× ×</td>
</tr>
</tbody>
</table>
**Note:** The letters in the **UI Modes** column indicate:

V - View
C - Compare
M - Markup

The columns indicate:

- **Control Name:** Column shows the list of available control names.
- **UI modes(s):** Column specify in which modes can be used that control safely.

  **Example:** *VueActionFileOpen* can be added to View and Compare Modes, except for Markup mode.

- **Functionality:** Column specifies which functionalities are provided when this control is added to a context.

  **Example:** Adding *VueActionFileMarkup* to any context enables you to switch to Markup mode.

- **Control key list:** Column provides the optional functionalities that can be added to a context.
  
  - If for a control name there is no entry in this list, this means that by default all the controls providing the functionality listed in the functionality column are provided. For example, for *VueActionFileOverlays*, there is no entry in the control key list and adding it to a popup menu will provide both select and modify functionalities for overlays. The entry will look like this:

    ```
    MENUITEM VueActionFileOverlays, , PERM_READ
    ```

  - If there is a list of strings separated by ‘/’, you can specify which functionalities you want added. If you don’t specify any of them, by default all functionalities will be added. For example the following entry adds two buttons to the toolbar: one for Zoom In and one for Zoom Out:

    ```
    BUTTON VueActionViewZoom, In/Out, PERM_READ
    ```

    Whereas the following entry:

    ```
    BUTTON VueActionViewZoom, , PERM_READ
    ```

    is interpreted as:

    ```
    BUTTON VueActionViewZoom, In/Out/Previous/FullRes/FitBoth, PERM_READ
    ```

- **Contexts:** Column provides the contexts to which you can add the control to.

  **Example:** You can have the entry in a popup menu of the menu bar, but not in an RMB configuration. (If you have such an entry, it will be ignored.):

  ```
  MENUITEM VueActionFileOpen, , PERM_READ
  ```
UNC File Names

When AutoVue is used in a Microsoft-based network environment, a special VueAction is available to support the viewing of files through their UNC filenames. This VueAction allows the server to directly access files on the network, as well as XRef files if they exist in the same directory as the base file. File names are specified through a specialization of the `server://` URL mechanism, where the UNC name is prefixed with the following string:

```
server://@0
```

The control name is `VueActionFileOpenUNC`. The GUI file has to be modified to use `VueActionFileOpenUNC`. For more information on the GUI file, see "Structure and Syntax of GUI Files".

Following are a few examples of how this VueAction works. First you will have to modify the GUI file to use `VueActionFileOpenUNC`.

**Example 1**

Assuming that you have files on a shared network drive `\machine1\share1`. You wish to open files that are in subdirectory `dir1` on the shared drive.

Select `Open` from the `File` menu and browse to `\machine1\share1\dir1`. Then select a file `file1` to open. AutoVue translates this upload request to: `server://@0/\machine1\share1\dir1\file1`

**Example 2**

Assuming that you have files on a shared network drive `\machine2\share2` mapped as `W:`. You wish to open files that are in subdirectory `dir2` on `W:`.

When you open a file `file2` using `Open` from the `File` menu, AutoVue translates this upload request to `server://@0/\machine2\share2\dir2\file2`.

**Example 3**

Assuming that you have files on a shared network drive `\machine3\share3`. You wish to open files that are in subdirectory `dir3` on this shared drive. You wish to open file `file3` that exists in directory `dir3`. All the XRefs for this file exist in the same directory.

When you open file `file3`, using `Open` from the `File` menu, AutoVue translates this upload request to `server://@0/\machine3\share3\dir3\file3`. AutoVue also locates all the XRefs for this file that exist in the same directory.
Appendix D: Configuring a Directory-Browsing Servlet for the AutoVue Client

The basic setFile functionality described in "Configuring the AutoVue Client" allows for easy browsing of files on the server side, using the small servlet ListDirServlet provided with the installation. This servlet generates a list of the accessible server files in HTML format and sends it back to the client. The client can then select a file in the list and display it in the AutoVue client.

The ListDirServlet accepts three initialization parameters:

- RootDir: This is the root directory of all the directories that a user can browse on the server side.
- RootURL: This is the URL of the RootDir. Subdirectory URLs are assumed to be RootURL + relative path to the directory.
- HREFFormat: This is the format of the HRef generated for every file listed. In this format, the URL of the file listed replaces the %URL token. For example, the following default format generates a hyperlink that will trigger a setFile in the applet located in the frame named AppletFrame, for each file listed:

  HREFFormat=JavaScript:parent.AppletFrame.setFile('%URL')

Because the client only receives a URL list, basic security of URL browsing still applies to the file access. However, you can also specify URLs using the pseudo-protocol 'server:' and directly browse the server file system (thus eliminating the download overhead). In order to use this protocol, you just have to ensure that the RootDir directory is also the one specified in the [Server]/Directory key of the vueserver.ini file.

Refer to "Configuration Options in VueServer.ini" for more information.

Installing the ListDirServlet depends on the servlet engine your Web server is using, see "Appendix B: VueServlet Deployment". Once the servlet is properly installed (you can test the installation by accessing the servlet URL in your favorite Web browser), modifying the sample HTML code so that it displays the list of available files in the left frame is very easy. To do so, use the following servlet URL to access the VueServlet:

```
http://myserver/servlet/ListDirServlet
```

**Note:** You can set this URL as a frame in an HTML framset.
Appendix E: Identity Management System

Added an authentication plug-in scheme between the client and server to enable integrators to hook AutoVue to Identity Management Systems. Under this scheme, there is a plug-in for the AutoVue client and another for the server. The client uses its plug-in to obtain user credentials as part of the process of connecting to the server. The client encrypts the credentials and sends them to the server which uses its plug-in to authenticate the user who is trying to connect. If the server does not recognize the credentials, it refuses the connection.

A pair of default plug-ins are now supplied with AutoVue. The UsernamePasswordObtainer class is supplied so that the client can prompt the user for login information (username and password). The JAASAuthenticator class is supplied so that the server can use the Java Authentication and Authorization Service to authenticate using the authentication mechanisms specified in the configuration text file, jaas_authen.conf. The default version of this file is configured to authenticate using the Kerberos protocol which is supported by Windows Active Directory and many other popular identity repository solutions.

To configure the server to use the default authentication plug-in supplied with the product, perform the following:

1. Edit jvueserver.properties to specify the plug-in by uncommenting the following line:
   
   ```
   jvueserver.authenticator=com.cimmetry.jvueserver.JAASAuthenticator
   ```

2. Create a text file called jaas_authen.conf in <AutoVue Install Folder>\bin directory. Add the following text in jaas_authen.conf:

   ```
   AVServer {
       com.sun.security.auth.module.Krb5LoginModule requiredstoreKey=true;
   }
   ```

   Edit jvueserver.properties and add the following highlighted lines after the -Djava.security.policy parameter of jvueserver.cmdline:

   ```
   jvueserver.cmdline=-Xmx128M -Djava.security.policy="C:\Program Files\jVue\bin\policy"
   -Djava.security.krb5.realm=<realm> -Djava.security.krb5.kdc=<kdc>
   -Djava.security.auth.login.config=<full path to jaas_authen.conf>
   ```

   Replace <realm> with your security realm.
   Replace <kdc> with your key distribution center

3. Update the client Web pages that embed the AutoVue applet to add a new applet parameter:

   ```
   <PARAM NAME="CREDENTIALOBTAINER" VALUE="com.cimmetry.vueframe.UsernamePasswordObtainer"/>
   ```

4. Startup AutoVue Server.

5. Launch AutoVue client.

   An authentication dialog appears and prompts you for login information. On successful login, AutoVue client should launch.

Oracle Corp.
Appendix F: Usage Monitoring

AutoVue has usage monitoring to enable system administrators to track how many files of a format group are opened at any given time. For example, you can use this feature to track the number of licenses for the different product variations of a single deployment of AutoVue. Usage data is written to licusage.out file in the <AutoVue Install Folder>\bin directory.

AutoVue ships a utility to parse the usage log and present meaningful information to the system administrator.

The following is the format of the command line to run this utility:

```
usagestat [-c] <path to the input file>
```

where `usagestat` is the command to run this utility.

`[-c]` is an optional parameter and indicates that the utility should run in continuous mode.

`<path to the input file>` specifies the full path to the input file, i.e. the log file on which the statistics is based. This argument is mandatory.

The following is an example command line that runs the utility in a standard or regular mode.

```
usagestat c:\AutoVue\bin\LicUsage.out
```
Appendix G: AutoVue Mobile

AutoVue Mobile provides the ability to view and add markups to files in a disconnected environment. Using the AutoVue Mobile feature in AutoVue, you can create a Mobile Pack (a "packaged" file that contains the base file, all the external resources—fonts, XRefs—needed to fully display the file, and existing markups for the file).

In a disconnected environment, depending on the markup policy defined during Mobile Pack creation, you can add markups using the Desktop deployment of AutoVue. Markup policy defines a set of rules to determine certain restrictions and privileges for users of the Mobile Pack. If no markup policy is defined in the Mobile Pack, a default set of values are used.

The default markup policy file, MarkupPolicy.xml, can be found in the <AutoVue installation>in folder.

Note: For more information on Mobile Pack, refer to the User’s Manual.

The following table explains the actions included in the markup policy, their default values, and which values can be modified.

All the following actions can be combined with certain exceptions.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaveNewMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, new Markup file creation inside the Mobile Pack is allowed. If FALSE, new Markup file creation inside the Mobile Pack is not allowed. For new/imported (local file) Markup file, Markup Save and Markup Save As are disabled. For an existing Markup file, Markup Save As is disabled.</td>
</tr>
<tr>
<td>SaveExistingMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, resave of existing Markup file is allowed. If FALSE, the Markup file from the Mobile Pack cannot be re-saved. The Markup Save command will be disabled for the existing Markup file.</td>
</tr>
<tr>
<td>EditMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, the Markup file can be edited. If FALSE, the Markup file is opened as read-only. All manipulation commands at all levels—Markup file, markup layers, and markup entities—are disabled. Setting EditMarkup=False is equivalent to the Hide Icon menu option.</td>
</tr>
<tr>
<td>DeleteMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>Note: Only available for a Mobile Pack created with DMS files. If TRUE, the Delete Markup menu option is enabled in the Markup File Open dialog. If FALSE, the Delete Markup menu option is disabled in the Markup File Open dialog.</td>
</tr>
<tr>
<td>OpenMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, the Markup file is listed in the Markup File Open dialog. If FALSE, the Markup files is not listed in the Markup File Open dialog.</td>
</tr>
<tr>
<td>AutoOpenMarkup= &lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, the Markup file opens automatically when opening the Mobile Pack. If FALSE, the Markup file does not open automatically when opening the Mobile Pack.</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>FilterAttrFromGUI.&lt;GUI&gt;..&lt;Prop&gt;..&lt;Value&gt;==&lt;TRUE</td>
<td>FALSE&gt;</td>
<td>If TRUE, the given property value is removed from the GUI definition.</td>
</tr>
<tr>
<td>If FALSE, the given property value is not removed from the GUI definition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This action takes three parameters:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GUI: GUI definition to be modified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prop: Property to be removed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value: Property value to be removed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If no Value is specified, then the UI element that represents the given property in the GUI definition is removed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For example:</td>
<td>&lt;Action name=&quot;FilterAttrFromGUI/Edit.CSI_MarkupType.master&quot; default=&quot;false&quot;&gt;</td>
<td></td>
</tr>
</tbody>
</table>
The following is an example of how to define a markup policy in XML.

```xml
<MarkupPolicy>
  <Action name="SaveExistingMarkup" default="true">
    <ExConditions>
      <OrOperator>
        <AndOperator>
          <AnyMarkupFileCondition Name="CSI_MarkupType" Value="master"/>
          <MarkupFileCondition name="CSI_MarkupType" value="consolidated"/>
          <MarkupFileCondition name="CSI_DocAuthor" value="$CURRENT_USER"/>
        </AndOperator>
        <NotOperator>
          <MarkupFileCondition name="CSI_DocAuthor" value="$CURRENT_USER"/>
        </NotOperator>
      </OrOperator>
    </ExConditions>
  </Action>

  <Action name="EditMarkup" default="true">
    <ExConditions>
      MarkupFileCondition name="Original" value="true"/>
    </ExConditions>
  </Action>

  <Action name="DeleteMarkup" default="true">
    <ExConditions>
      <OrOperator>
        <AndOperator>
          <AnyMarkupFileCondition Name="CSI_MarkupType" Value="master"/>
          <MarkupFileCondition name="CSI_MarkupType" value="consolidated"/>
          <MarkupFileCondition name="CSI_DocAuthor" value="$CURRENT_USER"/>
        </AndOperator>
        <NotOperator>
          <MarkupFileCondition name="CSI_DocAuthor" value="$CURRENT_USER"/>
        </NotOperator>
      </OrOperator>
    </ExConditions>
  </Action>

  <Action name="FilterAttrFromGUI.Edit.CSI_MarkupType.master" default="false">
    <ExConditions>
      <AnyMarkupFileCondition name="CSI_MarkupType" value="master"/>
    </ExConditions>
  </Action>
</MarkupPolicy>
```
# Appendix H: Logging for the AutoVue Server

## Appenders

The following table lists the appenders that are defined in log4j.xml.

<table>
<thead>
<tr>
<th>Appender</th>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Appender</td>
<td>Appender for logging to file.</td>
<td>File: The name of the log file. Append: If set to TRUE, logs are appended to file after process restarts. If set to FALSE, the old files is discarded after the process restarts.</td>
</tr>
<tr>
<td>Rolling File Appender</td>
<td>Backs up (rolls) previous files when the maximum file size is reached. <strong>Note:</strong> This appender is enabled by default.</td>
<td>MaxFileSize: The maximum size that the output file is allowed to reach before being rolled over to backup files. MaxBackupIndex: The maximum number of backup files to keep. <code>${jvueserver.processIndex}</code>: AutoVue Server-specific parameter used to log AutoVue’s processes into a separate file.</td>
</tr>
<tr>
<td>Daily Rolling File Appender</td>
<td>Defines the frequency for rolling over a file.</td>
<td>DatePattern: Determines the roll-over schedule. For format details refer to log4j documentation.</td>
</tr>
<tr>
<td>Console Appender</td>
<td>Used for logging the program console window.</td>
<td></td>
</tr>
<tr>
<td>SMTP Appender</td>
<td>Send an e-mail when a specific logging event occurs (such as errors or fatal errors).</td>
<td>BufferSize: The maximum number of logging events to collect in a cyclic buffer. SMTPHost: The host name of the SMTP server that sends the e-mail. From: E-mail address of the sender. To: A comma-separated list of the recipients’ e-mail addresses. Subject: The subject of the e-mail.</td>
</tr>
<tr>
<td>NT Event Log Appender</td>
<td>Appends to the NT event log system. <strong>Note:</strong> This appender is only for Windows OSes.</td>
<td>Source: The source of the events.</td>
</tr>
</tbody>
</table>
Output Layout

The following table defines the available output layouts in the log4j.xml configuration file.

**Note:** The output XML file can be viewed in a GUI-based log viewer such as Apache Chainsaw.

<table>
<thead>
<tr>
<th>Output Layout</th>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>XML Layout</strong> (org.apache.log4j.xml.XMMLayout)</td>
<td>When this layout is enabled, log4j outputs the logs in XML format.</td>
<td><strong>Properties:</strong> Set this value to TRUE to force log4j to record Mapped Diagnostic Complex (MDC) values.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>AutoVue-specific MDC values:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>User:</strong> Outputs source username with logging event.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Document:</strong> Outputs current document name with logging event.</td>
</tr>
<tr>
<td><strong>Pattern Layout</strong> (com.cimmetry.jvueserver.logger.JVuePatternLayout)</td>
<td>When this layout is enabled, log4j outputs the logs in textual format allowing for flexible string format configuration.</td>
<td><strong>ConversionPattern:</strong> The string that controls formatting. For the list of formatting characters, refer to log4j documentation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>AutoVue-specific formatting characters in conversion pattern:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>%s:</strong> Outputs current document server index or “0” in the case of a session server.</td>
</tr>
</tbody>
</table>

The following is an excerpt from a sample log4j.xml configuration file for the SMTP appender.

```xml
<!-- SMTPAppender -->
<appender name="JVUE-SMTP" class="org.apache.log4j.net.SMTPAppender">
  <param name="Threshold" value="ERROR"/>
  <param name="BufferSize" value="512"/>
  <param name="SMTPHost" value="mycompany.com"/>
  <param name="From" value="user@mycompany.com"/>
  <param name="To" value="admin@mycompany.com"/>
  <param name="Subject" value="[SMTPAppender] AutoVue Server Admin notification"/>
  <layout class="com.cimmetry.jvueserver.logger.JVuePatternLayout">
    <param name="ConversionPattern" value="%d %-5p JVueServer%s: %m%n"/>
  </layout>
</appender>
```

Oracle Corp.
Note: To enable logging output to the console, you must uncomment the \texttt{JVUE-CONS} line in the log4j.xml configuration file as shown in the following figure:

```
<!-- Root logger -->
<!-- Uncomment additional appender-ref to output to different/multiple outputs -->
<root>
  <level value="debug"/>
  <appender-ref ref="JVUE-ROLL"/>
  <!-- <appender-ref ref="JVUE-FILE"/> -->
  <!-- <appender-ref ref="JVUE-DAILY"/> -->
  <appender-ref ref="JVUE-CONS"/>
  <!-- <appender-ref ref="JVUE-SMTP"/> -->
  <!-- <appender-ref ref="JVUE-EVENT"/> -->
</root>
```

### Logger Information

The following descriptions explain what kind of logger information will be seen for each class specified:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>com.cimmetry.jvueserver.management</td>
<td>Displays information relating the start-up of the AutoVue Server, communications between AutoVue Server clusters and connections from the console, and other server management-related reports.</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.lic usage</td>
<td>Displays information related to the usage of AutoVue Server (opening and closing sessions and documents).</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.configuration</td>
<td>Displays reports on loading errors of the server's configuration.</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.event</td>
<td>Displays information concerning posting and handling of different server events (opened and closed sessions, opened and closed documents, and so on).</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.cache</td>
<td>Displays information concerning the server's cache. Reports messages and errors related to loading the cache, locking, saving, deleting cached files as well as searching for archive and XRef files.</td>
</tr>
<tr>
<td>log4j.category.com.cimmetry.connection</td>
<td>Displays information concerning downloading files from the network.</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.session</td>
<td>Displays reports on sessions opening, closing and being restored, and the loading and saving of session profiles.</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.document</td>
<td>Displays document-related information (open, information, properties, and so on).</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.document.native</td>
<td>Displays messages and error reporting for document related native code execution.</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.dms</td>
<td>Displays DMS-related operations (open, download, save, properties, and so on).</td>
</tr>
<tr>
<td>com.cimmetry.jvueserver.mobilepack</td>
<td>Displays information concerning generation and usage of mobile packs.</td>
</tr>
</tbody>
</table>
You can specify what kind of information to output by setting the classes to one of the following information levels:

<table>
<thead>
<tr>
<th>Information Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO</td>
<td>Displays informative messages such as session information, document open requests.</td>
</tr>
<tr>
<td>WARN</td>
<td>Displays error messages that are caused by factors external to AutoVue server such as RMI ports already in use.</td>
</tr>
<tr>
<td>ERROR</td>
<td>Displays errors or exceptions that are related to server startup.</td>
</tr>
<tr>
<td>OFF</td>
<td>Turn logging off. This is the default value.</td>
</tr>
</tbody>
</table>

**Note:** If you need more specific error messages, you can turn on verbosity for specific classes.

**For Example:**

```java
com.cimmetry.jvueserver.management=INFO
com.cimmetry.jvueserver.session=WARN
com.cimmetry.jvueserver.document=ERROR
com.cimmetry.jvueserver.dms=ALL
```

These four lines mean that session information will be displayed for the management class, warning messages will display for the session class, error messages pertaining to document requests will display for the document class. For the com.cimmetry.jvueserver.dms package, all messages be reported.

