

Release Notes: Client-Server Edition

AutoVue 19.1: June 1, 2006

Packaging and Licensing

- All product types are included in a single install.
- The installer will install all the components needed to run all product types. The installer requires a serial number.
- A license key is required to run the product. The license key determines the product type (functionality and format support) and the corresponding features will be activated. This means a product type upgrade (to add more functionality and format support) only requires entering a new license key from the server console. There is no re-install required.
- **License Types**
 - A “Named” license has been added to support the “Named User” model.
- **Evaluation Version**
 - An Evaluation version is a fully functional version of the product type specified in the evaluation license key.
 - An Evaluation version will stop working once the time out period (7 days) is reached.
 - Users can switch the Evaluation version to a licensed version by entering a non-Evaluation license key.
- **More checks on license keys**
 - A server can have only one license key. When a new license key is entered, it automatically over-writes the existing license key.
 - Serial Number in the license key must match the serial number entered during install. The license key will be rejected if this is not the case.
- **Server Farm Configuration**
 - A license key is now required for each individual server in the farm.
 - The license keys for the individual servers are now required to have the same serial number, license type, product type and license count.
 - Information is now embedded in the license key to identify keys to be used for load balancing and/or fail over.
 - The total license count for the entire farm is determined from the license count in any one of the license keys.
- **VueLinks**
 - As of 19.1, a license will be required to use Cimmetry VueLinks.
 - Licensed Cimmetry VueLink(s) will be indicated in the license key. The server will check the list of licensed VueLinks and will not work with (connect to) a Cimmetry VueLink not specified in the license key. VueLinks released prior to 19.1 will not be impacted, i.e. AutoVue 19.1 will still work with these VueLinks.
 - Non-Cimmetry VueLinks, developed by partners or other third parties, will not be affected (The VueLinks will be able to establish connections with the server).

Impact

- Customers using Cimmetry VueLinks 19.1 and later must make sure to use license keys that enable the VueLink(s) they are using.
- Customers must check their license keys to make sure they are consistent with the new license key checks, e.g. if a server is using two or more license keys, they must all be consolidated into one.
- Customers must get license keys for all their secondary servers when servers are in a farm.
- If servers in a farm use license keys with different serial numbers, the license keys must be updated to use the same serial number.
- Digital Mock-up functionality (DMU) has been removed from AutoVue SolidModel version. This functionality is now available only in the AutoVue SolidModel Professional version.

Important Client VM certification

Cimmetry will no longer support clients running Sun JAVA VM 1.4.1 and below. Cimmetry will henceforth certify SUN Java VM 1.4.2 and 1.5 and Microsoft VM.

Integrations certified with AutoVue 19.1

The following pre-19.1 Cimmetry VueLinks have been certified with AutoVue Server 19.1:

- VueLink for Matrix version 19
- VueLink for Documentum version 19
- VueLink for SAP cFolders version 19
- VueLink for SAP PLM version 18c2
- VueLink for OpenText version 18c6

In addition to the above, the integration with Agile PLM 9.2.1 has been certified with AutoVue Server 19.1.

MCAD Formats

- Added support for CATIA 5 R15 and R16.
- Added support for SolidWorks 2006.
- Added support for SolidEdge version 18.
- Improved performance and display of SolidWorks Drawing files containing shaded views.
- Improved text display in terms of alignment, color and size for CATIA 4 files.
- Improved double-byte font handling for CATIA 4 drawings. If a font file is missing, this is indicated in the Resource Information dialog and the text in the drawing may not display properly. The correct project file should be specified in the **CATIAPROJECTFILE** ini option. Font mapping should be updated in the file **CatiaV4.fontmap**. The fontmap file is located in the **<Install_Directory>\bin\fonts** and contains a mapping of the font name to the corresponding font resources.
- Enhanced CATIA 5 PMI support:
 - Added support for PMI visibility.
 - Added support for PMI Coordinate Dimensions.
- Performed maintenance and bug fixes for the following formats:
 - Autodesk Inventor
 - Pro/ENGINEER
 - CATIA 5
 - CATIA 4
 - JT
 - SolidWorks

