

# Visual CADD v8 – What’s New

Please note the contents are organized as follows for the benefit of continuing v8 users to read What’s New in each successive v8 release. If you are a new v8 user or want to review previous v8 Beta, Release Candidate, and Release versions, please read the Feature Highlights and More Features sections for all v8 Beta, Release Candidate, and Release versions.

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## **Fixes & Corrections – v8.0.4.94 – v8.0.4 Release**

- Fixed a problem with advanced ortho settings on the OrthoAdv/OV and TabCnstrnt/TBC dialogs.
- Fixed two message boxes incorrectly handling the pressed button.
- Updated supported DWG file formats through AutoCAD 2023.

## **Fixes & Corrections – v8.0.3.92 – v8.0.4 Beta 3**

- Fixed incorrect layer display in Layer Manager short list when changing drawings.
- Fixed extents used by leaders for window selections.
- Fixed a crash which may occur in nested reference frames.
- Fixed problems with DWG/DXF import of extrusions.
- Fixed a resource leak in the print dialog preview.

## **Fixes & Corrections - v8.0.3.90 - v8.0.4 Beta 2**

- Fixed dimension text location in certain cases of ordinate dimensions.
- Fixed construction points possibly drawing with the entity properties on continuous lines or curves.
- Fixed the speedbar line width box for an error in appearance in some cases.
- Fixed the size of the by-layer preview swatch in layer comboboxes when using dialog sizes on TBU.
- Fixed incorrect behavior of Snap Perpendicular combined with Snap Intersection.
- Simplified print error messages.
- Corrected a degree symbol in the default mousemenu.vcdef.
- Fixed a crash when creating a new symbol with a long name which is the same name as an already used symbol.
- Fixed problems with symbol and layer table export to DWG/DXF.

## **Features - v8.0.3.88 - v8.0.4 Beta 1**

- The Ctrl key can now be used to abort drawing of the Print, Plot, PDF, and Image Export previews.

## **Fixes & Corrections - v8.0.3.88 - v8.0.4 Beta 1**

- Changed the Print, Plot, PDF, and Image Export dialogs so that the preview draws after all other controls.
- Improved the mouse drag behavior in the Print, Plot, PDF, and Image Export previews.
- Fixed redraw problems associated with "not responding" Windows messages in very large drawings.
- Fixed toolbar line width combobox not drawing contents correctly in some cases.
- Revised the text of the Registry Warning message.
- Fixed dimension text rotation angle for linear, radial, and diametrical dimensions for certain rare cases.
- Fixed dimension text rotation angle for angular dimensions to agree with VCADD standard of dimension text readable from the bottom of the drawing.
- Fixed dimension text rotation angle for angular dimensions with text aligned after text slide or text move.
- Fixed a minor dimension text rotation issue with vertical dimension text.
- Fixed reversal of left/right arrows and extensions in a rare case of linear dimensions.
- Fixed a harmless problem on the progress bar for certain DWG/DXF imports.
- Fixed a problem in DWG/DXF import with model and paper space and self-referencing reference frames.

## **Fixes & Corrections - v8.0.3.86 - v8.0.3 Release**

- No changes between v8.0.3 Beta 6 and v8.0.3 Release.

## **Fixes & Corrections - v8.0.2.84 - v8.0.3 Beta 6**

- Fixed the Cancel behavior of the running snaps dialog.
- Fixed the reported length of certain elliptical arcs.
- Improved the behavior of the reference frame creation tools when cancelled from the dialog.
- Fixed unnecessary registry warning messages caused by long path - short path mismatches.
- Fixed a crash which may occur when using ObjectInfo/OI on some dimensions.
- Fixed a rare crash when the print dialog is opened.

## **API and ActiveX/COM - v8.0.2.84 - v8.0.3 Beta 6**

- Fixed VCUnloadUnusedSymDefs failing to remove symbols in v8.0.2.
- Corrected VCSetMBMode and VCSetMRMode which were previously reversed.
- Fixed scrollbars remaining visible in 3rd party applications.
- Fixed a potential incomplete shutdown in 3rd party applications.