Refer to the Apache Web site and log4j documentation for more information.
Appendix I: List of INI Options

In the following sections, option section headers are indicated in brackets []. Section headers in the INI file must be specified in brackets. The options for the section are discussed in the table below the section header.

**Note:** When you add multibyte paths or INI option values to INI files, make sure to save the files with Unicode encoding.

**allusers.ini and default.ini Options**

When users connect to the AutoVue server for the first time (for example, when profiles are created for the first time), the contents of `default.ini` are copied to the users’ own INI file (“username”.ini).

If you want all users that connect to AutoVue to have the same initial default options, specify these options in `default.ini`. When users connect to the AutoVue server, options set in allusers.ini are transferred to the user profile.

If you want set options for specific users only, you can do so by adding required options to their “username”.ini files. The options set in `allusers.ini` always override user profile settings.

All INI options described in this appendix can be set in allusers.ini or default.ini or user-specific INI files.

**Acrobat PDF Options**

Configure options for Adobe PDF files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDFCUSTOMRESOLUTION=&lt;&lt;val &gt;</td>
<td>When viewing PDF documents, specify a resolution at which to display the documents. This corresponds to Adobe’s resolution setting (<code>Preferences &gt; Page Display &gt; Resolution</code>). This resolution setting determines the zoom level at which AutoVue displays PDF documents (same behaviour as Adobe). <code>val</code> can be any value between 10 and 4800. When <code>val</code> is &lt;=0, use system screen resolution.</td>
<td>110</td>
</tr>
<tr>
<td>PDFENHANCENLINES=[0</td>
<td>1]</td>
<td>If set to 1, this option results in enhanced line display similar to the Adobe Acrobat option Enhance Thick Lines. This option is useful for cases when lines start to disappear in the AutoVue display when zooming out. If set to 0, this option is disabled and the line display is not enhanced.</td>
</tr>
<tr>
<td>PDFMAXIMAGESIZEMB = [val]</td>
<td>Allows users to set the maximum image size (in Mbytes) of large bitmaps in PDF files after which the PDF decoder starts reducing resolution to reduce memory use.</td>
<td>150</td>
</tr>
</tbody>
</table>
Allegro Options
Configure options for Allegro files.

[ECAD]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLEGRO_USETRUETYPEFON TS = [0</td>
<td>1]</td>
<td>Set to 0 to use stroke font. Set to 1 to use true type to use true type font instead (increases performance).</td>
</tr>
<tr>
<td>ECAD_3D_SHOWHOLES = [0</td>
<td>1]</td>
<td>Set to 1 if you want holes to be drawn in the 3D model. Set to 0 if you do not want holes to be drawn in the 3D model (increases performance). Currently only affects Allegro files.</td>
</tr>
</tbody>
</table>

AutoCAD Options
Configure options for AutoCAD drawings.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAD_FAST3D= [0</td>
<td>1]</td>
<td>Set to 1 to improve rendering speed of AutoCAD 3D. Note: Setting this option to 1 means that layers will not be listed and AutoVue streams all meshes and extrusions in one body. Set to 0 will mean slower rendering of AutoCAD 3D. However, layer information is listed and each mesh is streamed in its own entity.</td>
</tr>
<tr>
<td>ACAD_MAXNUMLINETYPECLES = [0-1000]</td>
<td>Specifies the maximum number of times a line type pattern can be repeated for a particular entity segment. Note: Any entity segment that has more cycles than then specified line type is drawn with a solid line type.</td>
<td>256</td>
</tr>
<tr>
<td>ACAD_PENSETTINGSAFFECTLINEWIDTH= [0</td>
<td>1]</td>
<td>Option is for AutoCAD drawings. When set to 0, pen settings do not affect non-zero constant width polylines. When set to 1, pen settings affect non-zero constant width polylines.</td>
</tr>
<tr>
<td>ACAD2004RGBCOLOR= [1</td>
<td>0]</td>
<td>Set to 1 to use RGB color. Set to 0 to use AIC (AutoCAD Indexed Color). Note: Should be set to 0 to be able to use pen settings for printing. Note: This is for AutoCAD files, version 2004 and later.</td>
</tr>
<tr>
<td>ACADDEFAULTFONT= [fontname]</td>
<td>This font is substituted if an 8-bit font is not located for AutoCAD drawings.</td>
<td></td>
</tr>
<tr>
<td>ACADDEFAULTBIGFONT= [bigfontname]</td>
<td>This font is substituted if a 16-bit font is not located.</td>
<td></td>
</tr>
<tr>
<td>ACADDEFAULTSHAPEFONT= [filename]</td>
<td>Specifies the default shape font filename that should be used if the desired shape font file and an equivalent AutoVue font cannot be found. You can specify a full file path or just the file name. The decoder searches for the font file name in the file path (if provided), the base file folder, XFONTPATHS, and the fonts directory of the installation.</td>
<td></td>
</tr>
</tbody>
</table>
AutoVue Options

Configure options for AutoVue.

[Settings]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAWORDER=[0</td>
<td>1]</td>
<td>Set to 1 to draw sorted (ordered) entities from the last save of the DWG file. Set to 0 to draw entities in the order they were first created.</td>
</tr>
<tr>
<td>FIELDDISPLAY = [0</td>
<td>1]</td>
<td>Specify whether or not field backgrounds display. Set to 1 to display field background. Set to 0 to hide field background. <strong>Note:</strong> For AutoCAD 2005 and later.</td>
</tr>
<tr>
<td>LWDEFAULT = [1-100]</td>
<td>Set the default line weight. Specify a value between 1 (which corresponds to 0.01mm) and 100 (which corresponds to 1mm). Default value is 25 (which corresponds to 0.25mm).</td>
<td>25</td>
</tr>
<tr>
<td>LWDISPLAYSCALE = [0-100]</td>
<td>This option controls the display scale of line weights in the modelspace page for AutoCAD files version 14 and above. Set this option to [0-100]. For no line weight scaling, set this option to 25. For thicker lines, set this option above 25. For thinner lines, set this option below 25.</td>
<td>25</td>
</tr>
<tr>
<td>SHOWALLLAYERS=[0</td>
<td>1]</td>
<td>Set to 1 to turn on all the layers in the base and XRef files.</td>
</tr>
<tr>
<td>SHOWNONRECTVIEWPORTS = &lt;0</td>
<td>1&gt;</td>
<td>In AutoCAD it is possible to create non-rectangular viewports. When a file has non-rectangular viewports, it may take AutoVue longer to display the drawing. Set to 1 to display non-rectangular viewports. Set to 0 to disable display of non-rectangular viewports and improve performance. Note that the accuracy of the display will be compromised. <strong>Note:</strong> This option applies to AutoCAD 2000 and up files.</td>
</tr>
</tbody>
</table>

**Autodesk DWF Options**

Configure options for Autodesk DWF files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWFRGBCOLOR=[0</td>
<td>1]</td>
<td>Set to 1 to use RGB color. Set to 0 to use AIC (AutoVue Indexed Color). <strong>Note:</strong> Should be set to 0 to be able to use pen settings for printing.</td>
</tr>
</tbody>
</table>
### Autodesk Inventor Options

Configure options for Autodesk Inventor file.

**[Options]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWFCOLORTBL=[file path]</td>
<td>Option is applicable only when DWFRGBCOLOR=0. Specify the path and the name to a color table. Specified color table overrides the palette stored in the DWF file. If no external palette is specified, the default palette stored in the DWF file will be used. Here are some of the common colors and their corresponding pen numbers: 0,0,0 /* 0, Black <em>/ 128,128,128 /</em> 248, Gray <em>/ 255,0,0 /</em> 190, Red <em>/ 0,255,0 /</em> 40 Green <em>/ 255,255,0 /</em> 251, Yellow <em>/ 0,0,255 /</em> 15, Blue <em>/ 255,0,255 /</em> 195, Violet <em>/ 0,255,255 /</em> 45, Cyan <em>/ 255,255,255 /</em> 225, White */</td>
<td></td>
</tr>
</tbody>
</table>

### Cadence Options

Configure options for Cadence Concept HDL file.

**[ECAD]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADENCE_CALLOUTS FILE = [file path]</td>
<td>Specifies the full path to a callouts file. The callouts file is used to create abstract mechanical part entities for the design</td>
<td></td>
</tr>
<tr>
<td>CADENCE_CONCEPT HDLONLY=[0</td>
<td>1]</td>
<td>Set to 1 so that PCB boards should not be displayed. 0</td>
</tr>
<tr>
<td>CADENCE_CPMONLY=[0</td>
<td>1]</td>
<td>Set to 1 to only display files listed in the CPM file. 1</td>
</tr>
</tbody>
</table>
# Cadkey Options
Configure options for Cadkey files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRTFONTMAP= [fullpath to prtfont.map]</td>
<td>Specifies the full path to the Cadkey/PRT font map file. This file maps Cadkey/PRT fonts to TrueType fonts.</td>
<td>The file Prtfont.map in the program directory</td>
</tr>
</tbody>
</table>

# CATIA Options
Configure options for CATIA 4 and 5 files.

**Note:** For CATIA 4-specific files see "CATIA 4 Options" and for CATIA 5-specific options see "CATIA 5 Options".

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATIALOADPMI = [0</td>
<td>1]</td>
<td>Set to 1 to enable displaying of PMIs. Set to 0 to disable displaying of PMIs.</td>
</tr>
</tbody>
</table>

# CATIA 4 Options
Configure options for CATIA 4-specific files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATIA4SPLINEGEOMETRY = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>CATIAPROJECTFILE= [file path]</td>
<td>Specify the full path to the CATIA 4 project file.</td>
<td></td>
</tr>
<tr>
<td>LOADCATIAWIRES=[0</td>
<td>1]</td>
<td>Set to 0 to disable display of 3D wires for CATIA 4 3D.</td>
</tr>
<tr>
<td>CATIADEFAULTFONT</td>
<td>Specify the default Catia 4 native font to use if a font is not found.</td>
<td></td>
</tr>
<tr>
<td>CATIAFILTERNONROOT=[0</td>
<td>1]</td>
<td>Set to 0 to display root entities for CATIA 4 3D.</td>
</tr>
<tr>
<td>CATIAFILTERNOSHOWS=[0</td>
<td>1]</td>
<td>Set to 0 so that no show entities are displayed for CATIA 4 3D.</td>
</tr>
<tr>
<td>CATIAIGNOREPROJECTIONLAYER=[0</td>
<td>1]</td>
<td>Set to 1 to support projected view visibility through draft view layer settings for CATIA 4 drawings</td>
</tr>
</tbody>
</table>
**CATIA 5 Options**

Configure options for CATIA 5-specific files.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATIA5BUILDCGMSETS = [0</td>
<td>1]</td>
<td>Controls the display of Geometrical sets. Set to 1 to show geometrical sets structure in the Model Tree.</td>
</tr>
<tr>
<td>CATIA5BUILDIINVISIBLECGMBODIES = [0</td>
<td>1]</td>
<td>Set to 1 to process and display invisible BREP bodies for CATIA 5 files.</td>
</tr>
</tbody>
</table>

**CGM Options**

Configure options for CGM files.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGMNOCLIP = [0</td>
<td>1]</td>
<td>Set to 0 to enable clipping in CGM files. Some files may display as empty when the value is 0. Set to 1 to disable clipping.</td>
</tr>
<tr>
<td>SHOWBACKGROUND=[0</td>
<td>1]</td>
<td>Set to 1 to display the background of CGM files with color. Set to 0 if you have problems printing CGM files that contain large black or dark backgrounds.</td>
</tr>
</tbody>
</table>
**DirectModel (JT) Options**

Configure options for DirectModel (JT) files.

<table>
<thead>
<tr>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>JTRESOLUTION = [HI</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Excel Options**

Configure options for Excel files.

<table>
<thead>
<tr>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>DOCVIEW = [0</td>
</tr>
<tr>
<td>DOCVIEWSHOWHEADERS = [0</td>
</tr>
<tr>
<td>USESMALLFONTSFOREXCELSMALLTEXT = [0</td>
</tr>
</tbody>
</table>

**Gerber Options**

Configure options for Gerber files.

<table>
<thead>
<tr>
<th>Gerber Format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>APERTURE_FORMAT_FILEPATH = [file path]</td>
</tr>
<tr>
<td>ENDOFCOMMAND = [ASTERISK</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>INCREMENTALMODE = [0</td>
</tr>
<tr>
<td>MULTIQUADRANT_ARCS_BY_DEFAULT = [0</td>
</tr>
<tr>
<td>NUMDECIMALS = [num]</td>
</tr>
<tr>
<td>NUMDIGITS = [num]</td>
</tr>
<tr>
<td>TOOLFILEPATH = [&lt;filepath&gt;/default.too]</td>
</tr>
<tr>
<td>TOOLFILETYPE=[0</td>
</tr>
<tr>
<td>TRAILINGZEROS = [0</td>
</tr>
<tr>
<td>TOOL_UNIT=[-1</td>
</tr>
<tr>
<td>UNITS = [1</td>
</tr>
</tbody>
</table>
**HPGL/HPGL2 Options**

Configure options for HPGL/HPGL2 file.

*[Options]*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPBACKGROUND = [0</td>
<td>1]</td>
<td>Set to 0 so that the page background is not drawn. Set to 1 to draw page background. <strong>Note:</strong> Applies to HPGL/HPGL2 files.</td>
<td>0</td>
</tr>
<tr>
<td>HPGLCOLORTbl = [&lt;file path&gt;=hpglcol.tbl]</td>
<td>Specifies the color table for HPGL/HPGL2 files. The color table file specifies the mapping between a pen number and a color. <strong>Note:</strong> This option is used only if the file does not explicitly specify pen colors with the HPGL PC command.</td>
<td>Web Version: &lt;install directory&gt;\jVue\bin\hpglcol.tbl Desktop Version: &lt;install directory&gt;\av\avwin\hpglcol.tbl</td>
<td></td>
</tr>
</tbody>
</table>
**IFC Options**

Configure options for IFC 3D files.

*Options*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFCCOLORS</td>
<td>Specify group element colors for IFC files.</td>
<td>IFCCOLORS=WALLSTANDARDAS(255,255,255) ASSETS, CURTAINWALLS(255,255,255) DOORS(255,219,153) OTHERS(205,91,69) SLABS(122,197,205) WINDOWS(255,255,255)</td>
</tr>
<tr>
<td>Syntax:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFCCOLORS=GROUP_ELEMENT_NAME(r,g,b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or IFCCOLORS=GROUP_ELEMENT_NAME(color_name)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>where GROUP_ELEMENT_NAME is the name of the group element. For example DOORS, WINDOWS, WALLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(r,g,b) is the RGB value for the color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>color_name is the string representing the color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All color definitions should be on the same line and should be separated by spaces. For example: IFCCOLORS= WALLS(WHITE) DOORS(GREEN) WINDOWS(BROWN)</td>
<td>Special element name OTHERS is used for all elements that are not in the color definition.</td>
<td>Special color NONE is used when you want to use the 3d default element color for a group element.</td>
</tr>
<tr>
<td>IFC pre-defined color extension is defined as below:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color Name</td>
<td>(R,G,B)</td>
<td></td>
</tr>
<tr>
<td>LIGHTCYAN</td>
<td>(188,255,255)</td>
<td></td>
</tr>
<tr>
<td>BROWN</td>
<td>(205,91,69)</td>
<td></td>
</tr>
<tr>
<td>LIGHTYELLOW</td>
<td>(255,219,153)</td>
<td></td>
</tr>
<tr>
<td>CADETBLUE</td>
<td>(122,197,205)</td>
<td></td>
</tr>
<tr>
<td>IFCCOLORS_MODE=0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>IFCREADPROPERTIES=0</td>
<td>1]</td>
<td>Enable or disable loading of attributes for IFC files. Set to 0 to display all supported entity properties for an IFC file. Set to 1 to display only the default entity properties which are Display Mode, Name and Visibility.</td>
</tr>
<tr>
<td>IFCLOADINVISIBLESPACES=0</td>
<td>1</td>
<td>Enable or disable loading of internal spaces boundary geometry. Set to 1 to enable loading of internal spaces boundary geometry. Set to 0 to disable loading of internal spaces boundary geometry.</td>
</tr>
<tr>
<td>IFCWINDOW_TRANSPARENCY=[int value]</td>
<td>Specify the transparency level for windows in IFC files. Value is an integer between 0 (no transparency) and 100 (full transparency).</td>
<td>55</td>
</tr>
</tbody>
</table>
JPEG Options
Configure options for JPEG files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPGQUANTIZE = [0</td>
<td>1]</td>
<td>Quantizes JPEG images to 256 colors for quicker display. Quantizing images affects quality of the color display. Set to 1 to quantize images. Set to 0 to use true colors.</td>
</tr>
</tbody>
</table>

JPEG 2000 Options
Configure options for JPEG 2000 files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>J2KRESOLUTION= [DYNAMIC</td>
<td>Set to HIGH to display with a high resolution. This could cause a decrease in performance. Other values: LOW, MEDIUM, and DYNAMIC. You can also set J2KRESOLUTION values to +num or -num, where num is a number between 1 and 100. Setting the value to +num gives the same result as DYNAMIC but increases the resolution by a factor of num where num is a value from 1 to 100 (up to the maximum possible resolution of the image). Note that this will decrease performance. Setting to -num gives the same result as DYNAMIC but decreases the resolution by a factor of num where num is a value from 1 to 100 (down to the lowest possible resolution of the image). Note that this will increase performance. DYNAMIC</td>
<td>1</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>LOW</td>
<td>+num</td>
</tr>
</tbody>
</table>

ME10/OneSpace Designer Drafting Options
Configure options for ME10/OneSpace Designer Drafting files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME10CONSTRUCTION GEOM = [0</td>
<td>1]</td>
<td>Set to 1 to draw construction entities for ME10 files.</td>
</tr>
<tr>
<td>ME10MULTIBYTE = [0</td>
<td>1]</td>
<td>This option sets the priority for glyph search in Multibyte/Singlebyte fonts. Set to 0 if the file does not contain any Multibyte fonts (Far Eastern Languages). Set to 1 if the file contains a mixture of Singlebyte/Multibyte fonts.</td>
</tr>
</tbody>
</table>
**Microsoft Outlook Options**

Configure options for Microsoft Outlook MSG files.