- IGES
- VDA-FS

EDA Formats

- Added support for Mentor PADS PowerLogic and PowerPCB 2005 (ASCII and Binary).
- Added support for Sieb Meyer and Excellon NC Drill formats.
- Added support for Allegro version 15.5.
- Added support for Cadence Concept version 15.5.
- Added support for OrCAD Capture and Layout version 10.5.
- Added support for Protel DXP/PCB 2004 (ASCII and Binary).
- Enhanced Gerber aperture support:
 - Added support for AutoTrax and Visula aperture files.
 - Added support for user-defined aperture files through schemas.
- Performed maintenance and bug fixes for the following formats:
 - Mentor PADS PowerLogic and PowerPCB
 - Mentor Design Architect
 - Mentor Expedition
 - Protel PCB and SCH
 - Allegro Layouts
 - Cadence Concept HDL
 - Gerber
 - Protel

AEC Formats

- Added support for AutoCAD 3D.
- Added support for MicroStation V8 3D.
- Added support for ME10 (OneSpace Designer Drafting) versions 13.20A and 13.20B.
- Added support for multiple layouts (paper spaces) for AutoCAD DWG files converted from version 2006 & above to version 14.
- Performed maintenance and bug fixes for the following formats:
 - CGM
 - MicroStation 7 and 8
 - HPGL
 - ME10 (OneSpace Designer Drafting)
 - AutoCAD DWG
 - Autodesk DWF

Office-Desktop Formats

- Performed maintenance and bug fixes for the following formats:
 - Microsoft Word
 - Microsoft PowerPoint
 - Microsoft Excel
 - Adobe PDF
 - Postscript

Documentation

- Created a product feature matrix to indicate what features are supported in different product variations. Document is featurelist.pdf located in the docs sub-folder in the AutoVue installation folder.
- In an effort to improve customer service, Cimmetry is pleased to provide a list of some known limitations with AutoVue. This is not a complete list of all existing limitations.

Refer to this document in addition to the Release Notes every time you receive a new version or service pack for AutoVue as it is updated with every product release. Document is prdlm.pdf located in the docs sub-directory of the AutoVue server installation.

General

- Improved markup to PDF conversion.

Known Issues

- If you are upgrading from Desktop Edition version 19 to the Client-Server Edition version 19.1, some markup entities such as sign-off and OLE entities created in Desktop Edition version 19 will not display correctly. To workaround this issue, markups will need to be resaved with Desktop Edition 19.1 and then reloaded in Client-Server Edition 19.1.

New INI File settings

[Options]

Parameter	Description	Default
JTBuildTopology	Option applies to JT Files. Set to 0 to improve performance. Drawbacks: Setting to 0 will disable topology building. Surface measurements will not be possible. [Options] JTBuildTopology=[1/0]	1
ACAD_FAST3D	Set to 1 for faster rendering for AutoCAD 3D. Drawbacks: No layer support, all extrusions and meshes will be grouped under one node each in the model tree. Set to 0 to get layer support and expanded model tree. Drawbacks: Slow rendering for some files. [Options] ACAD_FAST3D=[1/0]	1
DGN_FAST3D	Set to 1 for faster rendering for MicroStation 3D. Drawbacks: No layer support, all extrusions and meshes will be grouped under one node each in the model tree. Set to 0 to get layer support and expanded model tree. Drawbacks: Slow rendering for some files. [Options] DGN_FAST3D=[1/0]	1
ProEAbortOnREFailure	Option applies to Pro/ENGINEER files. If set to 1 , error message will be displayed when Render Engine is not running or not responding. [Options] ProEAbortOnREFailure=[1/0]	0
SWWIRECOLORVISIBLE	SWWIRECOLORVISIBLE is used to set the color to draw SolidWorks 3D wireframe models. If the ini option is not set, the default is 0 (black). [Options] SWWIRECOLORVISIBLE=[Color] where [Color] is an integer value representing the RGB color to use.	0

[Gerber Format]

Option should be specified in the [Gerber Format] section in the INI file.

Parameter	Description	Default
TOOL_UNIT	Option applies to the Gerber Format. Specify the unit for the tool and aperture file if unit is different from the Gerber file. -1 = Unspecified file unit. Aperture file will adopt the same unit as the Gerber file. 1 = inches 2 = millimeters 12 = mil	-1

[ECAD]

All options should be specified in the [ECAD] section in the INI file.