## **Fixes & Corrections - v8.0.2.82 - v8.0.3 Beta 5**

- Fixed a preview color when using grayscale in printing and in image and PDF export.
- Fixed combobox scrollbars sometimes remaining visible after switching applications.
- Fixed a crash in Windows 7 when the Windows Classic theme is used.
- Fixed combobox scrollbars not drawing correctly in Windows 7 with the Windows Classic theme.
- Fixed a rare problem with property comboboxes on some versions of Windows.

## **Fixes & Corrections - v8.0.2.80 - v8.0.3 Beta 4**

- Fixed an undo bug on Stretch/SS which could cause objects to become invisible.
- Changed the DWG export version to include 2018-2020.
- Fixed text alignment on DWG/DXF export for right and center justified text.

## **Fixes & Corrections - v8.0.2.78 - v8.0.3 Beta 3**

- Fixed vanishing objects when the Stretch tool is aborted.
- Fixed hatch and fill boundaries not displaying with Move Point.
- Fixed Snap Near Point and Snap Closest not working with Bezier control points in the Stretch tool.
- Fixed rubberband text not displaying after PenUp/PU in Datum/DU.
- Fixed command prompts for Datum/DU.
- Fixed the vertical centering of sub-dialogs.

## **API and ActiveX/COM - v8.0.2.78 - v8.0.3 Beta 3**

- Added VCSettingsDlg missing from VCLink32.def.
- Fixed an issue with tabbed ribalogs in 3rd party apps which caused CMD\_DlgOk to be ignored.
- Fixed a problem with scrollbars using the API in standalone third party EXEs.
- Reinstated running snap preview control for standalone applications.

## **Features - v8.0.2.76 - v8.0.3 Beta 2**

- The SysSett.vcenv file is now created automatically if it does not exist at startup.
- Changed popup menus for RPolyCen and RPolySide to use script variables for the number of polygon sides.
- Added a horizontal scrollbar to Text Edit.
- Changed Stretch command so that the rubberband is not drawn until the "from" point is selected.

## **Fixes & Corrections - v8.0.2.76 - v8.0.3 Beta 2**

- Fixed VCADD window sometimes not appearing after being activated with Windows Alt+Tab.
- Fixed Snap to Compound Object Points related to missing reference frame drawings and other compound objects.
- Improved folder location determination for error log files.
- Fixed a harmless stray dialog when using RF ZoomView.
- Improved reliability of import of some DWG files.
- Fixed some backward compatibility issues of v8 VCS symbol files opening in pre-v8 versions.
- Fixed the context popup menu definition for the Side Regular Polygon tool.
- Fixed a rare crash in the Spell Check tool.
- Fixed perpendicular and tangent running snaps attempting to run with unsupported tools.
- Corrected the Settings page opened by the TabNumeric (TBN) command.
- Fixed dimension line compatibility with v7 when using in-line with a suffix.
- Fixed a control position on TabText/TBT.
- Fixed a problem where addon commands may vanish in rare circumstances.
- Fixed the background color for the Birds Eye dialog.
- Fixed missing ribalog tab label text when foreign interface languages are used.
- Fixed text issues when using the floating text dialog (introduced in 8.0.3 Beta 1).
- Eliminated the character limit warning message from Text Edit.
- Fixed a rare crash with the Copy command.
- Fixed incorrect text extents for TT text which includes tab characters.

## **API and ActiveX/COM - v8.0.2.76 - v8.0.3 Beta 2**

- Fixed the COM implementation of GetTextStringW and GetTextStringLocale.

## **Features - v8.0.2.74 - v8.0.3 Beta 1**

- Added native commands for the charset on leaders and dimensions.
- Added charset settings to XML settings/styles for leaders and dimensions.
- The About dialog now shows the installation folder and activated computer name (new activations only).
- A text file with activation information is now saved in the installation folder after activation.
- Visual CADD now warns if its registry settings are not correct at startup.

## **Fixes & Corrections - v8.0.2.74 - v8.0.3 Beta 1**

- Fixed line type rendering to avoid dots causing pixels to draw beyond the endpoint.
- Added a failsafe on applying charset to text, leaders, and dimensions to avoid mismatch between requested charset and those available in the font.