**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTLOOKLINKFLAG=[0123]</td>
<td>Enable or disable hyperlinks or attachments in Outlook MSG files.</td>
<td></td>
</tr>
<tr>
<td>DOWNLOADWEBRESOURCES=[01]</td>
<td>Specifies whether external (files other than .msg files) resources are downloaded and displayed.</td>
<td></td>
</tr>
</tbody>
</table>
## MicroStation Options

Configure options for MicroStation files.

### [Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGN_FAST3D = [0</td>
<td>1]</td>
<td>Set to 1 to improve rendering speed of MicroStation 7 and 8 files. <strong>Note:</strong> Setting this option to 1 means that layer visibility will not be supported and AutoVue streams all meshes and extrusions in one body. Set to 0 will mean slower rendering of MicroStation 7 and 8 files. However, layer visibility is supported and each mesh is streamed in its own entity.</td>
</tr>
<tr>
<td>DGN8LWDISPLAYSCALE = [0.0-1000.0]</td>
<td>Set to a floating point value, greater than or equal to 0.0, representing the scaling factor which is applied to all lineweights in the drawing. <strong>Example:</strong> Set to 0.0: Reduces all lineweights to 0 (1 pixel width). Set to 1.0: Lineweights remain at their default value. Set to 0.5: Reduces all lineweights by half. Set to 2.0: Multiplies all lineweights by 2.</td>
<td>1.0</td>
</tr>
<tr>
<td>DGN8XREFUNITS = [unit]</td>
<td>Specifies the unit to use for AutoCAD XRefs when units information for the XRefs is not stored in the MicroStation drawing. The selected unit should be the same as the unit chosen for the DWG in MicroStation. Consult the MicroStation help for a complete list of units. If the unit is not specified or an invalid value is entered, AutoVue reads the units from the AutoCAD XRef and hence, XRefs may not be scaled properly. <strong>Example:</strong> DGN8XREFUNITS = meters  <strong>Note:</strong> Option applies to MicroStation version 8 files with AutoCAD XRefs.</td>
<td></td>
</tr>
<tr>
<td>DGNARABICFONTS = [0</td>
<td>1]</td>
<td>Support for Arabic fonts for MicroStation. Set to 1 to specify right-to-left drawing.</td>
</tr>
<tr>
<td>DGNCOLORTBL = [&lt;file path&gt;/color.tbl]</td>
<td>Specifies the full path to a MicroStation DGN color table file. This option is used only if the MicroStation file does not have a color-table element in it. If a color-table element exists in the file, it will supersede this option.  <strong>Note:</strong> Option applies to MicroStation version 7 files.</td>
<td></td>
</tr>
<tr>
<td>DGNDEACTIVATELEVSYM B = [0</td>
<td>1]</td>
<td>When MicroStation’s Settings\View Settings\Level Symbology flag is set, all graphic entities are displayed using the level (the one the entity belongs to) settings for color, line style and line width (the entity’s symbology). This option is implemented to overwrite the Settings\View Settings\Level Symbology flag and display a file using the individual entity’s symbology.  <strong>Note:</strong> Option applies to MicroStation 7 and 8 files.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>DGNDISABLEZCLIP = &lt;0</td>
<td>1&gt;</td>
<td>Specifies whether to take the z-axis into consideration when applying a clip region (a cut-out region) to a 2D drawing. Set to 1 if the contents of the clipped image should not be restricted based on the z-coordinate of individual objects. Set to 0 if the contents of the clipped image should be restricted based on the z-coordinate of individual objects. <strong>Note:</strong> This option only applies to 2D drawings; it is not considered when loading a 3D model. <strong>Note:</strong> Option applies to Microstation 7 files.</td>
</tr>
<tr>
<td>DGNFONTRSC = [&lt;file path&gt;/font.rsc;full 2. . .]</td>
<td>Specifies a semi-colon separated list of the full paths to fonts for the MicroStation font RSC files.</td>
<td></td>
</tr>
<tr>
<td>DGNIRASB = [0</td>
<td>1]</td>
<td>Set to 0 so that MicroStation raster hybrid files follow the I/RASB conventions for raster extents. Set to 1 if you find that the raster components of MicroStation files appear stretched.</td>
</tr>
<tr>
<td>DGNLSTYLERSC = [&lt;file path&gt;/style.rsc]</td>
<td>Specifies the full path to a MicroStation linestyle resource file that will be used to render linestyles and multi-line patterns. <strong>Note:</strong> Option applies to MicroStation 7 and 8 files.</td>
<td></td>
</tr>
<tr>
<td>DGNREFCYLECHECK = [0</td>
<td>1]</td>
<td>When set to 1, the decoder will check for circular references in reference paths. Circular references will not be displayed, except for the case where a given model references itself. When set to 0, all references will be displayed, as long as nesting depth permits. <strong>Note:</strong> Option applies to MicroStation 8 files and corresponds to MicroStation v8.5 environment variable MS_REF_CYCLECHECK.</td>
</tr>
<tr>
<td>DGNSHOWZEROLENGTHLINES = [0</td>
<td>1]</td>
<td>Set to 1 to display zero-length lines as fixed-sized filled squares. Set to 0 to ignore zero-length lines. <strong>Note:</strong> Option applies to Microstation 7 files.</td>
</tr>
<tr>
<td>DGNLSTYLEDASHDOT = [description, number of patterns, pattern1, pattern2,... , pattern6]</td>
<td>Defines up to seven line styles (indexed from 1 to 7). Each line style, separated by a comma, can include up to six patterns. Each line style must be preceded by a description and a number specifying the number of patterns for the style. <strong>Example:</strong> DGNLSTYLEDASHDOT = style1,5,-1,1,0,-1,2,style2,3,2,-2,-2 In this example, two line styles (index 1 and index 2) are defined. the line styles provided by this parameter replaces the default seven standard styles. A line that uses style index that has not been provided is displayed as a solid line (for example, a line with style3 when only two styles have been defined).</td>
<td></td>
</tr>
</tbody>
</table>
NC-Drill Options
Configure options for NC-Drill files.

[ECAD]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCD_UNITS=[1</td>
<td>2]</td>
<td>Specifies units for NC-Drill files.</td>
</tr>
<tr>
<td></td>
<td>1 = inches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 = millimeters</td>
<td></td>
</tr>
</tbody>
</table>
| NCD_TRAILINGZEROSOMITTED=[0|1|2|3] | 0 = Coordinate data is trailing zero omitted  
                             | 1 = Coordinate data is leading zero omitted                                | 0       |
|                            | 2 = Coordinate data is all digits present                                  |         |
|                            | 3 = Coordinate data is explicit decimal point                              |         |
| NCD_COMMENTSYMBOL=[symbol] | Specifies the comment symbol.                                               | ;       |
| NCD_INCREMENTALMODE=[0|1]     | Set to 1 if data is in incremental mode.                                    | 0       |
|                            | 0 = absolute mode                                                           |         |
|                            | 1 = incremental mode                                                        |         |
| NCD_NUMDIGIT=[0-6]         | Specifies the number of digits. Enter a value between 0 and 6.              | 2       |
|                            | **Note:** Changing this value will affect the x, y coordinate.              |         |
| NCD_NUMDECIMALS=[0-6]      | Specifies the number of decimals. Enter a value between 0 and 6.            | 4       |
|                            | **Note:** Changing this value will affect the x, y coordinate.              |         |
| NCD_APERTURE_FORMAT_FILEPATH=[file path] | Complete path for Aperture format file. This file provides information on how to read the tool file |         |

OrCAD Layout Options
Configure options for OrCAD Layout files.

[ECAD]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
</table>
| ORCAD_CUTOUT_COPPER_POUR=[0|1]       | Controls whether or not to display the copper pour cutouts for OrCAD Layout files.  
                             | Set to 1 to display the copper pour cutouts.                                | 0       |
|                                       | Set to 0 to disable the display.                                             |         |
# Pro/ENGINEER Options

Configure options for Pro/ENGINEER files.

## [Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROE2DLOADPICTURE = [0</td>
<td>1]</td>
<td>Set to 1 to load the preview data for Pro/ENGINEER 2D Drawings. If preview does not exist, the 2D drawing will be generated from the 3D Model.</td>
</tr>
<tr>
<td>PROE2DLOADSAVEDDISPLAYLISTS = [0</td>
<td>1]</td>
<td>Set to 1 to load the display list instead of generating the 2D drawing from the 3D Model. Option applies to Pro/ENGINEER 2D files. If the display list does not exist, the 2D drawing will be generated from the 3D Model.</td>
</tr>
<tr>
<td>PROE2DTANNEEDEDFULTSTYLE = [0-4]</td>
<td>Specifies the default line style for tangent edges if it is not saved in the native file. The styles are: 0 - Solid, 1 - Disabled, 2 - Control, 3 - Phantom, 4 - Dimmed</td>
<td>0</td>
</tr>
<tr>
<td>PROE2DVIEWDEFAULTSTYLE = [HIDDEN</td>
<td>WIREFRAME</td>
<td>SHADING</td>
</tr>
<tr>
<td>PROELANG=[native font]</td>
<td>Specifies the native font to use for Pro/ENGINEER 2D drawings. Possible values are: Korean/Japanese/Chinese_cn/Chinese_tw/Hebrew/Russian</td>
<td>0</td>
</tr>
<tr>
<td>PROELOADCOSMETICS = [0</td>
<td>1]</td>
<td>Set to 0 to turn off display of datum cosmetics (coordinate system, datum planes and datum axes and datum points).</td>
</tr>
<tr>
<td>PROELOADCOSMETICWIRES=[0</td>
<td>1]</td>
<td>Set to 0 to turn off display of cosmetic wires.</td>
</tr>
<tr>
<td>PROELOADPMIDATA = [0</td>
<td>1]</td>
<td>Set to 0 to disable display of PMI entities.</td>
</tr>
<tr>
<td>PROEMASSPROPERTYMESH = [0</td>
<td>1]</td>
<td>Set to 1 to compute mass properties (volume, surface area, mass,...) using the mesh model. Set to 0 to compute mass properties using the BRep model.</td>
</tr>
<tr>
<td>PROEPMIDIMTOLDISPLAY = [0</td>
<td>1]</td>
<td>Set to 1 to display tolerance for dimension entities for Pro/ENGINEER 3D files.</td>
</tr>
<tr>
<td>PROESHOWHIDDENLINEDASHED=[0</td>
<td>1]</td>
<td>This option controls the display and printing of hidden lines contained in Pro/ENGINEER drawings. Set to 1 to display and print hidden lines as dashed lines. Set to 0 to display and print hidden lines as solid lines.</td>
</tr>
</tbody>
</table>
SolidWorks Options
Configure the option for SolidWorks files.

**[Options]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWWIRECOLORVISIBLE=[int value]</td>
<td>Specifies the color to use for drawing Solidworks wireframe models for Solidworks drawings. Value should be an integer value specifying the RGB color.</td>
<td>0 (Black)</td>
</tr>
<tr>
<td>SWSHOWVIEWPORTBORDER = [0/1]</td>
<td>Set to 1 to display the border (bounding box) of 2D views in a SolidWorks drawing. Set to 0 so that no border is drawn.</td>
<td>0</td>
</tr>
</tbody>
</table>

STEP Options
Configure options for STEP file.

**[Options]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEPDETAILEDTREE = [0/1]</td>
<td>Set to 1 to show detailed tree for STEP 3D files.</td>
<td>0</td>
</tr>
<tr>
<td>STEPFACEPOSITIVECOLOR = [0/1]</td>
<td>Option applies to STEP files. Set to 1 so that AutoVue uses either the color for “.BOTH” sides of the face if it is set or the color of the “positive” face side if it is set. Set to 0 so that AutoVue uses either the color for “.BOTH” sides of the face if it is set or selects the “positive” or “negative” face side color depending on the face sense.</td>
<td>0</td>
</tr>
</tbody>
</table>

Text Options
Configure options for text files.

**[Options]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXPLAINTEXTAGES = [num]</td>
<td>Sets the maximum number of plain pages to be loaded to help improve performance. The option only affects unformatted text; other types of documents (Word, RTF, and so on) are not affected. <strong>Note:</strong> Setting the option value to 0 or less results in the entire file loading.</td>
<td>1000</td>
</tr>
</tbody>
</table>
TIFF Options
Configure options for TIFF files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIFF_ZERO_PIXEL = [BLACK</td>
<td>Specifies how pixel values are interpreted in black and white</td>
<td>FILE</td>
</tr>
<tr>
<td></td>
<td>WHITE</td>
<td>TIFF files. Set to <strong>BLACK</strong> to force zero pixels to display black. Set to <strong>WHITE</strong> to force zero pixels to display white. Set to <strong>FILE</strong> to force zero pixels to display as the pixel color specified in the file.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This only applies to black and white TIFF images.</td>
<td></td>
</tr>
</tbody>
</table>

Visio Options
Configure options for Visio files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISIODRAWINGPAGE = [0</td>
<td>1]</td>
<td>Specify if you want to display Visio files in drawing mode or in print mode. Set to 1 to display in print mode.</td>
</tr>
<tr>
<td>VISIOPAGE = [0</td>
<td>1]</td>
<td>0: Off</td>
</tr>
<tr>
<td></td>
<td>1: On. Displays the page outline and background.</td>
<td></td>
</tr>
<tr>
<td>VISIOPAGEBKCOLOR = [num]</td>
<td>Used to turn ON/OFF the page background fill color for Visio</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>files. If set to the default -1, there will be no background. You can specify an integer that represents an RGB color (Red + 256<em>Green + 65536</em>Blue). The values for Red, Green, and Blue range from 0 to 255. Only the outline will be displayed if VISIOPAGE is on (=1).</td>
<td></td>
</tr>
</tbody>
</table>

Word Options
Configure options for Microsoft Word files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMDOCFONTSUBSTITUTION</td>
<td>Specifies the path of the custom font mapping file (docfont.map) to use for word documents. The docfont.map contains font mapping information that identifies what font to use if a font is missing. If you wish to modify font mappings, update docfont.map.</td>
<td>C:/&lt;AutoVue installation directory&gt;/bin/fonts</td>
</tr>
<tr>
<td>DOC_SHOWTABLEGRIDLINES =</td>
<td>Turn table grid lines on and off. Set to 1 to display the table gridlines. Set to 0 to hide the table gridlines. Unlike cell borders, gridlines never print.</td>
<td>0</td>
</tr>
</tbody>
</table>
# General Options