Parameter	Description	Default
NCD_UNITS	Option applies to NC-Drill format. Specify units for NC-Drill files. 1 = inches 2 = millimeters	1
NCD_TRAILINGZEROSOMITTED	Option applies to NC-Drill format. 0 = Coordinate data's trailing zero omitted 1 = Coordinate data's leading zero omitted 2 = No zero in coordinate data is omitted 3 = Coordinate data is explicit decimal number	0
NCD_COMMENTSYMBOL	Option applies to NC-Drill format. Specify the comment symbol. Default: NCD_COMMENTSYMBOL=;	
NCD_INCREMENTALMODE	Option applies to NC-Drill format. Set to 1 if data is in incremental mode. 0 = absolute mode 1 = incremental mode	0
NCD_NUMDIGITS	Option applies to NC-Drill format. Specify the number of digits. Specify a value between 0 and 6. Note Changing this value will affect the x, y coordinate.	2
NCD_NUMDECIMALS	Option applies to NC-Drill format. Specify the number of decimals. Specify a value between 0 and 6. Note Changing this value will affect the x, y coordinate.	2
NCD_APERTURE_FORMAT_FILEPATH	Option applies to NC-Drill format. Complete path for Aperture format file. This file provides information on how to read the tool file	Empty path
NCD_TOOLFILEPATH	Complete path for Tool file.	Empty path

Release Notes: Client-Server Edition

AutoVue 19: September 26, 2005

3D Functionality

- Added 3D Compare capability.
 - Ability to compare two assemblies (assembly names should be identical).
 - Ability to detect geometric changes.
 - Ability to detect attribute changes.
 - Ability to identify parts that have been added, deleted, edited or moved.
 - Ability to compare selected sets of parts.
- Added 3D Explode capability with the ability to save exploded views.
 - Ability to dynamically explode large assemblies.
 - Ability to explode to desired level of model hierarchy.
 - Ability to save exploded views.
- Added 3D Search capability.
 - Search based on entity type.
 - Search based on entity attribute(s).
 - Search based on volume.
 - Search based on spatial location.
- Improved 3D measurement dialog. Dialog is now tabbed and allows easy switching between different measurement modes.
- PMI enhancements
 - Added support for native PMI visibility state.
 - Enhanced PMI filtering by adding more PMI entity types.
 - Added support for flat-to-screen and 3D-rendering styles for PMI text.
- Added ability to select all identical parts in an assembly. Available in the RMB menu when a part is selected.
- Added support for native views for SolidWorks, CATIA 5, Pro/ENGINEER and Unigraphics.
- Usability Enhancements
 - Added ability to retrieve entity properties by double-clicking an entity in the workspace.
 - Added ability to expand or collapse all in the model tree. Available in the RMB menu of the model tree.
 - Added ability to "Hide Rest" to only display entities that are selected and hide the rest. Option is available from the RMB menu when parts are selected.
 - Added cross-highlighting in 3D BOM - Highlights parts in the workspace when selected in the BOM result.
 - Renamed menu item Mockup to DMU.

EDA Functionality

- Added support for generating BOM for all pages of a schematic.
- Added ability to go to the instances of a net on other pages of a multi-page schematic.
- Enhanced cross-probe to be able to cross-probe nets from layout to schematics by selecting trace segments.
- Added "Dim Unselected" highlight type. With this new highlight type, selected entities retain original color and the rest of the board is dimmed.
- Improved EDA measurement dialog. Dialog is now tabbed and allows easy switching between different measurement modes.
- Improved usability of the Verify Design dialog.
- Enhanced entity selection from the workspace by default (can select entities without having to explicitly go into selection mode).

- Merged EDA selection filters and visibility filters into one dialog.
- Added LayerSets to the toolbar. Merged PCB Views into Layer Sets.

2D Functionality

- Added ability to sort layers in the layer dialog.
- Improved 2D measurement dialog. Dialog is now tabbed and allows easy switching between different measurement modes.

Printing Functionality

- Added support for print preview.
- Added partial print preview capability.
- Added support for AutoCAD's print file limits.
- Added support for printing a user-selected region.
- Added ability to limit output to one printer page.

Markup Functionality

- Added a library of GD&T symbols to the current symbols list.
- Added units to measurements by default.

Conversion Functionality

- Added support for converting 3D files to VRML and STL formats.
- Added ability to convert to PDF. When converted from markup mode, AutoVue markups are "burned" into the PDF as annotations.
Note Converting to PDF is not supported for the Server running on UNIX platforms.