- Fixed several command prompt strings for typos and general formatting.
- Fixed an issue which may prevent print presets with quotation marks in their name from saving and loading properly.
- Fixed a few cases where incorrect tooltip text would display for user tools on toolbar flyouts.
- Fixed the PDF Export preview not updating correctly when a preset is loaded.
- Fixed a rare crash after clicking OK on tabbed ribalogs.
- Fixed a PDF export issue for drawings with text which includes a backslash (\) character.

## **API and ActiveX/COM - v8.0.2.74 - v8.0.3 Beta 1**

- Added functions to get/set charset on leaders and dimensions.
- Added function to get the version number of the current drawing.

## **Fixes & Corrections - v8.0.2.72 - v8.0.2 Release**

- No changes between v8.0.2 Beta 3 and v8.0.2 Release.

## **Features – v8.0.1.70 - v8.0.2 Beta 3**

- Added feature to spell check to finish all pending 'change all' or to cancel.
- Added MovePt/MP to the tools which can be made persistent with Persist/PE.
- Added .jpeg as an extension type for the Image place (IG) file dialog.

## **Fixes & Corrections – v8.0.1.70 - v8.0.2 Beta 3**

- Enabled the Set Current button on TabColor/TBR at all times.
- Fixed an issue which prevented the Symbol Manager from loading symbols created in 8.0.1.66 and 8.0.1.68.
- Fixed snaps repeating with spacebar in certain tools.
- Corrected the drawing version number after DWG, DXF, and GCD import.
- Fixed potential errors with very large text strings in text, leaders, dimensions, and attributes and very large user data chunks.
- Fixed missing dictionary toolbar buttons on SpellOpt/TBK settings.
- Fixed a crash which may occur when printing with a watermark.
- Fixed the cursor, command prompts, and object highlights of MovePt/MP to be consistent with its pick behavior.
- Fixed the cursor and command prompts of BezEdit/BE to be consistent with its pick behavior.
- Fixed certain cases of BezEdit/BE not restarting correctly with Persist/PE.
- Fixed a potential crash when saving drawings with very large embedded images.
- Added toolbar bitmaps for the modify shortcut commands.

## **Fixes & Corrections – v8.0.1.68 - v8.0.2 Beta 2**

- Fixed the Layer Manager stealing the keyboard focus after some dialogs are closed.
- Removed a stray edit box from Layer Manager (MGL) accidentally introduced in v8.0.2 Beta 1.
- Synchronized the layer combobox and editbox and fixed the Match/= button on layer hide/show, lock/unlock, and print/no-print ribalogs.
- Improved cursor handling for the Match tool.
- Fixed certain circumstances for entities not de-selecting when hidden by TabSystem/TBS display settings.

- Fixed entities de-selecting when hidden by TabSystem/TBS display settings erroneously using selection filter.
- Fixed the size of the text box on the Extended Data dialog.
- Improved memory management for PDF export of images.

## **Features – v8.0.1.66 - v8.0.2 Beta 1**

- Added a right-click context menu to the Symbol Manager that shows the symbol's definition.
- Added option to select multiple layers from the layer list on layer hide/show, lock/unlock, and print/no-print ribalogs.
- Added a tooltip to the Color settings page color grid which shows the color's name and RGB values.
- Added draw ordinal to the Database Viewer Object Details.
- Added point count attribute to entity XML.
- Added fill settings TabFill/TBB separate from hatch settings in the settings tree.
- Added native command FillToHatch to convert selected fill objects to hatches.
- Added option to convert fills to hatches in FillCh dialog.
- Added a Selection tool feature to select alternate objects within the search tolerance.
- Added option to import DWG/DXF line widths to pixel widths.
- Settings toggles can now use \$ variables as parameters in scripts.
- Added Selection Only to Image Export.
- Added an option to save PNG and BMP images directly to the Windows clipboard.