Configure options that apply to parameters such as fonts, performance, and color

## Options

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTIALIAS = [0</td>
<td>1]</td>
<td>Aliasing is the distortion of a continuous line due to the nature of screen display, which relies on a matrix of pixels. Anti-aliasing visually corrects this by introducing additional colored pixels to give the impression of a continuous line or curve. If set to 1, anti-aliasing is enabled. If set to 0, anti-aliasing is disabled and degrades the quality of the display.</td>
</tr>
<tr>
<td>ARCRESOLUTION = [num]</td>
<td>Indicates the degree increment used in rendering arcs. Value can be a number from 0 to 10.</td>
<td>10</td>
</tr>
<tr>
<td>BRIGHTNESS = [value]</td>
<td>Specify the brightness value for the current control (this only affects colored raster formats and vectors overlaying them). Value can be an integer between -100 (black display) and 100 (white display).</td>
<td>0</td>
</tr>
<tr>
<td>CLIPLIMIT = [num]</td>
<td>Reduce file loading time. Set num to more than 1500: the clipping is performed on the server (in &quot;TILED&quot; rendering format). Set num to less than 1500: the clipping is performed on the client (in “METAFILE(CMF)” rendering format).</td>
<td>1500</td>
</tr>
<tr>
<td>CONTRAST = [value]</td>
<td>Applies contrast to raster images. The value can range from 0 (low contrast) to 100 (high contrast).</td>
<td>0</td>
</tr>
<tr>
<td>CONVERTPDFTHROUGHPRINTING = &lt;0</td>
<td>1&gt;</td>
<td>Specifies whether markups should be included as graphical elements in the PDF or added as annotations to the PDF. Set to 1 to add as graphical elements. Set to 0 to convert to PDF annotations.</td>
</tr>
</tbody>
</table>
| DEFAULTDOCpagesize= [height , width] | Specifies the page size in inches that AutoVue should use in order to properly display text files.  
**Example:** 
DefaultDocPageSize = 11.0,8.5 will force AutoVue to display text files at a page size of 11x8.5 inches.  
**Note:** This option is only for Text files and Microsoft Outlook Messenger files. |         |
| DEFAULTFILEUNITS=[1|2|5|7|8|9|10|11|12|14|15] | Specifies the unit to use if native file does not contain units information.  
1 - inches  
2 - millimeters  
5 - centimeters  
7 - meters  
8 - kilometers  
9 - feet  
10 - yards  
11 - miles  
12 - mils  
14 - microns  
15 - microinches | 1       |
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBTRUECOLOR = [0</td>
<td>1]</td>
<td>Set to 1 to force rendering of 4-bit and 8-bit raster images on a 24-bit pixmap.</td>
</tr>
<tr>
<td>DIGITNUMBER</td>
<td>Specifies the number of decimals to display when measuring in AutoVue.</td>
<td>6</td>
</tr>
</tbody>
</table>
| DMSBROWSEUCOLUMNS=\[-1|0|numcolumns\]          | Option controls the number of custom columns to display in the file open dialog when doing a DMS Browse.  
Set to -1 to use the number of columns specified in the DMS GUI definition  
Set to 0 to not display custom columns  
Set numcolumns to the number of columns you want to display.  
**Note:** Option works only when ENABLEUNIVESALFILECHOOSER=1. | -1      |
| ENABLEIDENTICALPARTDETECTION=[0|1]                | Optimizes the performance of loading 3D files.  
Set to 1 to detect identical parts in a native file before streaming begins.  
The detection helps to share more parts in the model and, as a result, reduce the amount of streaming data. In some cases, this procedure may become very slow and cause a critical slowdown in the loading of native files in AutoVue.  
Set to 0 to disable the procedure. By doing so, a memory increase on client side is apparent, as is a slowdown in the loading time for native files. As a result, performance is degraded except for files where this procedure suffers from a critical slowdown(as mentioned above). | 1       |
| ENABLEUFCAUTOCOMPLETE=[0|1]                       | Specifies whether to enable the filename auto-completion option for the File Open dialog.  
Set to 1 to enable filename auto-completion option.  
Set to 0 to disable filename auto-completion option. | 1       |
| ENABLEUNIVESALFILECHOOSER=[0|1]                   | Set to 1 to display the dialog with “universal file opening” ability. This dialog lets you browse server:// directories, local files, DMS systems.  
Set to 0 to display the 19.3 and earlier file open dialog. | 1       |
| FASTDISPLAY = [0|1]                                | AutoVue renders the drawing ignoring some details in order to speedup the rendering.  
Set to 0 so that AutoVue performs a full rendering without any optimization of the drawing of the primitives.  
Set to 1 so that AutoVue performs the following optimizations when the file is rendered in TILED mode:  
* Draw small text as boxes.  
* Ignore the line-style for small primitives and draw them with plain style.  
* Ignore the point style for points and draw them in dot style. | 0       |
| FLIP = \[0|1|2|3\]                                 | Specifies:  
0 - none  
1 - horizontal  
2 - vertical  
3 - both | 0       |
| FOLDERPERMISSIONS = [0|1]                          | Switch off the verification of client permissions for accessing the UNC path.  
Set to 1 to follow the standard folder permissions.  
Set to 0 to allow the client to access file locations for which the client does not have permissions. | 1       |
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORCETOBLACK = [0</td>
<td>1]</td>
<td>Set to 1 to force all colors to black when displaying vector documents.</td>
</tr>
<tr>
<td>FULLCOLORPRINTERSUPPOART = [0</td>
<td>1]</td>
<td>Enable color printing for some monochrome images. Set to 0: Default AutoVue behavior; where some transparent monochrome images are not printed in color due to some printers that do not fully support transparency. Set to 1: Enables certain monochrome images to be printed in color with color printers. This flag should not be set by default because it has some drawbacks and may cause some problems on some printers. Enabling option 1 could cause a decrease in performance: • The spool size is much larger because there is 8 to 24 times more information sent to the printer. • Not all printers support image transparency and using them with this option may yield incorrect results.</td>
</tr>
<tr>
<td>INVERT = [0</td>
<td>1]</td>
<td>If 1, monochrome raster images are displayed inverted.</td>
</tr>
<tr>
<td>KEEPOVERALCOLORS = [0</td>
<td>1]</td>
<td>Set to 1 to keep original colors - white graphics and black graphics will always be drawn white and black respectively, even if the background is white or black. Set to 0 to invert colors for white and black graphics on white and black background.</td>
</tr>
<tr>
<td>LOOKAHEAD = [1</td>
<td>0]</td>
<td>Enable look ahead rendering a Tiled mode.</td>
</tr>
<tr>
<td>NOSYMBOLETTF = [0</td>
<td>1]</td>
<td>Set to 1 to override the Charset of Symbol fonts. It will be replaced by the default Charset. This option applies to DWF and DWG files only.</td>
</tr>
<tr>
<td>NOWINARCS = [0</td>
<td>1]</td>
<td>Set to 1 so that Windows GDI functions are not used to draw arcs. Set to 0 so that Windows renders the arcs. This option is used for some HP print drivers that do not properly render arcs and circles.</td>
</tr>
<tr>
<td>OVERLAYALPHAVALUE = [0</td>
<td>1]</td>
<td>Controls transparency of two overlaid tiff files. Set to 1 so that the overlay is opaque. Set to 0 so that the overlay is transparent. <strong>Note:</strong> Only use for Autovue client on Java2.</td>
</tr>
<tr>
<td>PMITEXTRENDERINGSTYLE = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>RASTERFIT = [0</td>
<td>1]</td>
<td>Set to 1 to fit the initial display of raster images to the screen. Set to 0 so that the full resolution is shown.</td>
</tr>
<tr>
<td>RASTERMEMLIMIT = [n_kbytes]</td>
<td>Swaps raster data to disk when the Windows global memory heap falls below n_kbytes.</td>
<td>6000</td>
</tr>
<tr>
<td>RSNOFORCETOBLACK = [0</td>
<td>1]</td>
<td>Set to 1 to disable Force to Black for raster overlays and raster files. <strong>Note:</strong> Option is applicable only when <strong>FORCETOBLACK</strong> = 1.</td>
</tr>
<tr>
<td>REPLACEMENTFONTS=font1;fonts2;...;fontn</td>
<td>Specifies a list of replacement TrueType fonts to use when required TrueType fonts do not have the required glyphs. This option applies to all 2D vector formats containing non-English TrueType text. Specify a semicolon (;) separated list of font face names.</td>
<td></td>
</tr>
<tr>
<td>REQUESTTIMEOUT = [timeout value in milliseconds]</td>
<td>Partial results polling timeout in milliseconds.</td>
<td>500</td>
</tr>
</tbody>
</table>

*Oracle Corp.*
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESETROTATEAANDFLIP=[0</td>
<td>1]</td>
<td>This option allows the user to choose rotation and flip settings when viewing files. Set to 1 to render the file with no rotation and no flipping. If native file itself is rotated or flipped, native file settings take precedence and file is rendered with saved rotation/flip. Set to 0 to render the file with the rotation and flip settings defined in AutoVue GUI or in AutoVue INI file.</td>
</tr>
<tr>
<td>RESOLUTION = [1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>RESOLVERESOURCES = [0</td>
<td>1]</td>
<td>Enable/disable resource file lookup by the client. Set to 1 so that the client will try to locate resource files, Set to 0 so that the client will never receive a request to resolve resources.</td>
</tr>
<tr>
<td>RESOURCERESOLVINGTIMEOUT=T=[time in seconds]</td>
<td>Specifies the timeout for resource resolving callback. After the timeout has elapsed, resource resolving callback will not wait for a response from the client, it will continue execution without attempting to resolve any more resources on the client.</td>
<td>60</td>
</tr>
<tr>
<td>ROTATE = [degrees]</td>
<td>Specifies the degrees of rotation as 0, 90, 180 or 270.</td>
<td>0</td>
</tr>
<tr>
<td>SELECTIONHIGHLIGHT = [0</td>
<td>1]</td>
<td>Specifies selection highlight mode. 0: Bounding box 1: Entity default color</td>
</tr>
<tr>
<td>SHOWDIMENSION = [0</td>
<td>1]</td>
<td>Set to 1 to show dimension entities. Otherwise, they are not shown.</td>
</tr>
<tr>
<td>SHOWFILL = [0</td>
<td>1]</td>
<td>Set to 0 to display only the outlines of filled entities (solids, fat polylines, and so on). Set to 1 so that the entities are shown as filled.</td>
</tr>
<tr>
<td>SHOWHATCHING = [0</td>
<td>1]</td>
<td>Set to 0 so that the FILLMODE system variable (AutoCad) and the Hatch display are turned off. Set to 1 so that the Hatch entities are displayed.</td>
</tr>
<tr>
<td>SHOWLINESTYLE = [0</td>
<td>1]</td>
<td>Set to 1 to show linestyle patterns. Set to 0 so that linestyles are displayed as solid lines.</td>
</tr>
<tr>
<td>SHOWLINEWEIGHT = [0</td>
<td>1]</td>
<td>Set to 1 to display varying line thicknesses. Set to 0 so that no line weights are displayed for any lines (all lines appear equal).</td>
</tr>
<tr>
<td>SHOWTEXT = [0</td>
<td>1]</td>
<td>Set to 1 so that text entities are shown.</td>
</tr>
<tr>
<td>SHOWTREE = [0</td>
<td>1]</td>
<td>Set to 1 to display tree. Set to 0 to switch off the tree display.</td>
</tr>
<tr>
<td>SHOWXREFS = [0</td>
<td>1]</td>
<td>Set to 1 so that external reference files are shown.</td>
</tr>
<tr>
<td>SHOW_POINTOPOINT_PAGE = [0</td>
<td>1]</td>
<td>Set to 1 to hide the Point to Point distance tab. Set to 0 to display the Point to Point distance tab. <strong>Note:</strong> When snapping to an edge with the Point to Point distance tab enabled, the distance is measured from the exact point you click on the drawing (rather then the midpoint).</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>SMOOTHSHADING = [0</td>
<td>1]</td>
<td>Set to 1 to enable smooth shading of 3D display.</td>
</tr>
<tr>
<td>STATUSBARPREFERREDWIDTH = [numeric value]</td>
<td>Specifies the character width of the file name field in the status bar. When you specify a value for StatusBarPathPreferredWidth, it controls the proportion of the file name field with respect to the other fields displayed in the status bar. The file name field width will vary when loading different types of formats or if the applet size changes. This is because the value specified controls the proportion and does not set it to a fixed width. <strong>Note:</strong> To be able to display 56 characters in the file name field (STATUSBARPREFERREDWIDTH=56), the client applet width must be greater than 800 pixels when all the default fields are displayed in the status bar.</td>
<td>12</td>
</tr>
<tr>
<td>TEXTBITMAPRENDERING=[0</td>
<td>1]</td>
<td>Set to 1 to render small text glyphs using bitmaps. Set to 0 so that text is not rendered using bitmaps. <strong>Note</strong> This option may affect most text in PDF, TrueType text in ME10, and PostScript text in CATIA5.</td>
</tr>
<tr>
<td>TILEMODE = [-1</td>
<td>0</td>
<td>1]</td>
</tr>
<tr>
<td>USESERVERBANDING = [0</td>
<td>1]</td>
<td>Banding during native printing is done on the client. Set to 1 to force banding on the server.</td>
</tr>
<tr>
<td>USERXFONTPATHS = [semicolon separated list of paths]</td>
<td>Specifies the paths for external font lookup on the client side. The path appears in the Configuration dialog in General &gt; Font Paths.</td>
<td></td>
</tr>
<tr>
<td>USERXREFPATHS = [semicolon separated list of paths]</td>
<td>Specifies the paths for XRef lookup on the client side. The path appears in the Configuration dialog in General &gt; XRef Paths.</td>
<td></td>
</tr>
<tr>
<td>VECTORFIT = [0</td>
<td>1]</td>
<td>Set to 1 so that Vector files are &quot;Auto-Fit&quot; once they are loaded. 0 to disable option.</td>
</tr>
<tr>
<td>VECTORMEMLIMIT = [n_kbytes]</td>
<td>Swaps vector data to disk when the Windows global memory heap falls below n_kbytes.</td>
<td>4096</td>
</tr>
<tr>
<td>XFONTPATHS = [paths]</td>
<td>Specifies a semicolon-delimited list of directories to search for external fonts.</td>
<td></td>
</tr>
<tr>
<td>XREFPATHS = [paths]</td>
<td>Specifies a semicolon-delimited list of directories to search for external references.</td>
<td></td>
</tr>
<tr>
<td>ZOOMBOXENABLED=&lt;0</td>
<td>1&gt;</td>
<td>When a file is opened, this parameter sets the default mode of the mouse pointer to a zoom box. <strong>Note:</strong> This parameter only works with non-3D designs. Set to 1 to set the default mode of the mouse pointer to a zoom box. Set to 0 to disable option.</td>
</tr>
</tbody>
</table>
**Base Font**
Specify base font to be used for ASCII files.

*[BASEFONT]*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACE=[font style]</td>
<td>Specifies font style.</td>
<td></td>
</tr>
<tr>
<td>ISITALIC=[0</td>
<td>1]</td>
<td>Specifies if font is italic.</td>
</tr>
<tr>
<td>SIZE = [num]</td>
<td>Specifies font height.</td>
<td></td>
</tr>
<tr>
<td>WEIGHT = [num]</td>
<td>Specifies font weight.</td>
<td></td>
</tr>
<tr>
<td>FROMPAGE = [num]</td>
<td>Indicates the starting page number of the print range.</td>
<td></td>
</tr>
</tbody>
</table>

**UI Color Options**
Specify background color to be used for different file formats.

*Note:* For parameters in the following table, specify an integer that represents an RGB color (Red + 256 * Green + 65536*Blue). The values for Red, Green, and Blue range from 0 to 255.

*[UI Colors]*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKCOLORARCHIVE</td>
<td>Specifies background color for archive files.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORDATABASE</td>
<td>Specifies background color for database files.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORDOCUMENT</td>
<td>Specifies background color for PDF format.</td>
<td></td>
</tr>
<tr>
<td>BKCOLOREDA</td>
<td>Specifies background color for EDA files.</td>
<td>0</td>
</tr>
<tr>
<td>BKCOLORCOLORRASTER</td>
<td>Specifies background color for raster formats.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORMONORASTER</td>
<td>Specifies background color for monochrome raster formats.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORNOFILESET</td>
<td>Specifies background color when no file is open in AutoVue.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORSPREADSHEET</td>
<td>Specifies background color for spreadsheets.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORTHUMBNAI LS</td>
<td>Specifies background color for thumbnails.</td>
<td></td>
</tr>
<tr>
<td>BKCOLORVECTOR</td>
<td>Specifies background color for vector formats.</td>
<td></td>
</tr>
</tbody>
</table>
AutoVue Mobile Options

Configure the parameters for AutoVue Mobile.

[AutoVueMobile]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRKPOLICYFILE=[&lt;file path&gt;=markuppolicy.xml]</td>
<td>Specifies the path to the Markup Policy XML file for the Mobile Pack.</td>
<td>&lt;AutoVue Installation&gt;\bin\markuppolicy.xml</td>
</tr>
<tr>
<td>FILESTREAMENCRIPTON=[RC4</td>
<td>3DES]</td>
<td>Specifies encryption algorithm for both Markup and Mobile Pack password protection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILESTREAMENCRIPTON=[RC4</td>
<td>3DES]</td>
<td>Specifies encryption algorithm for both Markup and Mobile Pack password protection.</td>
</tr>
</tbody>
</table>

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAILINSEPARATEPROCESS=[0</td>
<td>1]</td>
<td>Specifies whether to send mail in a new process or to send mail in the current jvm process.</td>
</tr>
<tr>
<td>Note: This option is available only when MAPI is supported. Set to 1 to send out mail in a new process or system call. Set to 0 to send out mail in the current jvm process. If the current mail client is Lotus Notes, mail will be sent out in a new process regardless of whether this option is enabled or disabled.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAILERPATH=[file path]</td>
<td>Specifies the path to the mail client executable. Once the path is entered, it is saved in the user’s profile. If no path is specified, a dialog box appears prompting for the file path.</td>
<td>auto</td>
</tr>
<tr>
<td>Note: This option is available only when MAPI is not supported.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAILERTYPE=[auto</td>
<td>mozilla</td>
<td>thunderbird</td>
</tr>
<tr>
<td>Note: This option is available only when MAPI is not supported. Note: Evolution is only for clients on a Linux system.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Company Wide Policy

Configure AutoVue Mobile parameter for Company Wide policy.

[AutoVueMobile]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPIREAFTER=[num]</td>
<td>Set the expiry date for the Mobile Pack. For example, ExpireAfter=10 results in the Mobile Pack expiring 10 days after creation.</td>
<td></td>
</tr>
<tr>
<td>INCLUDESTREAMING FILE=[0</td>
<td>1]</td>
<td>Set to <strong>1</strong> to only include the streaming file in Mobile Pack. Set to <strong>0</strong> to exclude the streaming file from Mobile Pack. Therefore, the native file is only included in the Mobile Pack.</td>
</tr>
<tr>
<td>RENDITION=[None</td>
<td>PDF</td>
<td>TIFF]</td>
</tr>
</tbody>
</table>

3D Options

The parameters in the following table apply to 3D files.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>3DMASSPROP_MESH_BHAVIOR = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>3DMASSPROP_SHEET_BHAVIOR = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>3DPOLICYMANAGER = [0</td>
<td>1]</td>
<td>Set to <strong>1</strong> to enable dynamic loading of 3D models. Set to <strong>0</strong> to loads incrementally.</td>
</tr>
<tr>
<td>AXESSIZE = [value]</td>
<td>Enables you to resize the 3D axes. <strong>Example:</strong> If you set AxesSize=0 the default 3D axes will display. If you assign a value greater than 0, the size of the 3D axes will change accordingly. Suggested value=45.</td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>
BKIMAGES=[path1, position1, stretch1; path2, position2, stretch2; ...]

Displays a list of images in the 3D background. Can include a semi-colon separated list of images.

**Path values:** May be absolute and relative to the start directory of the application or module directory.

**Position values:** CENTER, TOP, BOTTOM, LEFT, RIGHT, TOP_LEFT, TOP_RIGHT, BOTTOM_LEFT, or BOTTOM_RIGHT.

**Stretch Values:** NONE (no stretching), FILL (fills the screen and does not respect image ratio), UNIFORM (displays full image and respects image ratio), and UNIFORM_TO_FILL (fill the screen and respects image ratio).

**BKTYPE**

Specifies the type of 3D background. Three classes of values: radial gradient, directional gradient, and plain color (default value).

**Radial gradient values:** CENTER, TOP, BOTTOM, LEFT, RIGHT, TOP_LEFT, TOP_RIGHT, BOTTOM_LEFT, or BOTTOM_RIGHT.

**Directional gradient values:**

An integer value (angle in degrees). Note that 0 is in the “3 o’clock” direction and that the angles rotate CCW.

**DYNAMICRENDERING = [0|1|2]**

Specifies mode for dynamic rendering of 3D.

0 - current render mode
1 - Flat Shading
2 - Wire Polygons

**FORCEPMISZORDER = [0|1]**

Invalidate the PMI_ATTRIB_RENDERAFTERMODEL generic attribute effect: 3D PMIs are not forced above the model and may be occluded by it, depending on its orientation.

**LOADFACETEDDATA = [0|1]**

Set to 1 if you wish to read Mesh data for 3D files.
Set to 0 if you wish to read BRep data for 3D files.

**MESHBUILDTOPOLOGY = [0|1]**

Set to 1 to build the topology in mesh mode.
Set to 0 if you do not want to build the topology in mesh mode. Note that building topology for meshes impacts load and rendering times (especially for large mesh parts and complex assemblies).

Applies to the following file formats:

- AutoCAD
- Catia 4
- Catia 5
- DirectModel (JT)
- DWG
- DWF3D
- Microstation
- ProEngineer
- SolidWorks
- Unigraphics
- STL
- IFC

**Note:** This option replaces the following INI options: SWBUILDMESHTOPOLOGY, Catia5MeshBuildTopology and BUILDMESHTOPOLOGY.