General Enhancements

- Improved scalability for EDA functionality on the Client-Server edition.
- Licensing enhancements
 - License keys are release-specific. License keys generated for past releases will not be accepted.
 - Licensing schemes depend on cookies on client machines. Cookies should be enabled on all client machines.
- Added graphical display of license usage to the server console which shows number of licenses being used over a period of time. A usage log is also generated showing the same.

MCAD Formats

- Added support for SolidWorks version 2005.
- Added support for Mechanical Desktop version 2006.
- Added support for Autodesk Inventor versions 9 and 10 files.
- Added support for Solid Edge versions 16 and 17 files.
- Added support for CATIA 5 R14.
- Added support for JT version 8.
- Added support for SolidDesigner version 13.00 (OneSpace Designer Modeling 2005).
- Added support for SolidDesigner 2D.
- Added support for Parasolids versions 15, 16 and 17 files.
- Added support for Point Cloud format.
- Added support for KOSDIC STEP 2D format.
- Improved PMI support for CATIA 5, Pro/ENGINEER and Unigraphics.
- Improved performance for Unigraphics 3D.

- Added support for native file properties and faceted bodies for Unigraphics files.
- Added support for native fonts for Pro/ENGINEER 2d drawings.
- Added support for roughness symbols for CATIA 4 drawings.
- Added assembly feature support for Autodesk Inventor assemblies.
- Added support for assembly configurations for SolidEdge assemblies.
- Added support for file units for SolidEdge parts and assemblies.
- Added support for color and units for STEP and SolidDesigner 3D.
- Performed maintenance and bug fixes.

EDA Formats

- Added support for Mentor DxDesigner/ViewDraw files.
- Added support for Zuken CADIF files.
- Added 3D support for Mentor Expedition PCB.
- Added 3D support for Mentor BoardStation Layout.
- Added 3D support for PADS PowerPCB (PADS Layout).
- Added 3D support for OrCAD Layout.
- Added support for P-CAD 2004 PCB and Schematic files, ASCII and Binary.
- Added support for Cadence Allegro — version 15.2 board layouts, drawings, and symbols.
- Added support for Zuken CADSTAR version 7.0 (PCB and schematic) files.
- Added support for Mentor Expedition versions 2004 and 2004 SP1 files.
- Added support for PADS PowerPCB (PADS Layout) Binary, version 5.
- Added support for Protel DDB files.
- Added support for EDA functionality for EDIF files.
- Added support for nets and traces for Gerber files.
- Added support for EDA functionality for ODB++ and ODB++(X) files.
- Added support for schematic hierarchy navigation for Mentor Design Architect (schematic), Cadence Concept HDL, Mentor DxDesigner, OrCAD Capture, PADS PowerLogic, P-CAD schematics, EDIF, Expedition Design Capture and Zuken CADSTAR schematic files.
- Performed maintenance and bug fixes.

AEC Formats

- Added support for 3D Solids and Region entities in AutoCAD 3D files.
- Added support for SmartSolids, SmartSurfaces and 3D features in MicroStation 3D files.
- Added support for AutoCAD 2006 files.
- Added support for CGM ASCII – Clear Text Encoding files.
- Added support for DWF Markups.
- Added support for ME10 (OneSpace Designer Drafting) 2005 (version 13.00) files.
- Added support for ME10 embedded fonts. Added INI option to enable display of multibyte fonts.
- Added support for EDAT for AutoCAD versions 2004, 2005 and 2006 files.
- Performed maintenance and bug fixes.

Desktop Formats

- Added support for Adobe Acrobat version 7.0.
- Added support for Microsoft Project version 2003 (requires an installation of Microsoft Project).
- Added support for comments and hyperlinks in Excel files.
- Added support for postscript level 3.
- Performed maintenance and bug fixes.

Raster Formats

- Added support for anisotropic resolution for TIFF files.
- Performed maintenance and bug fixes.