## **Fixes & Corrections – v8.0.1.66 - v8.0.2 Beta 1**

- Plotter Options dialog converted to tree style.
- Drawing Properties dialog converted to tree style.
- Closing a drawing tab activates the adjacent tab instead of the right-most tab.
- Fixed the Help button on the Plotter Options dialog.
- Fixed an issue where mainsbar comboboxes may not draw correctly after changing a selection.
- Fixed an issue where the real linewidth control on the mainsbar may be the wrong size if large dialog sizes are used.
- Fixed a crash when some OLE servers return an invalid object.
- Fixed a crash when an invalid toolbar bitmap is specified.
- Fixed the Auto Pan tool not obeying the refresh setting in some cases.
- Fixed auto panning with the cursor keys.
- Optimized some internal data access for speed.
- Adjusted RW and LP button sizes and bitmaps on PP and CG.
- Moved the incremental snap control on TBC.
- Improved format of TBN checkbox table.
- Resized edit boxes to be consistent with combo boxes and dialog scale.
- Added high resolution grid command bitmaps.
- Fixed an issue which prevented symbols whose names contained a vertical line character (|) from being removed.
- Fixed a crash which may occur in Reference Frames whose referenced drawings contain dimensions.
- Fixed incorrect colors in PDF export of fills in symbols.
- Fixed incorrect Dim Direction settings after a cumulative mode dimension tool is restarted.
- Fixed potentially incorrect drawing version number after auto-backup.
- VCADD drawing Paste tool no longer starts if the VCADD clipboard is empty.
- Fixed not being able to make toolbars visible if they were initially hidden at startup.

- Improved handling of modal dialogs.
- Fixed the Windows clipboard showing as empty on menus when it contains only a PNG image.
- Fixed a potential error in the layer of fill entities within symbols for pre-v8 symbols.
- Fixed a rare error in dimensions with prefix, suffix, tolerances, or stacked text strings.
- Fixed a minor problem with text size in dimensions.
- Fixed a random crash which may occur in drawings which contain reference frames.
- Fixed potentially incorrect scale when zooming reference frames.
- Improved Visual CADD app, document, and font bitmaps and icons.

## **API and ActiveX/COM – v8.0.1.66 – v8.0.2 Beta 1**

- Added an API function which can remove symbols whose names contain a vertical line (|) character.
- Improved performance of AlertApp callbacks.
- Fixed VCGetDrawList returning an empty list.
- Fixed VCGetDrawOrdinal.
- Fixed a parameter error in the ActiveX/COM function GetWorldExtentsAll.
- Added API and ActiveX/COM function VCSettingsDlg for running certain settings dialogs outside the TBO settings tree dialog.
- Added API and ActiveX/COM settings to import DWG/DXF line widths to pixel widths.
- Added FontEdit to the SDK Examples.

## **Fixes & Corrections – v8.0.1.64 - v8.0.1 Release**

- Corrected the command prompt for Snap Center, SnCenter/SN.
- Fixed the initiation of a move with the Selection tool when Snap Near Point is used.

## **Features – v8.0.0.62 - v8.0.1 Beta 3**

- Added Open As Copy and Open As Settings options to File Open.
- Added Save As Copy and Save As Copy And Open options to File Save As.
- Added Shift+Ctrl option for keys to Assign Script.
- Improved size and appearance of all buttons in the Visual CADD UI, with large icons, dialog scale, and menu font scale.
- Added new native command FillCh to edit selected fills. Also runs from Edit/ED.
- Added GDI style to fills and masks to include top and left boundaries and exclude right and bottom boundaries with new native commands FillGDI and HatchGDI.
- Added new native ModGDIStyle to change the GDI style of selected fills and masks.
- Added XML export traits for dimensions.
- Added DWG file error correction to DWG import.
- PNG images can now be used for user defined toolbar bitmaps.
- Changed status indicators on drawing tabs to resize with menu font size.
- Changed App Button menu and QAT to use button size according to the large icons setting.

## **Fixes & Corrections – v8.0.0.62 - v8.0.1 Beta 3**

- Fixed a line width problem in HatchCh/HC and edit mode of TextEditor/TE.
- Fixed DWG import for certain text format control codes.