**MESHRESOLUTION = [LOW | MEDIUM | HIGH | VERYHIGH]**

Specifies the default mesh resolution for 3D files.

Note that the higher the mesh resolution, the more time required to load the image.

Set to **LOW** for low mesh resolution.
Set to **MEDIUM** for medium mesh resolution.
Set to **HIGH** for high mesh resolution.
Set to **VERYHIGH** for very high mesh resolution.
3D PMI Options

Configure options to control visibility of PMI entities for 3D files.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOACCELERATION = [0</td>
<td>1]</td>
<td>Set to 1 to disable OpenGL acceleration. It is recommended setting to 1 if 3D files are displaying blank or vector files are not displaying properly or if markup entities are not completely visible. <strong>Note:</strong> If you have a poor graphics cards, OpenGL acceleration could slow down performance for big 3D models.</td>
</tr>
<tr>
<td>SHOWGLOBALAXES = [0</td>
<td>1]</td>
<td>Set to 1 to display global axes for 3D models.</td>
</tr>
<tr>
<td>USEMESHCACHE = [0</td>
<td>1]</td>
<td>Set to 1 to enable using hard drive to cache mesh data when loading 3D files. When memory is insufficient, data is dumped to disk. <strong>Note:</strong> Option should be used when loading large 3D models.</td>
</tr>
</tbody>
</table>

### [PMI]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>COORDINATE_SYSTEM_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display datum coordinate system entities in the tree. Set to 0 to hide datum coordinate system entities from the tree.</td>
</tr>
<tr>
<td>COORDINATE_SYSTEM_VIEW_VIS = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>DATUM_FEATURE_SYMBOL_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display datum feature symbol entities in the tree. Set to 0 to hide datum feature symbol entities from the tree.</td>
</tr>
<tr>
<td>DATUM_FEATURE_SYMBOL_VIEW_VIS = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>DATUM_TARGET_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display datum target entities in the tree. Set to 0 to hide datum target entities from the tree.</td>
</tr>
<tr>
<td>DATUM_TARGET_VIEW_VIS = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>DIMENSION_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display dimension entities in the tree. Set to 0 to hide dimension entities from the tree.</td>
</tr>
<tr>
<td>DIMENSION_VIEW_VIS = [0</td>
<td>1]</td>
<td>Set to 2 to set the visibility of dimension entities to the last saved state in the native application. Set to 1 to display dimension entities. Set to 0 to hide dimension entities from the display.</td>
</tr>
<tr>
<td>FEATURE_CONTROL_FRAME_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display datum feature control frame entities in the tree. Set to 0 to hide datum feature control frame entities from the tree.</td>
</tr>
<tr>
<td>FEATURE_CONTROL_FRAME_VIEW_VIS = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>LINE_WELD_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display lineweld entities in the tree. Set to 0 to hide lineweld entities from the tree.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>LINE_WELD_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of lineweld entities to the last saved state in the native application. Set to 1 to display lineweld entities. Set to 0 to hide lineweld entities from the display.</td>
</tr>
<tr>
<td>LOCATOR_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display locator entities in the tree. Set to 0 to hide locator entities from the tree.</td>
</tr>
<tr>
<td>LOCATOR_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of locator entities to the last saved state in the native application. Set to 1 to display locator entities. Set to 0 to hide locator entities from the display.</td>
</tr>
<tr>
<td>MEASUREMENT_POINT_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display point measurement entities in the tree. Set to 0 to hide point measurement entities from the tree.</td>
</tr>
<tr>
<td>MEASUREMENT_POINT_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of point measurement entities to the last saved state in the native application. Set to 1 to display point measurement entities. Set to 0 to hide point measurement entities from the display.</td>
</tr>
<tr>
<td>NOTE_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display note entities in the tree. Set to 0 to hide note entities from the tree.</td>
</tr>
<tr>
<td>NOTE_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of note entities to the last saved state in the native application. Set to 1 to display note entities. Set to 0 to hide note entities from the display.</td>
</tr>
<tr>
<td>REFERENCE_GEOMETRY_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display reference geometry entities in the tree. Set to 0 to hide reference geometry entities from the tree.</td>
</tr>
<tr>
<td>REFERENCE_GEOMETRY_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of reference geometry entities to the last saved state in the native application. Set to 1 to display reference geometry entities. Set to 0 to hide reference geometry entities from the display.</td>
</tr>
<tr>
<td>SPOT_WELD_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display spotweld entities in the tree. Set to 0 to hide spotweld entities from the tree.</td>
</tr>
<tr>
<td>SPOT_WELD_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of spotweld entities to the last saved state in the native application. Set to 1 to display spotweld entities. Set to 0 to hide spotweld entities from the display.</td>
</tr>
<tr>
<td>SURFACE_FINISH_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display surface finish entities in the tree. Set to 0 to hide surface finish entities from the tree.</td>
</tr>
<tr>
<td>SURFACE_FINISH_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of surface finish entities to the last saved state in the native application. Set to 1 to display surface finish entities. Set to 0 to hide surface finish entities from the display.</td>
</tr>
<tr>
<td>WIRE_TREE_VIS = [0</td>
<td>1]</td>
<td>Set to 1 to display wire entities in the tree. Set to 0 to hide wire entities from the tree.</td>
</tr>
<tr>
<td>WIRE_VIEW_VIS = [0</td>
<td>1][2]</td>
<td>Set to 2 to set the visibility of wire entities to the last saved state in the native application. Set to 1 to display wire entities. Set to 0 to hide wire entities from the display.</td>
</tr>
</tbody>
</table>
3D Export Options
Configure the parameters in the following table for 3D export options

[Export Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPORTTETESSELLATIONTOL=[val]</td>
<td>Control the mesh density when converting to 3D STL. Meshes are more dense if tolerance value is smaller. Note: Val can be 0.01, 0.005, 0.001, 0.0001</td>
<td>0</td>
</tr>
</tbody>
</table>

3D Color Options
Note: For parameters in the following table, specify an integer that represents an RGB color (Red + 256 * Green + 65536 * Blue). The values for Red, Green, and Blue range from 0 to 255.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUNDCOLOR</td>
<td>Specifies background color for 3D models.</td>
<td></td>
</tr>
<tr>
<td>ENTITYDEFAULTCOLOR</td>
<td>Specifies default color for 3D models.</td>
<td></td>
</tr>
<tr>
<td>EDGESHIGHLIGHTCOLOR</td>
<td>Specifies color for highlighting edges.</td>
<td></td>
</tr>
<tr>
<td>FACEHIGHLIGHTCOLOR</td>
<td>Specifies color for highlighting faces.</td>
<td></td>
</tr>
<tr>
<td>MEASUREMENTCOLOR</td>
<td>Specifies color for measurements.</td>
<td></td>
</tr>
<tr>
<td>MINDDISTANCESET1HIGHLIGHTCOLOR</td>
<td>Specifies color for first set in minimum distance measurement.</td>
<td></td>
</tr>
<tr>
<td>MINDDISTANCESET2HIGHLIGHTCOLOR</td>
<td>Specifies color for second set in minimum distance measurement.</td>
<td></td>
</tr>
<tr>
<td>SECTIONEDGESCOLOR</td>
<td>Specifies section edge color.</td>
<td></td>
</tr>
<tr>
<td>SECTIONFILLCOLOR</td>
<td>Specifies fill color.</td>
<td></td>
</tr>
<tr>
<td>SECTIONFILLHATCHCOLOR</td>
<td>Specifies hatch pattern for fill color.</td>
<td></td>
</tr>
<tr>
<td>SELECTIONCOLOR</td>
<td>Specifies color for selecting models or model parts.</td>
<td></td>
</tr>
<tr>
<td>VERTEXHIGHLIGHTCOLOR</td>
<td>Specifies color for highlighting vertices.</td>
<td></td>
</tr>
</tbody>
</table>
# ECAD Options

Specify configuration options for ECAD.

**[ECAD]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROSSPROBE_ACTION = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>CROSSPROBE_AUTOMATIC_PAGETYPE = [0</td>
<td>1]</td>
<td>Specifies whether the Automatic option is enabled or disabled when cross probing EDA files. Set to 1 to enable Automatic mode during an EDA cross probe. Set to 0 to disable Automatic mode during an EDA cross probe.</td>
</tr>
<tr>
<td>ECAD_3D_BOARDCOLOR</td>
<td>Specifies the color of the PCB board in 3D.</td>
<td></td>
</tr>
<tr>
<td>ECAD_3D_COMPONENTCOLOR</td>
<td>Specifies the color of the PCB components in 3D.</td>
<td></td>
</tr>
<tr>
<td>ECAD_3D_CUTOUTDRILLHOLESS = [0</td>
<td>1]</td>
<td>Specifies whether to cut drill holes out of the 3D model of the board. Set to 1 to cut out drill holes. Set to 0 to disable drill holes. <strong>Note:</strong> Setting this option to 1 increases the amount of memory required to load the 3D model. Also, for DMU purposes, this option should be set to 1 to correctly check for interference for parts that go through the drill holes.</td>
</tr>
<tr>
<td>ECAD_3D_DEFAULTBOARDTHICKNESS</td>
<td>Specifies default board thickness for EDA. <strong>Note:</strong> This option is used when the board thickness is not specified in the design.</td>
<td>40.0</td>
</tr>
<tr>
<td>ECAD_3D_DEFAULTCOMPONENTTHICKNESS</td>
<td>Specifies default thickness for components for 3D EDA. <strong>Note:</strong> This option is used when the component height is not specified in the design.</td>
<td>40.0</td>
</tr>
<tr>
<td>ECAD_3D_DEFAULTTHICKNESSUNIT</td>
<td>Specifies the unit to be used for the options ECAD_3D_DEFAULTBOARDTHICKNESS and ECAD_3D_DEFAULTCOMPONENTTHICKNESS.</td>
<td>12 (mils)</td>
</tr>
<tr>
<td>ECAD_DIMLEVEL = [0.0-1.0]</td>
<td>Specifies the dim level. The value corresponds to a percentage. For example 0.3 is 30%. Change takes effect whether you change it manually or through the GUI. Set a value between 0.0 and 1.0.</td>
<td>0.5</td>
</tr>
<tr>
<td>ECAD_LAYER_EXPANDCOLLAPSE_LOGICAL = [0</td>
<td>1]</td>
<td>Expand or collapse the Logical Layers pane in the Layers dialog. Set to 0 to expand the Logical Layers pane. Set to 1 to collapse the Logical Layers pane.</td>
</tr>
<tr>
<td>ECAD_LAYER_EXPANDCOLLAPSE_PHYSICAL = [0</td>
<td>1]</td>
<td>Expand or collapse the Physical Layers pane in the Layers dialog. Set to 0 to expand the Physical Layers pane. Set to 1 to collapse the Physical Layers pane.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ECAD_LOAD_3D_PAGE</td>
<td>Enable or disable display of 3D models of EDA files. Set to 0 to disable display of 3D model. Set to 1 to enable display of 3D model. Option applies to the following PCB formats:  • Altium Designer/Protel • Cadence Allegro • Cadence Projects • Cadence Spectra • IDF • Mentor BoardStation • Mentor Expedition • ODB++ • OrCAD Layout • Zuken CADIF • Zuken CADSTAR</td>
<td>1</td>
</tr>
<tr>
<td>ECAD_SEARCH_DESIGN</td>
<td>EDA entity searching scope. Set to 1: the search scope is the entire design. Set to 0: the search scope is current page.</td>
<td>0</td>
</tr>
<tr>
<td>ECAD_SELECTIONHIGHLIGHT</td>
<td>Select either Highlight Selected or Dim Unselected as the default behavior when selecting entities. Set to 1 when Dim Unselected is selected. Set to 0 when Highlight Selected is selected. Option takes effect whether you change it manually or through the GUI.</td>
<td>0</td>
</tr>
<tr>
<td>ECAD_SHOW_NATIVE_HIGHLIGHTS</td>
<td>Specifies whether AutoVue should display a file’s native highlighting. Set to 0 so that the native highlighting in the file is ignored during display. Set to 1 so that the native highlighting in the file is applied during display.</td>
<td>1</td>
</tr>
<tr>
<td>ECAD_SNAPRADIUS</td>
<td>Specifies snap radius for snap box to appear to select entity. Note: The snap radius is configured in pixels.</td>
<td>5</td>
</tr>
</tbody>
</table>
## Markups

### Markup Options

Configure a variety of Markup options such as symbol for markup dimensions.

### [Markup Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARROW_SIZE</td>
<td>Set to a positive value (greater than 0.1) to create zoomable arrow heads when creating leader and measurement markup entities. If set to a negative value, arrow head is not zoomable.</td>
<td>between -7.2 and 0</td>
</tr>
<tr>
<td>ATTACHMENT_MAX_SIZE=[value]</td>
<td>Specifies the maximum size for attachment markup entities. When creating attachment markup entities, if attachment size exceeds, an error message appears to indicate that attachment size exceeds the limit. <strong>Note</strong>: value is in MegaBytes.</td>
<td>0 (no limit)</td>
</tr>
<tr>
<td>CONSOLIDATE_OPENASACTIVE=[0</td>
<td>1]</td>
<td>Set to 1 to turn on the Open as Active Markup option in the Markup Consolidation dialog box. Set to 0 to turn off this option.</td>
</tr>
<tr>
<td>DEF_COLOR=</td>
<td>Specifies a windows RGB color for default markup entity color. Other values: -1 - Assign layer color to markup entity -2 - Hide markup entity -3 - Assign line color (option applies to fill color only)</td>
<td>-1</td>
</tr>
<tr>
<td>DEF_LSTYLE</td>
<td>Specifies the default linestyle for markup entities. Possible values are: 0 - Solid line 1 - Dashed line 2 - Dashed line (smaller dashes) 3 - Dash Dot 4 - Dash Dot Dot 6 - Cloud linestyle 7 - Triangle linestyle</td>
<td>0</td>
</tr>
<tr>
<td>DEF_LWIDTH=</td>
<td>Specifies the default line width in pixels for markup entities.</td>
<td>1</td>
</tr>
<tr>
<td>DEF_FILLTYPE=</td>
<td>Specifies the fill type for filled entities. Possible values are: 0 - No Fill 1 - Solid Fill 2 - Transparent Fill</td>
<td>0</td>
</tr>
<tr>
<td>DEF_FILLCOLOR=[-1</td>
<td>-2</td>
<td>-3]</td>
</tr>
<tr>
<td>LINETHICKNESS_ZOOMABLE</td>
<td>Set to 1 if you want markup entity line thickness to scale according to zoom level</td>
<td>0</td>
</tr>
</tbody>
</table>

Oracle Corp.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINESTYLE_ZOOMABLE</td>
<td>Set to 1 if you want to maintain markup entity line style at all zoom levels</td>
<td>0</td>
</tr>
<tr>
<td>NOTENAME_AUTOGEN</td>
<td>Set to 0 to disable automatic numbering of note entities. Set to 1 to enable numbering of note entities.</td>
<td>1</td>
</tr>
<tr>
<td>RESCALEMARKUP=[0</td>
<td>1]</td>
<td>If view extents of base document have changed since creating the Markup, set this option to 1 to scale Markups appropriately.</td>
</tr>
<tr>
<td>TRUEBACKGROUND=[0</td>
<td>1]</td>
<td>Used when a highlight markup is applied on a colored background (for example, graphic/filled cell areas in office document tables). Set to 1 for a dithered highlight markup. Set to 0 for a normal highlight markup.</td>
</tr>
<tr>
<td>TRUECOLOR=[0</td>
<td>1]</td>
<td>Set to 0 so that the Markup entity color is inverted when it matches the background color. Set to 1 so that all entities are drawn with their actual color irrespective of the background color. Entities whose color matches or is close to the background color become invisible.</td>
</tr>
<tr>
<td>SIGNOFFFILE = [&lt;file path&gt;]&lt;name_of_signoffbg]</td>
<td>Specifies the name of the background image for the Sign Off markup entity. The image file should exist in the bin subdirectory of the AutoVue Installation.</td>
<td>signoffstamp.bmp in the &lt;AutoVue installation&gt;\bin directory</td>
</tr>
<tr>
<td>SYMBOLLIST=[alphanum]</td>
<td>Specifies a comma-separated list of symbols (in unicode) for measurements. <strong>Example:</strong> u0398, u2221, u2248.</td>
<td></td>
</tr>
<tr>
<td>ANGLESYMBOLLIST=[alphanum]</td>
<td>Specifies a comma-separated list of symbols (in unicode) for angle measurements. If not specified and SymbolList is specified, symbols defined in SymbolList are displayed. <strong>Example:</strong> u0398, u2221, u2248.</td>
<td></td>
</tr>
<tr>
<td>ARCSSYMBOLLIST=[alphanum]</td>
<td>Specifies a comma-separated list of symbols (in unicode) for arc measurements. If not specified and SymbolList is specified, symbols specified in SymbolList are displayed. <strong>Example:</strong> u0398, u2221, u2248.</td>
<td></td>
</tr>
<tr>
<td>DISTANCESYMBOLLIST=[alphanum]</td>
<td>Specifies a comma-separated list of symbols (in unicode) for distance measurements. If not specified and SymbolList is specified, symbols specified in SymbolList are displayed. <strong>Example:</strong> u0398, u2221, u2248.</td>
<td></td>
</tr>
<tr>
<td>AREASYMBOLLIST=[alphanum]</td>
<td>Specifies a comma-separated list of symbols (in unicode) for area measurements. If not specified and SymbolList is specified, symbols specified in SymbolList are displayed. <strong>Example:</strong> u0398, u2221, u2248.</td>
<td></td>
</tr>
</tbody>
</table>
[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLOWSTAMPLIBRARYEDIT = [0</td>
<td>1]</td>
<td>Specifies whether you can edit/delete a stamp library. Set to 1 to enable editing/deleting of a stamp library. Set to 0 to disable editing/deleting of a stamp library.</td>
</tr>
<tr>
<td>ENABLEOFFICEMARKUPS=[0</td>
<td>1]</td>
<td>Enable/disable creation of markups for office documents. Set to 1 to enable markups for office formats. Set to 0 to disable markups for office formats.</td>
</tr>
</tbody>
</table>

**Markup Font Options**

[MrkFont]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACE</td>
<td>Specifies the text entity font name.</td>
<td>Arial</td>
</tr>
<tr>
<td>SIZE</td>
<td>Specifies the text entity font size.</td>
<td>10</td>
</tr>
<tr>
<td>ISBOLD</td>
<td>Set to 1 so that the text entity font appears in bold.</td>
<td>0</td>
</tr>
<tr>
<td>ISUNDERLINE</td>
<td>Set to 1 so that the text entity is underlined.</td>
<td>0</td>
</tr>
<tr>
<td>ISITALIC</td>
<td>Set to 1 so that the text entity appears in italic.</td>
<td>0</td>
</tr>
</tbody>
</table>

**Overlay Options**

Configure Overlay options that apply to laying files over the current active document.