New INI File settings

Parameter	Description	Default
DIBTrueColor=<0/1>	Set to 1 to force rendering of 4-bit and 8-bit raster images on a 24-bit pixmap.	0
CATIAFILTERNONROOT= <0/1>	Set to 0 to display non-root entities. Set to 1 to filter out (not display) non-root entities. Note Option applies to CATIA 4 3D files.	1
CATIAFILTERNOSHOWS= <0/1>	Set to 0 to display no-show entities. Set to 1 to filter out no-show entities. Option applies to CATIA 4 3D files.	1
CATIA5BuildInvisibleCGMBodies= <0/1>	Set to 1 to process and build invisible BREP bodies for CATIA 5 files. Set to 0 to not process and build invisible BREP bodies.	1
DGN8XREFUNITS=	Option applies to Microstation version 8 files with AutoCAD XREFs. Specify the unit to use for AutoCAD XREFs when units information for the XREFs is not stored in the Microstation drawing. The unit specified should be the same as the unit for the DWG specified in Microstation. Consult the Microstation help for a complete list of units. If the unit is not specified or an invalid value is specified, AutoVue reads the units from the AutoCAD XREF and hence, XREFs may not be scaled properly. Example: DGN8XREFUNITS = meters	
DGNREFCYCLECHECK=<0/1>	This option applies to Microstation 8 files and corresponds to MicroStation v8.5 environment variable MS_REF_CYCLECHECK. 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. Set to 0 , all references will be displayed as long as nesting depth permits.	0

Parameter	Description	Default																		
DWFCOLOR_TBL	<p>Option is applicable only when DWFRGBCOLOR=0.</p> <p>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. There are two default palettes depending on the DWF file version:</p> <ul style="list-style-type: none"> Autocad palette for file versions 3.6 and earlier. A second palette for file versions later than 3.6. <p>Below are some of the common colors and their corresponding pen numbers:</p> <table> <tr> <td>0,0,0</td> <td>/* 0, Black */</td> </tr> <tr> <td>128,128,128</td> <td>/* 248, Gray */</td> </tr> <tr> <td>255,0,0</td> <td>/* 190, Red */</td> </tr> <tr> <td>0,255,0</td> <td>/* 40 Green */</td> </tr> <tr> <td>255,255,0</td> <td>/* 251, Yellow */</td> </tr> <tr> <td>0,0,255</td> <td>/* 15, Blue */</td> </tr> <tr> <td>255,0,255</td> <td>/* 195, Violet */</td> </tr> <tr> <td>0,255,255</td> <td>/* 45, Cyan */</td> </tr> <tr> <td>255,255,255</td> <td>/* 225, White */</td> </tr> </table>	0,0,0	/* 0, Black */	128,128,128	/* 248, Gray */	255,0,0	/* 190, Red */	0,255,0	/* 40 Green */	255,255,0	/* 251, Yellow */	0,0,255	/* 15, Blue */	255,0,255	/* 195, Violet */	0,255,255	/* 45, Cyan */	255,255,255	/* 225, White */	
0,0,0	/* 0, Black */																			
128,128,128	/* 248, Gray */																			
255,0,0	/* 190, Red */																			
0,255,0	/* 40 Green */																			
255,255,0	/* 251, Yellow */																			
0,0,255	/* 15, Blue */																			
255,0,255	/* 195, Violet */																			
0,255,255	/* 45, Cyan */																			
255,255,255	/* 225, White */																			
DWFRGBCOLOR=<0 1>	<p>Option applies to DWF files.</p> <p>If 1, use RGB color.</p> <p>If 0, use AIC (AutoVue Indexed Color).</p> <p>Note Should be set to 0 to be able to use pen settings for printing.</p>	1																		
IGESLoadSubFigureDefinitions=<0 1>	<p>Set to 1 to display subfigure definitions when subfigure instances are not found.</p> <p>Note Option is for IGES 3D files.</p>	0																		
LWDISPLAYSCALE=[0-100]	<p>This option controls the display scale of line weights in the modelspace page for AutoCAD files version 14 and above.</p> <p>Set this option to [0-100].</p> <p>Default: 25</p> <p>For no line weight scaling, set this option to 25.</p> <p>For thicker lines, set this option above 25.</p> <p>For thinner lines, set this option below 25.</p>	25																		
ME10MULTIBYTE=<0 1>	<p>This option sets the priority for glyph search in Multibyte/Singlebyte fonts.</p> <p>Set to 0 if the file does not contain any Multibyte fonts (Far Eastern Languages).</p> <p>Set to 1 if the file contains a mixture of Singlebyte/Multibyte fonts.</p>																			
ORCAD_CUTOUT_COPPER_POUR= <0 1>	<p>Set to 1 if you wish to display copper pour cutouts for OrCAD Layout files.</p>	0																		