- Fixed import of font format codes embedded in DWG MText objects.
- Fixed status bar prompt when using shortcuts with no drawing open.
- Fixed the export of 16bpp BMP images.
- Fixed DWG import font defaults and mapping.
- Improved display of disabled checkbox and radio buttons.
- Removed an unused groupbox from the dimension edit dialog.
- Fixed inconsistent arc length calculation for angular dimensions.
- Fixed a problem where startup scripts may not complete when VCADD is started using DDE.
- Fixed print and PDF export bounds for OLE objects and selection-only.
- Fixed an incorrect statusbar prompt when the cursor is moved outside the VCADD window.
- Updated all File Open and Save dialogs to conform to VCADD standard.
- Improved text property buttons on TT, DMT, and DME.
- Fixed a problem using Layer Properties button in MGL with no layer selected.
- Fixed missing disabled lock button in RFM layer list.
- Fixed Enter key as equivalent to mouse click for Selection and other tools which do not use the crosshair cursor.
- Fixed incorrect selection behavior when a snap is used in combination with the Selection tool.
- Fixed a potentially incorrect symbol when dragging and placing from the Symbol Manager preview.
- Fixed the updating of the Symbol Manager list when the available symbols are changed by other tools.
- The match tools now restore the previous tool's cursor when they complete instead of always using the crosshair.
- Changed the Trim, Extend, Fillet, Chamfer, and JoinCorner tools to uses the Pick cursor.
- Fixed an incorrect crosshair cursor which may appear if snaps are used with the Selection tool.
- Fixed a problem when opening multiple drawings as read-only.
- Removed Text Change from default menu and tool bar as a duplicate of Text Editor.
- Revised the default left toolbar for more complete inclusion of tools and better organization.
- Fixed problems with editing real world line widths in the main speedbar.

## **Features – v8.0.0.60 - v8.0.1 Beta 2**

- Added support for a user-defined menu font size set in the User Interface settings.
- Added native command, API, and ActiveX/COM to set menu font size.
- Added high DPI support for cursors.
- Preview window for the CADD Import dialog now shows the version for DWG files.

## **Fixes & Corrections – v8.0.0.60 - v8.0.1 Beta 2**

- Fixed speed issues with various operations, such as text edit.
- Fixed an issue where symbol files may not appear in the Symbol Manager.
- Fixed an issue where closing an edit dialog with the Esc key may not abort the associated edit tool.
- Changed ribalog tabs to use menu font size instead of Large Icons toggle.
- Fixed a conflict between TBH line width combobox and context sensitive help.
- Fixed match and help buttons on LayPropDlg/PY.
- Corrected XML export of hatch and fill contours to obey XML export settings.
- Adjusted the column widths for the TBA list for dialog scale and high DPI.
- Changed toolbar combobox fonts to match other comboboxes.
- Changed combobox highlight and item alignment to be consistent.
- Fixed drawing tabs for resizing on menu font size changes.
- Fixed TBH zoom button images for dialog scale and high DPI.

- Adjusted dialog background color for high contrast themes.
- Changed all browse buttons to "...".
- Fixed controls enabled/disabled on XIX and XPX settings dialogs.
- Fixed a button background color in 3rd party apps.
- Adjusted several ribalogs for control positions.
- Fixed a button size on SelRibalog/S1.
- Fixed ribalog tab font size for 3rd parties.

## **Fixes & Corrections – v8.0.0.58 - v8.0.1 Beta 1**

- Fixed dialog and ribalog sizing on high DPI displays and when using the dialog scale setting or large toolbar icons.
- Improved redraw speeds of reference frame edit and zoom tools.
- Improved general screen redraw speeds.
- Fixed multiple drawing redraws occurring in several circumstances.
- Fixed the RF Layer Manager for display and printable setting of multiple layer selections.
- Fixed the hidden layer message not displaying.
- Fixed a crash when using RFCreate with older drawings.
- Fixed a possible buffer overrun on large strings in DWG/DXF import.
- Changed Symbol Manager and Layer Manager to size to the large icons toggle instead of dialog scale.
- Fixed incorrect focus when the Paths page is selected in the Settings dialog.
- Sorted the font lists in DWG/DXF and GCD settings.