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONVERTWMFT OEMF = [0</td>
<td>1</td>
<td>2]</td>
</tr>
</tbody>
</table>
Disable Options

Configure the Disable options parameters.

[Disable]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTIALIASING = [0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Set to 0 to enable all types of antialiasing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to 1 to disable image antialiasing. This also disables image blurring (value=8).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to 2 to disable text antialiasing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to 4 to disable geometry antialiasing. Geometry includes lines, arcs, polygons, ellipses and rectangles.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to 8 to disable image blurring. Blurring is an interpolation that is performed when images are magnified to prevent pixelation. Disabling image antialiasing (value=1) also disables blurring.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> To use this option, ANTIALIAS must be set to 1.</td>
<td></td>
</tr>
<tr>
<td>MARKUPFORCETOBLACK = [0</td>
<td>1]</td>
<td>Specifies whether to force markup color to black for high resolution printing.</td>
</tr>
<tr>
<td></td>
<td>Set to 1 so that markup color is not forced to black (even when base file printing is forced to black).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to 0 to use the same logic as for the base file color.</td>
<td></td>
</tr>
</tbody>
</table>

Printing Options

General Options

Specify general print options such as orientation, scale.

[PRINTOPTIONS]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA = [0</td>
<td>1]</td>
<td>If 0, the extents of the page is printed, otherwise, the region displayed in the view window is printed.</td>
</tr>
<tr>
<td>AREA</td>
<td>Indicates if you are printing:</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0 - File Extents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Displayed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - Selected area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 - Limits (AutoCAD files only)</td>
<td></td>
</tr>
<tr>
<td>COPIES</td>
<td>Specifies the number of copies to print.</td>
<td>1</td>
</tr>
<tr>
<td>CUSTOMOFFSETX = [num]</td>
<td>If SCALING is set to 1 or 2 then you can specify the offset value (in inches) along the X-axis.</td>
<td>0</td>
</tr>
<tr>
<td>CUSTOMOFFSETY = [num]</td>
<td>If SCALING is set to 1 or 2, then you can specify the offset value (in inches) along the Y-axis.</td>
<td>0</td>
</tr>
<tr>
<td>FACTOR1 = [num]</td>
<td>If SCALING = 1, specifies the number of pixels for the scaling factor.</td>
<td></td>
</tr>
<tr>
<td>FACTOR2 = [num]</td>
<td>If SCALING = 1, specifies the number of units to which the specified number of pixels are scaled.</td>
<td></td>
</tr>
</tbody>
</table>
**FORCETOBLACK** = [0|1]
If 1, the file is printed in black and white; otherwise, in color. 0

**FROMPAGE** = [num]
Indicates the starting page number of the print range.

**HIGHRESOLUTION** = [0|1]
If 1, prints high resolution

**LIMITTOONEPRINTERPAGE** = [0|1]
If 1, limits output to one printer page when the scaling options selected causes a single page to span over several pages. 0

**OFFSETTYPE** = [0-9]
Specifies the location of the drawing with respective to the page boundary when printing.

Possible values:
0: Custom—To set a custom offset type, you must also set the values for SCALING to 1 or 2, and then assign values for CUSTOMOFFSETX and CUSTOMOFFSETY. See the respective INI options for more information.
1: Top Left
2: Top Center
3: Top Right
4: Middle Left
5: Center
6: Middle Right
7: Bottom Left
8: Bottom Center
9: Bottom Right

**ORIENTATION** = [1|0]
If 0, the file is printed as portrait; otherwise, landscape. Currently supported with Java 2 low resolution printing.

**PAGES** = [0|1|2]
Indicates if you want to print
0 - All Pages
1 - Current Page
2 - Page Range

**PAPER SIZE**
Specifies the paper size to print to.
The following table lists the available paper sizes.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAPER_10X11</td>
<td>10 x 11 in.</td>
</tr>
<tr>
<td>PAPER_10X14</td>
<td>10x14 in.</td>
</tr>
<tr>
<td>PAPER_11X17</td>
<td>11x17 in.</td>
</tr>
<tr>
<td>PAPER_12X11</td>
<td>12 x 11 in.</td>
</tr>
<tr>
<td>PAPER_15X11</td>
<td>15 x 11 in.</td>
</tr>
<tr>
<td>PAPER_9X11</td>
<td>9 x 11 in.</td>
</tr>
<tr>
<td>PAPER_A_PLUS</td>
<td>SuperA/SuperA/A4 227 x 356 mm.</td>
</tr>
<tr>
<td>PAPER_A2</td>
<td>A2 420 x 594 mm.</td>
</tr>
<tr>
<td>PAPER_A3</td>
<td>A3 297 x 420 mm.</td>
</tr>
<tr>
<td>PAPER_A3_EXTRA</td>
<td>A3 Extra 322 x 445 mm.</td>
</tr>
</tbody>
</table>

**Print Option: PAPERSIZE**
<table>
<thead>
<tr>
<th>Paper Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAPER_A3_EXTRA_TRANSVERSE</td>
<td>A3 Extra Transverse 322 x 445 mm.</td>
</tr>
<tr>
<td>PAPER_A3_ROTATED</td>
<td>A3 Rotated 420 x 297 mm.</td>
</tr>
<tr>
<td>PAPER_A3_TRANSVERSE</td>
<td>A3 Transverse 297 x 420 mm.</td>
</tr>
<tr>
<td>PAPER_A4</td>
<td>A4 210 x 297 mm.</td>
</tr>
<tr>
<td>PAPER_A4_EXTRA</td>
<td>A4 Extra 9.27 x 12.69 in.</td>
</tr>
<tr>
<td>PAPER_A4_PLUS</td>
<td>A4 Plus 210 x 330 mm.</td>
</tr>
<tr>
<td>PAPER_A4_ROTATED</td>
<td>A4 Rotated 297 x 210 mm.</td>
</tr>
<tr>
<td>PAPER_A4_TRANSVERSE</td>
<td>A4 Transverse 210 x 297 mm.</td>
</tr>
<tr>
<td>PAPER_A4SMALL</td>
<td>A4 Small 210 x 297 mm.</td>
</tr>
<tr>
<td>PAPER_A5</td>
<td>A5 148 x 210 mm.</td>
</tr>
<tr>
<td>PAPER_A5_EXTRA</td>
<td>A5 Extra 174 x 235 mm.</td>
</tr>
<tr>
<td>PAPER_A5_ROTATED</td>
<td>A5 Rotated 210 x 148 mm.</td>
</tr>
<tr>
<td>PAPER_A5_TRANSVERSE</td>
<td>A5 Transverse 148 x 210 mm.</td>
</tr>
<tr>
<td>PAPER_A6</td>
<td>A6 105 x 148 mm.</td>
</tr>
<tr>
<td>PAPER_A6_ROTATED</td>
<td>A6 Rotated 148 x 105 mm.</td>
</tr>
<tr>
<td>PAPER_B_PLUS</td>
<td>SuperB/SuperB/A3 305 x 487 mm</td>
</tr>
<tr>
<td>PAPER_B4</td>
<td>B4 (JIS) 250 x 354.</td>
</tr>
<tr>
<td>PAPER_B4_JIS_ROTATED</td>
<td>B4 (JIS) Rotated 364 x 257 mm.</td>
</tr>
<tr>
<td>PAPER_B5</td>
<td>B5 (JIS) 182 x 257 mm.</td>
</tr>
<tr>
<td>PAPER_B5_EXTRA</td>
<td>B5 (ISO) Extra 201 x 276 mm.</td>
</tr>
<tr>
<td>PAPER_B5_JIS_ROTATED</td>
<td>B5 (JIS) Rotated 257 x 182 mm.</td>
</tr>
<tr>
<td>PAPER_B5_TRANSVERSE</td>
<td>B5 (JIS) Transverse 182 x 257 mm.</td>
</tr>
<tr>
<td>PAPER_B6_JIS</td>
<td>B6 (JIS) 128 x 182 mm.</td>
</tr>
<tr>
<td>PAPER_B6_JIS_ROTATED</td>
<td>B6 (JIS) Rotated 182 x 128 mm.</td>
</tr>
<tr>
<td>PAPER_CSHEET</td>
<td>C size sheet.</td>
</tr>
<tr>
<td>PAPER_DBL_JAPANESE_POSTCARD</td>
<td>Japanese Double Postcard 200 x 148 mm.</td>
</tr>
<tr>
<td>PAPER_DBL_JAPANESE_POSTCARD_ROTATED</td>
<td>Double Japanese Postcard Rotated 148 x 200 mm.</td>
</tr>
<tr>
<td>PAPER_DSHEET</td>
<td>D size sheet.</td>
</tr>
<tr>
<td>PAPER_ENV_10</td>
<td>Envelope #10 4 1/8 x 9 1/2.</td>
</tr>
<tr>
<td>PAPER_ENV_11</td>
<td>Envelope #11 4 1/2 x 10 3/8.</td>
</tr>
<tr>
<td>PAPER_ENV_12</td>
<td>Envelope #12 4 1/2 x 276 x 11.</td>
</tr>
<tr>
<td>PAPER_ENV_14</td>
<td>Envelope #14 5 x 11 1/2.</td>
</tr>
<tr>
<td>PAPER_ENV_9</td>
<td>Envelope #9 3 7/8 x 8 7/8.</td>
</tr>
<tr>
<td>PAPER_ENV_B4</td>
<td>Envelope B4 250 x 353 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_B5</td>
<td>Envelope B5 176 x 250 mm.</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>PAPER_ENV_B6</td>
<td>Envelope B6 176 x 125 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_C3</td>
<td>Envelope C3 324 x 458 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_C4</td>
<td>Envelope C4 229 x 324 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_C5</td>
<td>Envelope C5 162 x 229 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_C6</td>
<td>Envelope C6 114 x 162 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_C65</td>
<td>Envelope C65 114 x 229 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_DL</td>
<td>Envelope DL 110 x 220 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_INVITE</td>
<td>Envelope Invite 220 x 220 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_ITALY</td>
<td>Envelope 110 x 230 mm.</td>
</tr>
<tr>
<td>PAPER_ENV_MONARCH</td>
<td>Envelope Monarch 3.875 x 7.5 in.</td>
</tr>
<tr>
<td>PAPER_ENV_PERSONAL</td>
<td>6 3/4 Envelope 3 5/8 x 6 1/2 in.</td>
</tr>
<tr>
<td>PAPER_ESHEET</td>
<td>E size sheet.</td>
</tr>
<tr>
<td>PAPER_EXECUTIVE</td>
<td>Executive 7 1/4 x 10 1/2 in.</td>
</tr>
<tr>
<td>PAPER_FANFOLD_LGL_GERMAN</td>
<td>German Legal Fanfold 8 1/2 x 13 in.</td>
</tr>
<tr>
<td>PAPER_FANFOLD_STD_GERMAN</td>
<td>German Std Fanfold 8 1/2 x 12 in.</td>
</tr>
<tr>
<td>PAPER_FANFOLD_US</td>
<td>US Std Fanfold 14 7/8 x 11 in.</td>
</tr>
<tr>
<td>PAPER_FOLIO</td>
<td>Folio 8 1/2 x 13 in.</td>
</tr>
<tr>
<td>PAPER_ISO_B4</td>
<td>B4 (ISO) 250 x 353 mm.</td>
</tr>
<tr>
<td>PAPER_JAPANESE_POSTCARD</td>
<td>Japanese Postcard 100 x 148 mm.</td>
</tr>
<tr>
<td>PAPER_JAPANESE_POSTCARD_ROTATED</td>
<td>Japanese Postcard Rotated 148 x 100 mm.</td>
</tr>
<tr>
<td>PAPER_JENV_CHOU3</td>
<td>Japanese Envelope Chou #3.</td>
</tr>
<tr>
<td>PAPER_JENV_CHOU3_ROTATED</td>
<td>Japanese Envelope Chou #3 Rotated.</td>
</tr>
<tr>
<td>PAPER_JENV_CHOU4</td>
<td>Japanese Envelope Chou #4.</td>
</tr>
<tr>
<td>PAPER_JENV_CHOU4_ROTATED</td>
<td>Japanese Envelope Chou #4 Rotated.</td>
</tr>
<tr>
<td>PAPER_JENV_KAKU2</td>
<td>Japanese Envelope Kaku #2.</td>
</tr>
<tr>
<td>PAPER_JENV_KAKU2_ROTATED</td>
<td>Japanese Envelope Kaku #2 Rotated.</td>
</tr>
<tr>
<td>PAPER_JENV_KAKU3</td>
<td>Japanese Envelope Kaku #3.</td>
</tr>
<tr>
<td>PAPER_JENV_KAKU3_ROTATED</td>
<td>Japanese Envelope Kaku #3 Rotated.</td>
</tr>
<tr>
<td>PAPER_JENV_YOU4</td>
<td>Japanese Envelope You #4.</td>
</tr>
<tr>
<td>PAPER_JENV_YOU4_ROTATED</td>
<td>Japanese Envelope You #4 Rotated.</td>
</tr>
<tr>
<td>PAPER_LEDGER</td>
<td>Ledger 17 x 11 in.</td>
</tr>
<tr>
<td>PAPER_LEGAL</td>
<td>Legal 8 1/2 x 14 in.</td>
</tr>
<tr>
<td>PAPER_LEGAL_EXTRA</td>
<td>Legal Extra 9 275 x 15 in.</td>
</tr>
<tr>
<td>PAPER_LETTER</td>
<td>Letter 8 1/2 x 11 in.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>PAPER_LETTER_EXTRA</td>
<td>Letter Extra 9 1/4 x 12 in.</td>
</tr>
<tr>
<td>PAPER_LETTER_EXTRA_TRANSVERSE</td>
<td>Letter Extra Transverse 9 1/4 x 12 in.</td>
</tr>
<tr>
<td>PAPER_LETTER_PLUS</td>
<td>Letter Plus 8.5 x 12.69 in.</td>
</tr>
<tr>
<td>PAPER_LETTER_ROTATED</td>
<td>Letter Rotated 11 x 8 1/2 in.</td>
</tr>
<tr>
<td>PAPER_LETTER_TRANSVERSE</td>
<td>Letter Transverse 8 1/2 x 11 in.</td>
</tr>
<tr>
<td>PAPER_LETTER_SMALL</td>
<td>Letter Small 8 1/2 x 11 in.</td>
</tr>
<tr>
<td>PAPER_NOTE</td>
<td>Note 8 1/2 x 11 in.</td>
</tr>
<tr>
<td>PAPER_P16K</td>
<td>PRC 16K 146 x 215 mm.</td>
</tr>
<tr>
<td>PAPER_P16K_ROTATED</td>
<td>PRC 16K Rotated.</td>
</tr>
<tr>
<td>PAPER_P32K</td>
<td>PRC 32K 97 x 151 mm.</td>
</tr>
<tr>
<td>PAPER_P32K_ROTATED</td>
<td>PRC 32K Rotated.</td>
</tr>
<tr>
<td>PAPER_P32KBIG</td>
<td>PRC 32K(Big) 97 x 151 mm.</td>
</tr>
<tr>
<td>PAPER_P32KBIG_ROTATED</td>
<td>PRC 32K(Big) Rotated.</td>
</tr>
<tr>
<td>PAPER_PENV_1</td>
<td>PRC Envelope #1 102 x 165 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_1_ROTATED</td>
<td>PRC Envelope #1 Rotated 165 x 102 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_10</td>
<td>PRC Envelope #10 324 x 458 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_10_ROTATED</td>
<td>PRC Envelope #10 Rotated 458 x 324 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_2</td>
<td>PRC Envelope #2 102 x 176 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_2_ROTATED</td>
<td>PRC Envelope #2 Rotated 176 x 102 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_3</td>
<td>PRC Envelope #3 125 x 176 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_3_ROTATED</td>
<td>PRC Envelope #3 Rotated 176 x 125 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_4</td>
<td>PRC Envelope #4 110 x 208 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_4_ROTATED</td>
<td>PRC Envelope #4 Rotated 208 x 110 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_5</td>
<td>PRC Envelope #5 110 x 220 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_5_ROTATED</td>
<td>PRC Envelope #5 Rotated 220 x 110 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_6</td>
<td>PRC Envelope #6 120 x 230 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_6_ROTATED</td>
<td>PRC Envelope #6 Rotated 230 x 120 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_7</td>
<td>PRC Envelope #7 160 x 230 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_7_ROTATED</td>
<td>PRC Envelope #7 Rotated 230 x 160 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_8</td>
<td>PRC Envelope #8 120 x 309 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_8_ROTATED</td>
<td>PRC Envelope #8 Rotated 309 x 120 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_9</td>
<td>PRC Envelope #9 229 x 324 mm.</td>
</tr>
<tr>
<td>PAPER_PENV_9_ROTATED</td>
<td>PRC Envelope #9 Rotated 324 x 229 mm.</td>
</tr>
</tbody>
</table>
[PRINTOPTIONS]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALING = [0</td>
<td>1</td>
<td>2]</td>
</tr>
<tr>
<td>0 - fit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - scaling factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - scaling percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCALE = [percentage]</td>
<td>If scaling = 2, specifies the percentage to which the image is scaled.</td>
<td></td>
</tr>
<tr>
<td>SSNOPRINTCOLHEADERS = [0</td>
<td>1]</td>
<td>If 1, row and column headers are not printed for spreadsheet formats.</td>
</tr>
<tr>
<td>ThicknessScale = [thickness1,</td>
<td>Specifies the mapping of MicroStation line weights to line thickness on</td>
<td></td>
</tr>
<tr>
<td>thickness2, ..., thicknessN]</td>
<td>paper. You can get this from the MicroStation configuration file, attribute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>weight_strokes.</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td>ThicknessScale = 0.250, 0.375, 0.500, 0.625, 0.750, 0.875, 1.000, 1.125,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.250, 1.375, 1.500, 1.625, 1.750, 1.875, 2.000, 2.125, 2.250, 2.375, 2.500,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.625, 2.750, 2.875, 3.000, 3.125, 3.250, 3.375, 3.500, 3.625, 3.750, 3.875,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.000, 4.125</td>
<td></td>
</tr>
<tr>
<td>THICKNESSSCALEUNITS = [mm</td>
<td>inch</td>
<td>dot]</td>
</tr>
<tr>
<td></td>
<td>Option only applies to MicroStation files when ThicknessScale is set.</td>
<td></td>
</tr>
<tr>
<td>TOPAGE = [num]</td>
<td>Indicates the ending page number of the print range.</td>
<td></td>
</tr>
<tr>
<td>UNITS = [1</td>
<td>0</td>
<td>2]</td>
</tr>
<tr>
<td>0 - pixels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - millimeters</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Options]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXPRINTERDPI = [DPI value]</td>
<td>Specifies the maximum printer DPI to use for Enhanced Metafile (EMF)</td>
<td>600</td>
</tr>
<tr>
<td>generation for Java and native printing (used to minimize EMF size if needed).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRINTBANDSIZE = [Band size value</td>
<td>Specifies the size of one printing band for requesting from the server in</td>
<td>5.0</td>
</tr>
<tr>
<td>in MB]</td>
<td>megabytes (MB). If an images sent to the printer is estimated to be too</td>
<td></td>
</tr>
<tr>
<td></td>
<td>large, then the generated images are banded.</td>
<td></td>
</tr>
<tr>
<td>PRINTINGDPI = [DPI]</td>
<td>Specifies the DPI for java printing. This value affects the size of the</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>image that is sent to the printer graphics.</td>
<td></td>
</tr>
</tbody>
</table>

Oracle Corp.
There are two methods to generate Enhanced Metafiles (EMF) on the server: rendering directly to EMF device context (DC) or rendering using an intermediate banded device-independent bitmap (DIB) images. The following options control which option is used.