Parameter	Description	Default
PDFCACHELEVEL=<None Low Medium High>	Specify the level of caching to be used for PDF font glyphs. Low – 2 faces, 3 sizes per face, 200KB maximum memory size Medium - 4 faces, 6 sizes per face, 800KB maximum memory size High – 8 faces, 6 sizes per face, 1.5MB maximum memory size	Medium
PSWidth= PSHeight=	For Postscript files that do not have a page size, specify the width and height that AutoVue should use to completely display the file. For example, the below settings specify that the page size is 11.0 X 8.5 inches. [Options] PSWidth=11.0 PSHeight=8.5	
ProELang=	Specify the native font to use for Pro/Engineer 2D drawings. Possible values are: Korean/Japanese/Chinese_cn/ Chinese_tw/Hebrew Example: ProELang=Chinese_cn	
ProEMassPropUseMesh=<0 1>	Set to 1 to compute mass properties (volume, surface area, mass,...) using the mesh model. Default 0 computes mass properties using the BRep model.	0
ProEPMIDIMTOLDisplay=<0 1>	Set to 1 to display tolerance for dimension entities for Pro/ENGINEER 3D files.	0
RASNOFORCETOBLACK=<0 1>	Set to 1 to disable Force to Black for raster overlays and for raster files. Note Option is applicable only when FORCETOBLACK=1 .	0
SSHIDESCROLLBARS=<0 1>	Set to 1 to disable Dundas scroll bars for spreadsheet files. Note Option will work for Excel, Archives and MS Access formats.	0
STEPDetailedTree=<0 1>	Set to 1 to show detailed tree for STEP files.	0

Release Note: Client-Server Edition

AutoVue 18: June 30, 2004

3D Functionality

- Added Digital MockUp capability.
 - 3D Import capability.
 - 3D part alignment.

- Interference checking capability with support for exporting results to a csv (comma separated values) file.
- Support for user-defined coordinate systems. Users can now measure and transform parts with respect to a user-defined coordinate system.
- Enhanced part transformation:
 - Added manipulators to manipulate parts directly on the screen.
 - Improved part transformation capability: Setting absolute transformation (absolute part positioning) is now possible.
- Support for more attributes in user-defined views. Users can now save state information such as imported models, part visibility, transformation, color, transparency and sectioning.
- Added ability to save states, user-defined views, user-coordinate systems in markup files.
- Added functionality to generate 3D Bill of Material.
- Added option to fill a section plane and compute a section's area.
- Added support for GD&T for Catia 5, Pro/ENGINEER and JT.
- Added ability to display and manipulate PMI (Product and Manufacturing Information).
- Added support for displaying the properties of selected entities. This includes the display of EDA component attributes in the 3D view of PCB files and PMI attributes for files containing PMI data.
- Added the ability to configure the center of rotation used for rotating the entire model using the mouse.
- Added new display mode combining shaded and wireframe.
- Added support for viewing native file properties saved in JT files.

EDA Functionality

- Added design verification functionality for geometry- and attribute-based checks with support for exporting results to a csv (comma separated values) file.
- Added user-defined layer sets.
- Added support for sorting columns in the Layers dialog box.
- Added support for entity type-based filtering (e.g. one entity type — like pins — can be turned off in the display).
- Added ability to extract entity information by double-clicking (in entity selection mode).
- Added support for additional net properties, e.g. length and acute angle.
- Improved file compare functionality within EDA framework: added the ability to set offset/scale.
- Added support for cross probing between the 2D and the 3D pages.
- Added a flashing box to emphasize the location of the entity being highlighted.

2D Functionality

- Added snapping support for AEC formats.
- Added support for launching hyperlinks attached to entities for these formats: AutoCAD DWG, MicroStation versions 8 and 7, and Autodesk DWF, Adobe Portable Document Format (PDF) and Solidworks Drafts.
- Added support for viewing contents of notes attached to entities for Adobe Portable Document Format (PDF).
- Added support for viewing native file properties for the following formats: AutoCAD DWG, Microstation Version 8, Autodesk DWF and Adobe Portable Document Format (PDF).

Markup Enhancements

Saving Settings in the Markup File

- Added support for saving all current Markup settings in Markup files: e.g. color and current layer.
- Added support for saving last view settings in the Markup file: e.g. layer states, part visibility, part color, and transformation.
- Added support for saving user-defined views in the Markup file.
- Added user-coordinate systems which can also be saved in the Markup file.
- Added support for saving user-defined layer sets in the Markup files.
- Added support for saving reference to all imported files, in the Markup file.
- Added capability of saving the creation state for each Markup entity and restoring this state when the "Go To" is invoked.