## **API and ActiveX/COM – v8.0.0.58 – v8.0.1 Beta 1**

- Fixed a crash when VCClearDrawing is called with an invalid world.

## **Fixes & Corrections – v8.0.0.56 - v8.0.0 Release**

- Fixed Symbol Manager to remember the last list view.
- Fixed a rare problem when loading a pre-v8 drawing containing a reference frame.
- Fixed a problem with updating the group selection count when using the API.
- Fixed a tab spacing problem with VCF fonts with an incorrectly defined space character.
- Fixed text greeking at very small onscreen text sizes.
- Fixed above-line dimension text to preserve appearances when loading pre-v8 drawings.

## **Fixes & Corrections – v8.0.0.54 – RC 4**

- Optimized the DimOrd/DO ribalog.
- Improved the character positioning for monospaced TrueType text drawn as vector.
- Fixed a crash when the Layer Manager is opened with an invalid reference frame selected.
- Fixed incorrect clipboard extents for some text objects.
- Fixed issues with the Modify and Delete buttons on the Layer Manager dialog.
- Improved single unit fraction layout.
- Fixed a DWG/DXF export problem with fractional/architectural dimension text.
- Corrected the sample SOLID line type definition in Linetype.vclnt.
- Fixed potential errors in PostLoadVCD script.
- Improved layer redraw in applying layer groups and in LayDisplay/YD and LayHide/YH.

- Fixed a problem with running snap perpendicular on continuous lines.
- Fixed default quick access toolbar when missing from custom.vcmnu or classic.vcmnu.
- Revised App Button menu accelerators keys.
- Symbols created by drag-and-drop into the Symbol Manager are now immediately loaded.
- Fixed some issues with symbol previews in SymMgr/MGY and SymOpen/YO.
- Fixed a rare crash which may occur when using Symbol Remove.

## **Features – v8.0.0.52 – RC 3**

- Added TBA toggle for ColorProp, LayerProp, TypeProp, and WidthProp to force UseFastProp on.
- Added Extended Data commands to the Edit menu.
- Added an informational factor value to the XML export of normalized (non-verbatim) hatches.
- Added BezEdit/BE option to move both endpoints of closed curves.
- Added support for tangent control point smoothing to BezEdit/BE at common endpoints of closed Bezier.
- Added feature to select move point on MovePoint/MP or BezEdit/BE when multiple points are ambiguous.
- Added extended expiry expiration date to the About dialog.
- Added a Shift key option to the Join/JO command to keep the last point instead of using the close contour flag.

## **Fixes & Corrections – v8.0.0.52 – RC 3**

- Fixed dialogs not responding to some keystrokes when @@@ is used in a script.
- Fixed a crash which may occur when closing several MDI tabs quickly.
- Fixed a bug in continuous Bezier curves which might act as if closed when not closed.
- Fixed missing names in RF Zoom View after RF Update.
- Corrected ConstPts/DC and HandlePts/DH to display corresponding points.
- Corrected fill, hatch, reference frame, and image boundaries to display and snap construction points.
- Corrected RSEndPoint/XSC snapping to curve tangent points.
- Changed running snap quadrant, tangent, and perpendicular to only snap to points on the object, not their extension.
- Optimized running snap speed.
- Fixed a crash which could occur with running snaps and too many objects within the search tolerance.
- The drawing extents for Print, Plot, PDF export and image export now ignore objects on non-printable layers.
- Objects on non-printable layers are no longer included in image export.
- Fixed the initial display of scale and reference offset in the PDF export dialog.
- The Print preview now updates when the rotation angle is changed.
- Fixed a problem with a special case of self-reference frames.
- Fixed the rubberband on MovePoint/MP when moving points on hatch or fill boundaries, including tangent lines on curves.
- Fixed the start of the rubber line in MovePoint/MP.
- Fixed a special case of MovePoint/MP moving points on hatch/fill boundaries.
- Fixed the missing rubberband line in Stretch/SS.
- Improved the format of some objects in the Object Info/OI dialog.
- Disabled the slide and move commands on the Dimension menu unless a dimension is selected.