**EMF Generation Options**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCDIRECTRENDER = [0</td>
<td>1]</td>
<td>Controls whether EMF DC is used directly for document files. Set to 0 so that banded DIB images are used. Set to 1 so that EMF DC is used.</td>
</tr>
<tr>
<td>DIRECTRENDERLIMIT = [Size in KB]</td>
<td>Specifies the threshold in KB when to use DIB images if the estimated page size is too large. This option affects vector and spreadsheet formats.</td>
<td>30720KB</td>
</tr>
<tr>
<td>TROVLDIRECTRENDER = [0</td>
<td>1]</td>
<td>Controls whether EMF DC is used directly when a vector file contains transparent overlays. Set to 0 to disable this option. Set to 1 to enable this option. <strong>Note:</strong> This option is enabled in order to have a safe fallback after disabling check for transparent overlays.</td>
</tr>
<tr>
<td>VECDIRECTRENDER = [0</td>
<td>1]</td>
<td>Controls whether EMF DC is directory for vector files. Set to 0 so that banded DIB images are used. Set to 1 so that additional checks are performed to determine which method to use.</td>
</tr>
</tbody>
</table>

**Watermark Options**

Specify Watermark options such as font style, size, text.

**[PRINTWATERMARK]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FONTNAME</td>
<td>Specifies the font used for the printed Watermark text</td>
<td></td>
</tr>
<tr>
<td>FONTSIZE</td>
<td>Specifies the font size for Watermark text</td>
<td></td>
</tr>
<tr>
<td>FONTSTYLE = [2</td>
<td>1</td>
<td>0]</td>
</tr>
<tr>
<td>TEXT</td>
<td>Specifies the text to be printed as a watermark. For carriage returns enter %r.</td>
<td></td>
</tr>
</tbody>
</table>
**ORIENTATION = [0|1|2]**

Specifies if the watermark should be:
0 - Diagonal
1 - Horizontal
2 - Vertical

**DISABLEWATERMARK= [0|1]**

When set to 1, user will not be able to edit entries for watermark in the print properties dialog box (for both print and print preview). Option goes under section [PRINTOPTIONS] in the INI File.

---

### Headers/Footers Options

Configure options for headers and footers.

**[PRINTHEADERS]**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>FONTNAME</td>
<td>Specifies the font used for the printed Header/Footer strings.</td>
<td></td>
</tr>
<tr>
<td>TOPCENTERTEXT</td>
<td>Specifies the text for the center header. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>TOPLEFTTEXT</td>
<td>Specifies the text for the left header. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>TOPRIGHTTEXT</td>
<td>Specifies the text for the right header. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>BOTTOMCENTERTEXT</td>
<td>Specifies the text for the center footer. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>BOTTOMLEFTTEXT</td>
<td>Specifies the text for the left footer. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>BOTTOMRIGHTTEXT</td>
<td>Specifies the text for the right footer. For carriage returns, enter %r.</td>
<td></td>
</tr>
<tr>
<td>DISABLEHEADERS= [0</td>
<td>1]</td>
<td>When set to 1, user will not be able to edit entries for headers or footers in the print properties dialog box (for both print and print preview). Option goes under section [PRINTOPTIONS] in the INI File.</td>
</tr>
</tbody>
</table>
Margins Options
Configure options for print margins.

[PRINTMARGINS]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOTTOM=</td>
<td>Specifies the bottom margin</td>
<td>0.25</td>
</tr>
<tr>
<td>LEFT=</td>
<td>Specifies the left margin</td>
<td>0.25</td>
</tr>
<tr>
<td>RIGHT=</td>
<td>Specifies the right margin</td>
<td>0.25</td>
</tr>
<tr>
<td>TOP=</td>
<td>Specifies the top margin</td>
<td>0.25</td>
</tr>
<tr>
<td>UNITS=</td>
<td>Specifies units for the margin:</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0 - pixels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - inches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - millimeters</td>
<td></td>
</tr>
</tbody>
</table>

Pen Settings Options
Configure options for pen settings.

[PENSETTINGS]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS=0/1</td>
<td>Specifies units for the pen settings:</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0 - inches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - millimeters</td>
<td></td>
</tr>
<tr>
<td>SELECTEDPEN=pen name</td>
<td>The active pen setting.Pen mappings are defined in INI options PEN&lt;n&gt;, where n starts from 0.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>Specifies the name and a mapping of pen index and thickness. Thickness value is in inches.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>AUTOCAD - The pen-color mapping uses the AutoCAD color palette. You cannot modify the mapping.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>HPGL - The pen-color mapping is defined in hpglcol.tbl and can be modified by the user.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>ME10 - The pen-color mapping is defined in me10col.tbl and can be modified by the user.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>DWF - The pen-color mapping is defined in dwfcol.tbl and can be modified by the user.</td>
<td></td>
</tr>
<tr>
<td>PEN&lt;n&gt;</td>
<td>Microstation drawings - The pen-color mapping is shipped in a binary file, color.tbl. This mapping file can be modified using Microstation. The mapping files are located at &lt;AutoVue Installation Directory&gt;\bin.</td>
<td></td>
</tr>
</tbody>
</table>
Watermark in View Mode

With AutoVue it is possible to display watermarks in View mode.

[WATERMARK]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXT</td>
<td>Specifies watermark text.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: TEXT=AutoVue 19.3.</td>
<td></td>
</tr>
<tr>
<td>FONTNAME</td>
<td>Specifies font to be used for the watermark.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: FONTNAME=Times New Roman.</td>
<td></td>
</tr>
<tr>
<td>FONTSTYLE</td>
<td>Specifies the font style for the watermark.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 – Plain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 – Bold</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 – Italic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 – Bold and Italic</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: FONTSTYLE=3.</td>
<td></td>
</tr>
<tr>
<td>FONTSIZE</td>
<td>Specifies font size.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: FONTSIZE=24.</td>
<td></td>
</tr>
<tr>
<td>XFACTOR</td>
<td>Specifies watermark x position on the applet window.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value should range from 0 to 1.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: XFACTOR=0.05.</td>
<td></td>
</tr>
<tr>
<td>YFACTOR</td>
<td>Specifies watermark y position on the applet window.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value should range from 0 to 1.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: YFACTOR=0.90.</td>
<td></td>
</tr>
<tr>
<td>COLOR</td>
<td>Specifies a valid color value.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: COLOR=0xFF.</td>
<td></td>
</tr>
<tr>
<td>ALPHA</td>
<td>Specifies the transparency level of the text.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value can range from 0x00 (not visible) to 0xFF (opaque).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: ALPHA=0x80.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** To disable the watermark you must either remove the whole [WATERMARK] section, remove the TEXT option, or assign an empty string to the TEXT option.

CSI Shapefile Project Files

CSI shapefile project files (CSHP files) are used to overlay multiple ESRI shapefile drawings. Project files specify the shapefiles that should be overlayed and general information such as units and point options. Project files are formatted as standard INI configuration settings files. Comments in CSHP files begin with a semi-colon().

**Note:** A CSI shapefile project file must begin with the following line: ;CSI shapefile project file

[PROJECTPROPERTIES]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Oracle Corp.
<table>
<thead>
<tr>
<th><strong>UNITS</strong></th>
<th>Specifies the file units. Possible values:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• px</td>
</tr>
<tr>
<td></td>
<td>• inches</td>
</tr>
<tr>
<td></td>
<td>• millimeters</td>
</tr>
<tr>
<td></td>
<td>• mm</td>
</tr>
<tr>
<td></td>
<td>• twips</td>
</tr>
<tr>
<td></td>
<td>• centimeters</td>
</tr>
<tr>
<td></td>
<td>• cm</td>
</tr>
<tr>
<td></td>
<td>• decimeters</td>
</tr>
<tr>
<td></td>
<td>• dm</td>
</tr>
<tr>
<td></td>
<td>• meters</td>
</tr>
<tr>
<td></td>
<td>• m</td>
</tr>
<tr>
<td></td>
<td>• kilometers</td>
</tr>
<tr>
<td></td>
<td>• km</td>
</tr>
<tr>
<td></td>
<td>• feet</td>
</tr>
<tr>
<td></td>
<td>• yards</td>
</tr>
<tr>
<td></td>
<td>• miles</td>
</tr>
<tr>
<td></td>
<td>• millimeters</td>
</tr>
<tr>
<td></td>
<td>• micrometers</td>
</tr>
<tr>
<td></td>
<td>• microns</td>
</tr>
<tr>
<td></td>
<td>• microinches</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>POINTYPE</strong></th>
<th>Specifies what shape to use when drawing a point. Possible values:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Circle</td>
</tr>
<tr>
<td></td>
<td>• Triangle</td>
</tr>
<tr>
<td></td>
<td>• Square</td>
</tr>
<tr>
<td></td>
<td>• Star</td>
</tr>
<tr>
<td></td>
<td>• Dot</td>
</tr>
<tr>
<td></td>
<td>• Plus</td>
</tr>
<tr>
<td></td>
<td>• Cross</td>
</tr>
<tr>
<td></td>
<td>• Diamond</td>
</tr>
<tr>
<td></td>
<td>• Custom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>POINTSIZE=[int]</strong></th>
<th>Specifies what size to use when drawing a point. You can assign int any integer greater than 0.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
## [LAYERS]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTLINECOLOR=</td>
<td>Specifies the color to use when drawing outlines for graphics such as points, lines, polygons, and so on.</td>
<td>-1</td>
</tr>
<tr>
<td>int</td>
<td>Possible integer range: [-1, 255]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to OUTLINECOLOR=-1 so that an internal counter is used to determine the color.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The counter is incremented a maximum of two times per layer and only if it is required: once for the outline color (if it is not provided) and once for the fill color (if it is not provided).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> If a user provides valid outline and fill colors, the counter is not incremented for the given layer. However, if the user only provides a valid outline color, the counter increments once for the given layer.</td>
<td></td>
</tr>
<tr>
<td>FILLCOLOR=</td>
<td>Specifies the color to use when drawing fills for graphic (such as polygons).</td>
<td>-1</td>
</tr>
<tr>
<td>int</td>
<td>Possible integer range = [-1, 255]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to FILLCOLOR=-1 so that an internal counter is used to determine the color.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The counter is incremented a maximum of two times per layer and only if it is required: once for the outline color (if it is not provided) and once for the fill color (if it is not provided).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> If a user provides valid outline and fill colors, the counter is not incremented for the given layer. However, if the user only provides a valid outline color, the counter increments once for the given layer.</td>
<td></td>
</tr>
<tr>
<td>LINEWIDTH=</td>
<td>Specifies the line width to used when drawing graphics.</td>
<td>0</td>
</tr>
<tr>
<td>int</td>
<td>Possible integer range: [0,100]</td>
<td></td>
</tr>
<tr>
<td>VISIBLE=</td>
<td>Specifies the visibility of the shapefile.</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>Set to 1 to make the shapefile visible when initially loading the CSI shapefile project.</td>
</tr>
<tr>
<td></td>
<td>Set to 0 to make the shapefile invisible when initially loading the CSI shapefile project.</td>
<td></td>
</tr>
<tr>
<td>POINTTYPE</td>
<td>Specifies what shape to use when drawing a point.</td>
<td>Custom</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If a POINTTYPE is not provided for the a given [LAYER] section, then the POINTTYPE provided in [PROJECTPROPERTIES] section is used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possible values:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Circle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Triangle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Square</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Star</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Dot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cross</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diamond</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Custom</td>
<td></td>
</tr>
<tr>
<td>POINTSIZE</td>
<td>Specifies what size to use when drawing a point.</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If a POINTSIZE is not provided for the a given [LAYER] section, then the POINTSIZE provided in [PROJECTPROPERTIES] section is used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can assign <code>num</code> any integer greater than 0.</td>
<td></td>
</tr>
<tr>
<td><strong>FILENAME= [file path]</strong></td>
<td>Specifies the name of the ESRI shapefile drawing.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix J: FAQ

General

Q What is the applet size of AutoVue client?
A
The applet size is about 5.2MB.

Q What is the approximate transfer time of the applet?
A
This depends on your network connection speed. On a Local Area Network, transfer time is a few seconds.

Q Is the applet transmitted every time a document is viewed?
A
No. The applet is usually only transmitted the first time it is used and then is saved by your Web browser in its cache folder. The applet is transmitted again if:
• You clear up the cache.
• A new version of the applet is available on the server, in which case the new applet is transmitted automatically.

Q What languages are supported by AutoVue Client?
A
English(EN), French(FR), German(DE), Japanese(JA), Korean(KO), traditional Chinese(TW), and simplified Chinese(ZH).

Q How do I set up AutoVue to run in a specific language (English, French, German, Korean, and so on)?
A
It is done automatically; you do not need to set up anything. AutoVue is multilingual. The Client chooses the appropriate language depending on the client machine’s LOCALE setting. However, you can modify this behavior by using the LOCALE parameter of the applet.

Q How do I set up AutoVue Server on Linux so as to get full font support for Office and other formats?
A
If your format requires TTF and TTC fonts, follow these steps to configure AutoVue Server on Linux:
1 Shut down AutoVue Server.
2 Back up and remove the fonts from <AutoVue Server Install Directory>/jvuew_c/windows/fonts.
3 Copy all required TTF/TTC fonts from a Windows font directory (from a machine which has all required fonts) to <AutoVue Installation Folder>/jvuew_c/windows/fonts.
Restart AutoVue server.
Q How does AutoVue locate external resources (XRefs, fonts, font maps, and so on)?

A
When AutoVue encounters a base file that requires other resources in order to display fully, AutoVue generally performs the following series of searches until the resources are found. Note, however, that there are certain exceptions to the search sequence.

1. If the base file contains a path to the resource, AutoVue looks up the path to locate the resource. If the path is a relative path, the relative path is taken with respect to the base file path.
2. AutoVue looks for the resources in the base file location.
3. AutoVue looks for the resource in the AutoVue installation folder (in some cases, this folder is used for font maps, color maps, and font resources).
4. If the client contains a session path setting (for example, SESSIONXFONTPATH or SESSIONXREFPATHS), AutoVue looks for the resources in this path.
5. AutoVue looks in the path specified by the XREFPATHS and XFONTSPATH ini options specified in the user’s INI file.

Q What are the rendering schemes used by AutoVue?

A
A number of different rendering schemes are used by AutoVue.
Vector and 2D CAD files are generally streamed as Custom or Compressed Metafile Format.
Other formats are generally rendered using a tiled raster stream.

Q When rendering a file what is the size of the streamed data compared to the original file size?

A
This is highly dependent on the nature of the document being viewed.
Vector and 2D CAD files are streamed as ASF (AutoVue Streaming Format). The ASF is generally smaller than the original file, but it depends on the complexity of the original document.
Other formats are rendered using a tiled raster stream. The advantage of this is that the size of the tiled data is generally independent of the size of the document being viewed. The size of each tile is quite small, generally less than 10Kb. You can check the size of the data being transmitted by setting the “VERBOSE” Applet parameter tag to TRUE. The results are displayed in the Java console.

Q What is streaming file?

A
When a native document is read, AutoVue Server provides the capability to export the internal representation of the document. This is, by default, stored in the AutoVue Server’s cache in a format called the streaming file format. The first time a 2D CAD file or a 3D assembly/part is read, the server will parse the file and load it. A streaming file is created when the file is closed. The streaming file is then used for all subsequent loads of the same document. Thus the second and subsequent loads of document are faster than the first load.
When a document is loaded and its streaming file exists, it greatly speeds up the loading time since the original document does not have to be re-parsed and many of the CPU intensive calculations are skipped since the results are in the streaming file.
Q Is it possible to disable streaming file generation?
A
Yes. It is possible to disable streaming file generation. Set:

```
jvueserver.metacache.enable=false in jvueserver.properties
```

Default: true

Q What is a Doc Server? How is it different from the Primary Server?
A
What is a Streaming File Server?
A

Every AutoVue Server installation has a Primary Server, several Doc Servers and a Streaming File Server.

The Primary Server is responsible for routing document requests to the secondary servers. This server is represented by P in the AutoVue Server console.

The secondary servers, also called Doc Servers or Document Servers are responsible for processing document requests and streaming data to the clients. The secondary servers are represented by 1, 2, 3, 4 in the AutoVue Server console. The number of secondary processes is determined by the `jvueserver.nt.processPoolSize` setting in `jvueserver.properties`. Default: 4.

The Streaming File Server is dedicated to generating streaming files for all documents. When a document handle is closed, request is transferred from the Doc Server to the Streaming File Server and this server generates the streaming file. The Streaming File Server is represented by M in the AutoVue Server console.

The advantage of having a dedicated process for generating streaming files is that clients do not have to wait for the previous document to be cached to view the next document.

Q How do I configure what servers handle streaming file generation?
A

There are two ways to configure this:

1. You can configure AutoVue Server so that if the load on the Doc Server is high, Streaming File Server can handle streaming file generation. In `jvueserver.properties`, set:

```
jvueserver.metacache.threshold to a non-negative integer.
```

If the load on the Doc Server reaches this threshold, Streaming File Server will generate streaming files.

2. You can disable the Streaming File Server so that all streaming file creation requests are handled by Document Servers.

In `jvueserver.properties`, set `jvueserver.metacache.process=false`.

Q Does AutoVue work with firewalls and proxy servers?
A

Yes. There are usually two distinct sets of firewalls/proxy servers that come into play:

- Firewall/proxy on the server: Most Web servers, ASP’s and document management systems run behind a firewall and proxy server for security.
- If a Proxy Server is being used to connect to the outside Internet, then the name of the Proxy Server must be specified in `jvueserver.properties`. See "Configuring AutoVue Server".
- Firewall/proxy on the client. Many client browsers run behind a firewall. Generally all ports except the standard HTTP port (80) are disabled. You must set up the VueServlet on your Web server to tunnel all communications
through standard HTTP or HTTPS. If the client is using a proxy server to connect to the Internet, there is generally no special configuration needed since the AutoVue Client will use the TCP/IP services of the browser.