2D Dimensions and Measurements

- Added take-off capability.
- Added arc dimension entity (radius or diameter).
- Added angle dimension entity.
- Added support for adding symbols to dimension text.
- Added extension lines (supporting the measured line) to 2D measurements.
- Added support for displaying units for all dimensions.
- Added snapping support for creating 2D dimensions for AEC files.

Entity Enhancements

- Added ability to create straight horizontal or vertical lines.
- Improved cloud entity.
- Improved positioning of leader text.
- Added ability to create multiple freestyle segments within a freestyle entity.
- Added support for rotating markup text when the markup file is rotated.

General

- Added display of version and build information for the different components of the application.
- Improved performance.
- Added support for batch printing.
- Added support for viewing files contained in Archive formats.
- Added support for collaboration when participants are connected to servers separated by a firewall.
- Added ability for collaboration message receiver to identify "whispered" messages.
- Added support for all new functionality in Collaboration mode.
- Improved server logging.
- Improved server load balancing.

AEC Formats

- Added support for AutoCAD 2005.
- Added support for AutoCAD Sheet Set (DST) 2005.
- Added support for MicroStation 8.5.
- Added support for ME10, version 12.
- Added support for Visio 2003.
- Added support for JPEG 2000.
- Added support for ESRI shape file.

- Added support for digital signature (without verification) for Microstation version 8.5.
- Added support for compressed enhanced metafile.
- Enhanced support for ME10 - added support for units, multi-sheets, pen settings.
- Performed maintenance and bug fixes.

EDA Formats

- Added support for Mentor Expedition PCB and Schematic.
- Added support for Cadence Allegro — version 15 board layouts, drawings, and symbols.
- Added support for Cadence Concept HDL, versions 14 and 15.
- Added support for HP IFF, version 3.0.
- Added support for Protel PCB, versions 98, 99, 99SE (ASCII and Binary).
- Added support for Protel Schematic, versions 98, 99, 99SE (ASCII and Binary).
- Added support for Cadence Specctra, versions 14 and 15.
- Added support for PADS PowerPCB, version 4.0 (ASCII).
- Added support for PADS PowerLogic, versions 4.0 (ASCII) and 5.0 (ASCII and Binary).
- Added support for Orcad Capture Version 10.
- Added support for Orcad Layout Version 10.
- Added bookmark entries to navigate PCB and Schematic pages contained in an archive format for Mentor.
- Added 3D support for Zuken Cadstar PCB.
- Performed maintenance and bug fixes.

MCAD Formats

- Added support for SolidWorks 2004.
- Added support for Unigraphics NX2.
- Added support for Pro/ENGINEER Wildfire 2.0 (2D/3D).
- Added support for AutoDesk Inventor 8 (2D/3D).
- Added support for SolidEdge, version 15.
- Added support for CATIA 5 R12 and R13.
- Added BRep support for CATIA 5 3D.
- Added support for SolidDesigner Version 12.
- Added support for AutoCAD Mechanical version 2005.
- Improved support for dimension and text entities for CATIA 5 drawings.
- Added PMI support for JT, CATIA 5, and Pro/ENGINEER.
- Improved performance for Unigraphics, CATIA 4, Pro/ENGINEER and JT.
- Improved support for STEP and IGES.
- Added color support for STL.
- Performed maintenance and bug fixes.

Desktop Formats

- **PDF**
 - Added support for Adobe Portable Document Format (PDF) 6 (version 1.5).
 - Added support for PDF digital signature (without verification).
 - Improved display of unicode characters for PDF files.
 - Added support for PDF through Adobe Graphics Server.
 - Added capability to automatically adjust page orientation when printing PDF files.
- **Word**
 - Added support for WordArt.
 - Implemented formatting enhancements: e.g. auto-numbering, column balancing, and font mapping.

- Added support for Word files through conversion(AutoVue Client-Server Edition only).
- **Excel**
 - Added support for rotated text.
 - Added support for WordArt.
 - Added support for number formatting in cells and charts.
 - Improved support for charts.
 - Added support for native print headers.
 - Added support for Central European languages in Excel, Word and PowerPoint.
- Added unicode, multi-byte and UTF-8 encoding to text format.
- Added support for 7-zip, Arj, Bzip2, Cab, Debian, Gzip, LHA, RAR, RPM and Tar archives.
- Performed maintenance and bug fixes.