## **API and ActiveX/COM – v8.0.0.52 – RC 3**

- Fixed the definition of print view values in the API.

## **Features – v8.0.0.50 – RC 2**

- Hatch definitions can now be viewed from the Hatch Settings dialog.
- Object Info dialog is now resizable.
- Updated the Symbol Manager "Symbols on Disk" list to indicate loaded and invalid symbols.
- Added a Refresh command to the Symbol Manager.
- Added support for single unit fractions on TrueType drawn as vector.
- Added footnotes to the Script Assign native command list.
- Added native commands FillLayer, FillLType, FillWidth, and TxtVertAlign.
- Added midpoint and percentage running snaps to all of circles, arcs, ellipses, elliptical arcs, and single and continuous curves.

## **Fixes & Corrections – v8.0.0.50 – RC 2**

- Fixed incorrect symbol component object colors or widths when the desired color or width is 0.
- PDF export revised to match onscreen drawing and printing.
- Fixed a bug on the speedbar changing selected symbols usage of by-layer.
- Improved the symbol preview for the Symbol Manager when showing symbols on disk.
- Fixed an issue with the XML export of hatch definitions loaded from a VCD file.
- Fixed incorrect location for the "Do not show this message again" dialog checkbox.
- Improved the symbol preview for Load Symbol.
- Fixed the running snap cursor for the percentage snap.
- Loading a symbol no longer marks the current drawing as dirty.
- Fixed running snaps to geometry taking precedence over running snaps to object.
- Fixed BezierCont/BC leaving rubberbands onscreen in rare cases.
- Fixed reading v2.0.4 version number from drawing files.
- Fixed leader compatibility in pre-v8 drawings.
- Corrected zoom factor on TabSystem/TBS to limits 1.1 - 2.0.
- Fixed the tooltips for various slider controls (e.g. watermark density).
- Moved Text Substitution from TBG to TBA.
- Changed PR, PL, XPP, and XPI dialogs to identify the offset origin.
- Fixed Snap Near Point (NP) and Snap Closest (SC) not snapping to the handle point of compound objects in some cases.
- Fixed PDF Export so that it obeys the Line Types, Line Widths and Fills display settings.
- Improved drawing of page borders and margins for the print preview.
- Fixed dimension tool ribalogs not closing if Selection is the default tool.
- Added missing command prompt for SnGridPt/GN.
- Removed continuous lines as a target for SnCenter/SN.
- Removed obsolete settings from SysSett.vcenv.
- Changed default on Shift+Right Button toggle.
- Fixed point objects printing a very long upper line segment.

## **API and ActiveX/COM – v8.0.0.50 – RC 2**

- Fixed a rare bug in VCChangeSymPlacementColor.

## **Fixes & Corrections – v8.0.0.48 – RC 1**

- Fixed selected objects disappearing when WinStretch/WS is aborted.
- Fixed incorrect second point location for Track tool when it is used with some other tools.
- Fixed incorrect point location for nesting tool when the Track tool is aborted.
- Fixed incorrect tool palette width with no flyout buttons.
- Improved file handling for drawings with objects with a large amount of data.
- Fixed initialization of the XML export options dialog.
- Fixed the Break Symbol tool not restarting correctly after a symbol is selected in the Place Symbol ribalog combobox.
- Fixed a version compatibility issue with reference frames in v4 and earlier drawings.
- Improved running snap reliability and accuracy.
- Fixed the Selection ribalog not displaying correctly if a dimension tool is the default.
- Changed leaders to agree with text behavior when mirrored horizontally or vertically.
- Fixed incorrect editbox selection in the Properties dialog after the Tab key.
- Fixed leader shoulder angle edit in LeaderCh.
- Added in-line centered option to vertical position of dimension text with prefix or suffix on new lines.
- Fixed vanishing objects after WinStretch/WS is undone.
- Fixed incorrect icons in the Symbol Manager list.
- The Symbol Manager preview now updates when "Use Placement Color" is changed.
- Corrected the Symbol Manager preview for non-symbol list entries.
- Improved handling of corrupt VCS files.
- Corrected the Load Symbol preview for VCS files where the file name does not match the internal symbol name.
- Corrected the Load Symbol preview for files which are not valid symbol files.
- Fixed incorrect folder change in the Load Symbol dialog.
- Removed DWG and DXF as Load Symbol options.
- The caption for the Load Symbol preview now shows the selected internal symbol name.
- Fixed blurry toolbar icons.
- Fixed the Match button on the Symbol Manager dialog.