**Note:**
- The proxy server uses NTLM authentication; only IE works in this case.
- Even if there is no way for the server to know if a client is behind a firewall or not, you still can provide the direct socket connection just by setting the JVUESERVER parameter properly.

Use something like:

```
<PARAM NAME="JVUESERVER"
VALUE="http://myserver/servlet/VueServlet">
```

would allow clients behind firewall to tunnel through the servlet, while other clients can still use the faster socket connection.

**Q** How do I setup ISAPI tunneling for the VueServlet or how do I direct requests to the VueServlet through IIS?

**A**

The instructions for setting up ISAPI tunneling depends on the application server you are using. Refer to your application server documentation for instructions on setting up ISAPI tunneling.

**Q** I want to use AutoVue client as a standalone application without using an Web browser. How do I do this?

**A**

The best way to minimize deployment effort is to put the necessary files on a locally accessible network directory so that all users can just fire up the applet from that common location.

Once the server is installed, copy the following files and directories to the chosen location, then run `jvue.bat` for Windows and `jvue` for Linux to launch the applet as a standalone application.

- `<AutoVue Install directory>\bin\jvue.bat` *(Windows OS)*
- `<AutoVue Install directory>/bin/jvue` *(Linux OS)*
- `<AutoVue Install directory>\html\jvue.jar`
- `<AutoVue Install directory>\html\jogl.jar`
- `<AutoVue Install directory>\html\gluegen-rt.jar`
- `<AutoVue Install directory>\jre`

**Security**

**Q** Does AutoVue Client set cookies?

**A**

No. As of release 20.0.0, AutoVue client does not set cookies. However, AutoVue client passes on cookies available to it to AutoVue Server and integration/VueLink servlet.

**Q** Can I use HTTPS/SSL for secure communications?

**A**

Yes. You can “tunnel” all communications between the AutoVue Client and server through HTTPS which uses SSL. This ensures a secure connection. To do this, the applet should communicate with the server through a servlet which should be referenced through HTTPS.

**Example:**
Q Is the data transmitted to the Applet encrypted?
A
If you tunnel all communications through the servlet using HTTPS, all communications are encrypted using SSL.

Q When I load any 3D file for the first time, a security warning dialog box pops up. Can I deny the certificate?

A
No. This certificate belongs to SUN Microsystems Inc. and is necessary for the 3D model to render properly. If not accepted, the 3D model will load blank.
Integrating with Other Systems

Q Can AutoVue be customized to work within our interface?
A

Yes. We provide several kinds of integrations:

- You can script the Applet just by changing the FILENAME parameter in it. This is a simple but convenient way to generate Applet pages from a backend Document Management System.
- You can script the applet with JavaScript to:
  - Set the document to View
  - Load one or more markups
  - Compare to a file
  - Add an overlay
  - Print the document
- You can define the GUI definition of the Applet by specifying the GUIFILE applet parameter. This allows you to fully control the menu and toolbar items that will appear on the client.
- You can integrate the server with a DMS using AutoVue’s Integration SDK. This is aimed at customers who want to tightly integrate AutoVue with a back-end document database. The SDK provides the interface between the AutoVue Server and the back-end database and provides all “hooks” to manage Markups, reference files, access permissions and user permissions.
- You can use the VueBean, which is to AutoVue what the VCET controls are to AutoVue Desktop Version. The VueBean provides the full rendering and Markup capability of AutoVue, but without any GUI. This is aimed at customers who want full control over the applet interface.

Q Does the AutoVue server have to be on the same server as my drawings or Web server?
A

No. The AutoVue server can be on any machine. In fact, the AutoVue server distinguishes between several types of documents:

- When the server is integrated with a DMS then the location of the documents is completely transparent to the AutoVue server. The downloads/uploads are handled by the DMAPI integration component.
- The applet client can upload local files to the AutoVue Server using the “upload:” pseudo-protocol.
- If the document to be viewed specifies a URL with the HTTP:, HTTPS: or FTP: protocol, then the AutoVue server tries to download the document. These documents could be located anywhere, as long as they are accessible through TCP/IP.
- You can view documents that are on the AutoVue server itself using the “server:” pseudo-protocol.

  Note: This is disabled by default, see directory in the [Server] section in "Configuring the AutoVue Client" for more information.

Q Can I access my Oracle/Microsoft SQL database even if it is on a different server?
A

Yes. Refer to the question above. You will probably have to have a DMAPI integration installed for a tight integration between the Applet, the AutoVue server and the Database.
Q Do I need a Web server to be able to run AutoVue?
A
No. Users will access the client applet through a Web browser such as IE or FireFox. However, a WEB server is not required.
The AutoVue client can also be run as an application (not as an applet). The jvue.bat file in the \bin directory gives an example on how to invoke the client as an application.

Q Can I integrate AutoVue with my FTP site?
A
Yes. The applet can accept any valid URL including the standard HTTP, HTTPS and FTP protocols.

Q Can users Markup files on my FTP site and save the Markup files there?
A
Yes. By default Markups will be managed and saved by the AutoVue server. In order to have the Markups saved on the FTP site, you would have to interface with the AutoVue server using the DMAPI.

Q Can I set security access or restricted access to my drawings through AutoVue?
A
Yes. Through the integration with your backend system, you can enforce any access restrictions that are defined in your DMS.

Q Has AutoVue been integrated with popular EDM/PDM Systems?
A
Yes. We have "out-of-the-box" solutions for a number of systems including: Agile, Documentum, Oracle UCM, and SharePoint.
The integration SDK is an open specification that allows AutoVue server to be integrated with other systems.

Q How easy is it to integrate AutoVue into my own EDM/PDM system?
A
It is relatively straightforward. Oracle provides an Integration SDK and sample interface to get you started. The API is XML-based and can be implemented as a Web server component. We provide a skeleton servlet that can be used as basis.

Q What is meant by the DMAPI/Vuelink Integration/Interface and what can I do with it?
A
The DMAPI is the XML-based API that is used to interface the AutoVue server with a back-end EDM/PDM system. VueLink is the product name of the DMAPI interfaces that Oracle itself has developed for a variety of EDM/PDM systems. The development of a DMAPI integration generally involves several issues:
- The integration can be developed in any language that supports a CGI-like protocol, including .ASPs, .JSPs, C or Perl CGI scripts or Java Servlets.
  We provide a sample skeleton of an integration as a Java servlet.
• The Integration has full control over the document properties.
• The Integration has full control over the querying/reading/saving of Markups.
• The Integration has full control over the management of reference files/compound documents.
• The integration can enforce any access restrictions and workflow rules.
  For example when a new Markup is created on a document a workflow can be automatically started.
• Query document attributes to add to the headers/footers or watermark of printouts.

In general the DMAPI integration acts as an intermediary layer between the AutoVue server and the EDM/PDM system.

Q Does AutoVue support real-time collaboration?
A
Yes.

Q Where are Markups saved?
A
When AutoVue is integrated with a DMS using the VueLink DMAPI then Markups are entirely managed by the DMS.

Without the integration the AutoVue server will manage the Markups itself. The Markups are stored in a specific directory on the server, with a mapping between the base file and the associated Markup list. By default the Markups are stored in the \Markups subdirectory of the AutoVue server program directory, but this can be specified in the VueServer.ini file.

Troubleshooting
Q I've installed the AutoVue server. When I open the sample HTML page (http://my.machine.com/jVue/jVue.html) containing the applet I just get a blank screen. What should I do?
A
Proceed in the following order:

If you are running Internet Explorer
1 Clear the browser cache. Do this by selecting Tools, then Internet-Options.
2 Under Temporary Internet Files, click Delete Files.
3 Click OK.
4 Again under Temporary Internet Files, click Settings.
5 Click View Objects in the Settings dialog.
  In the list of objects, you will not see jVue or VueBean.
6 If you see either of these two objects, right-click and select Delete.
  (These two objects were created by a very early version of AutoVue and are incompatible with the new version.)

If you are running Firefox
1 Clear the browser cache. Do this by selecting Tools then Clear Private Data.
2 In the Clear Private Data dialog box, select all the entries and click Clear Private Data.
3 Restart the browser.
   The problem should be solved, but if it is not continue to take the following steps.

4 If you still see a blank screen, there is an installation problem on the server.
   Verify that the Jar files are accessible. You can do this from your browser by typing the following URLs:
   http://my.machine.com/jVue/jvue.jar
   http://my.machine.com/jVue/jogl.jar
   http://my.machine.com/jVue/gluegen-rt.jar
   If you are prompted for a download, you can ignore it. If you are not prompted for a download then the Jar files
   are improperly installed on the server.

5 If you can modify the file frmApplet.html on the server machine, under the ‘jVue Web directory, then set the
   VERBOSE parameter of the applet to TRUE.

6 Restart the browser and re-open the jVue.html page on the Web server.

7 Open the Java Console in the Web browser.
   The console indicates the cause of the problem.

Q I get an error message, “An error occurred while connecting to the server. Restart the applet?” What should
   I do?
   A
   To begin, you should start by clearing your browser cache, following the steps from the previously answered
   question. If you still get this message it means that the client cannot communicate with the AutoVue server. Verify
   that the AutoVue server is running on the server machine.

   Next verify that the applet parameter JVUESERVER is properly set to the VueServlet URL. See "Debugging
   AutoVue" which provides pointers on troubleshooting the servlet.

Q When I open files from the AutoVue client, files do not display. What should I do?
   A
   This problem could occur if the AutoVue client and the server are of different versions. When there is a mismatch in
   the version or build numbers, files either display blank or a 'File not found' error message appears.

   To begin, launch the AutoVue Client, select 'Help'-’About’. Check that the client and the server version and build
   numbers are the same. If they do not match, clear your browser cache and reload the applet. If the numbers still do not
   match, check the Web server components installed as part of the AutoVue server installation. Try a manual
   installation of the Web server components.

Q When I start up AutoVue server, the processes P, 1, 2, 3, 4, M never turn green.
   A
   This can occur if the ports needed by AutoVue server are in use. Make sure the following ports are available for the
   server:
   • RMI port + [n+1] consecutive ports (where RMI port is the port set in jvueserver.properties — the default RMI
     port is 1099; and where n is the process pool size in jvueserver.properties)
     For example, if the RMI port is 1099: make sure ports 1099, 1100, 1101, 1102 and 1103 are available for a
     process pool size of 4.
   • Socket port + [n+1] (where Socket port is the port used for socket connections — see jvueserver.properties for
     the socket port number value — the default Socket port is 5099; and where n is the process pool size set in
     jvueserver.properties)
Q When I start up AutoVue Server on Linux, I get the following error messages: “XSERVTransMakeAllCOTSServerListeners: server already running Fatal server error: Cannot establish any listening sockets - Make sure an X server isn’t already running x11drv: Can’t open display: localhost:909.” What should I do?

A

This error occurs when the port used by the Xvfb server is already in use by another process. Modify the Xvfb port by editing jvueserver in <AutoVue Install directory>/bin. Set xvfb_display in jvueserver.properties to an available port.

Q When I start up AutoVue Server on Linux, the server fails to start and the message in the log is “Could not create server lock file: /tmp/.X909.lock” or “Cannot establish any listening sockets - Make sure an X server isn’t already running.”

A

Ensure that AutoVue Server is not running already. Next, ensure that there is no other process using port 909. If another process is using the port, modify the Xvfb port by editing jvueserver in <AutoVue Install directory>/bin. Set xvfb_display in jvueserver.properties to an available port. Remove all files in /tmp/..X9* and /tmp/.X11-unix/X9*. Restart AutoVue.

Q 3D files don’t display when the AutoVue client is on HP-UX / Linux / AIX.

A

Make sure these libraries exist on your Linux machine:

- HP-UX - libGL.sl and libGLU.sl
- Linux - libGL.so and libGLU.so
- AIX - libGL.a and libGLU.a

Make sure the path to these libraries is set in the LD_LIBRARY_PATH.

Q When I print from my Linux client, text is not printed properly.

A

This can happen when printing files containing overlays when the file is rendered in EMF. Since printing on a Linux client, defaults to JAVA printing, which is client-side printing, you must ensure that Windows TTF fonts (such as symbol.ttf) are installed on the client-side.

Note: The fonts should be installed in a location where the Java Virtual Machine (JVM) can access them.

The follow steps describe how to install the Windows TTF fonts.

1 Copy symbol.ttf from a the fonts directory of a Windows machine to the JDK fonts directory of the Linux client machine.

   Example: /usr/java/jdk1.6.0_06/jre/lib/fonts

2 From the fonts directory of the Linux machine open fonts.dir with a text editor.

3 Append the following code line to the end of font.dir:

   symbol.ttf -urw-symbol-medium-r-normal--0-0-0-0-p-0-adobe-fontspecific
**Q Why is text not displaying correctly when I view a file?**

**A**

Check to see if the Resource icon displays in the status bar. If it does appear, click on it to view whether there are any missing or substituted font resources. In the event there are missing or substituted resources, you must provide access to AutoVue for these fonts. If a TTF font is missing, install the font in the C:\Windows\fonts directory on the AutoVue Server machine. If other fonts are missing, specify the font path in the XFONTPATH ini option or through the Configuration dialog. In some cases, you must update the font map.

**Q I have the WV server on Linux. When I open files with XRefs, the XRefs do not load.**

**A**

In release 19.3.1, if you have XRefs defined in your INI file or if you are using the server protocol to load XRefs, you must do an additional step. You need to modify the Wine configuration file to map the UNIX path to an internal Windows drive. Open jVue/jvue_w/jvuew_config in a text editor and add the following:

```
[Drive <letter>]
"Path" = <path>
"Type" = "network"
"Label" = "Root"
"Filesystem" = "unix"
```

For example:

```
[Drive T:]
"Path" = /home/admin/jVue/XREFs
"Type" = "network"
"Label" = "Root"
"Filesystem" = "unix"
```

**Q Why do I get a “Running low on memory” message when viewing a file?**

**A**

In the event the allocated memory to the client is lower than what is required to complete a task, you will see a “Running low on memory” message. To resolve this issue, you must increase Java memory client-side and try again.

To increase Java memory:

1. Open the Control Panel.
2. Double-click **Java**.
   
   The Java Control Panel appears.
3. Select the **Java** tab and then click **View**.
   
   The Java Runtime Environment Settings dialog appears.
4. Select the **User** tab.
5. Double-click the **Runtime Parameters** field for your Java platform and set/update the maximum memory. For example: `-Xmx256M`
   
   This value sets your maximum Java memory to 256MB.
Index

Numerics
3D Color options 111
3D Options 107
   export 111
3D PMI options 109

A
Acrobat PDF options 82
Adding an Additional Server 52
Allegro Options 83
allusers.ini options 82
AutoCAD options 83
Autodesk DWF options 84
Autodesk Inventor options 85
AutoVue Mobile Options 106
   Canada wide policy 107
AutoVue Server 24
   start
      for Windows 45
AutoVue Server Console 24

C
Cadence options 85
Cadkey options 86
CATIA 4 options 86
CATIA 5 options 87
CATIA options 86
CGM options 87
Client-side Installation 44
Collaboration
   configuring 26
Configuring for Collaboration 26
Creating a WAR file 60
Customizing the GUI 65
   choosing GUI file 65
   UNC file names 71

D
default.ini options 82
Deploying the WAR File 60
   generic steps 60
      Oracle Application Server 10g R3 62
      Tomcat 5.5 62

WebLogic 9.0 61
   WebSphere 5.x 60
DirectModel (JT) options 88
Disable options 117

E
ECAD options 112
EMF generation options 123
Enable Tunneling 60
Excel options 88

G
General options 100
   base font 105
Gerber options 88
GUI
   customizing 65
   GUI Configuration Syntax 66

H
HPGL/HPGL2 options 90

I
IFC options 91
INI File Options
   3D color 111
      3D Options 107
      3D PMI 109
      Allegro 83
      AutoCAD 83
      Autodesk DWF 84
      Autodesk Inventor 85
      AutoVue Mobile options 106
      Cadence 85
      Cadkey 86
      CATIA 86
      CATIA 4 86
      CATIA 5 87
      CGM 87
      DirectModel (JT) 88
      ECAD 112
      EMF generation 123
      Excel 88
      General 100
         base font 105
      Gerber 88
autoVue 142
Oracle Corp.

HPGL/HPGL2 90
IFC 91
JPEG 92
JPEG 2000 92
Markup 114
ME10/OneSpace 92
Microsoft Outlook 93
MicroStation 7/8 94
NC-Drill 96
OrCad Layout 96
Printing 117
  general 117
  headers/footers 124
  margins 125
  pen settings 125
  watermark 123
  in view mode 126
Pro/ENGINEER 97
SolidWorks 98
STEP 98
Text 98
TIFF 99
UI Color 105
Visio 99
Word 99
INI Options
  Markup
    Font 116
  Overlay 116
Initialization file
  general options
    SHOWALLLAYERS 84
Installation
  server-side 18

J
J2EE-enabled Application Servers 60
JPEG 2000 options 92
JPEG options 92

M
Markup options 114
  font 116
ME10/OneSpace Designer Drafting options 92
Microsoft IIS ISAPI Extension
tunelling 64
Microsoft Outlook 93
MicroStation 7/8 options 94
Modifying GUI file 65

N
NC-Drill options 96
Non-Interactive Installation 57, 73, 74, 75, 78
Non-J2EE Application Servers
tunelling 62

O
OrCad layout options 96
Overlay options 116

P
Printing
  general options 117
  headers/footers options 124
  margins options 125
  pen settings options 125
  watermark options 123
Pro/ENGINEER options 97

S
Scripting the Applet
  advanced scripting 39
  basic 38
Server Configuration 24
  adding an additional server 52
  adding multiple servers in a cluster 51
Server-side Installation 18
Servlet Configuration 60
SolidWorks options 98
Start AutoVue Server 45
  for Windows 45
STEP options 98
Structure and Syntax of GUI Files 65
System Requirements 12

T
Text options 98
TIFF options 99
Tunneling with Microsoft IIS ISAPI Extension
  64
Tunneling with non-J2EE Application Servers
  62
U
UI Color options 105

V
Visio options 99

W
WebSphere 5.0 60
Word options 99
Feedback

If you have any questions or require support for AutoVue please contact your system administrator. Some customization and maintenance must be done on the server and cannot be implemented on the client machine. If the administrator is unable to resolve the issue, please contact Oracle Corp.

If at any time you have questions or concerns regarding AutoVue, call or e-mail us.

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