## **Features – v8.0.0.46 - Beta 3**

- Added the ability to control the opacity of images.
- Changed layer settings so that changes to layer display, locked, printable, name, and groups make a drawing dirty.
- Changed layer settings so that changes to by-layer properties make a drawing dirty.
- Changed reference frame layer and layer group changes using RFLayMgr/RFM to be undoable.
- Allowed layer name changes which differ only by case.
- Improved compatibility with spell check dictionaries which use UTF-8 encoding.
- Ported layer toggles from system to drawing settings: use by layer, apply layers to all views, and use layer group properties.
- Text, Dimension, and Drawing Assistant wizards updated.
- Added native commands for Image place settings.

## **Fixes & Corrections – v8.0.0.46 - Beta 3**

- Changed the Layer Group combobox static message to clarify that it does not indicate the current layer group.

- Improved error message when attempting to load a zero-length style file.
- Fixed various problems with multiple views of a drawing.
- Fixed a problem related to, and made obsolete, the Redraw Layer on YD and YH ribalogs and the MGL popup menu for multiple drawing views.
- Changed the Apply Layer on the MGL popup menu to the more descriptive Use Layer Group Properties.
- The default Match popup tool context menu item is only included when the tool dialog has a Match button.
- Fixed a memory leak when using the Offset tool with a single Bezier object.
- Removed the Match button from tool ribalogs which do not support it.
- Fixed an incorrect match string on the Linear Dim Prefix/Suffix ribalog.
- Fixed WinStretch/WS hiding entities when aborted after the window selection.
- Fixed a scale problem when loading v7 drawings with reference frames into v8.
- Added "Apply to All Views" button to LayMgr/MGL toolbar.
- Fixed the speedbar color combobox text overwriting its dropdown button.
- The default All Layers layer group now updates when the interface language is changed.
- Fixed native SetLayer to make current layer visible.
- Changed NewView/VW to inherit current layer settings when Apply to All Views is set.
- Fixed layer list styles to make current layer visible and to obey the Apply to All Views setting.
- Fixed layer groups to obey the Apply to All Views setting.
- Fixed LayHide/YH to not hide the current layer in any MDI view.
- Moved layer settings from TabSys2/TB2 to TabGeneral/TBG.
- Added 'Apply Layers to All Views' setting to TabGeneral/TBG.
- Added menu items to default main Layer menu and to LayMgr/MGL popup menu.
- Fixed incorrect keyboard focus after menu opened with Alt+key.
- Fixed a problem with the selected points and save selected objects.
- Fixed leaders correctly redrawing after changes affecting leader text.
- Fixed text and leader extent problems related to Selection/SE, SelWin/SW, and SelCross/SX.
- Fixed leader text border size and position.
- Fixed PDF export of fills drawing boundary when Show Boundary is off.
- Corrected text extents for text with tab stops and tab spaces.
- Fixed TT fonts drawn as vector for spaces, tabs spaces, and tab stops, with and without full height.
- Fixed rare problems with leaders at very small scales.
- Fixed Leader/LE behavior with PenUp/PU before second point placement.
- Fixed Leader/LE problems when using direct entry.
- Prevented zero-length line or curve segments when placing Leader/LE.
- Adjusted the text tool I-beam cursor position to match the text vertical alignment.
- Added a small x to the text tool I-beam cursor to indicate the text handle point relative to the I-beam.
- Corrected the initial position of the Text Line caret for non-baseline vertically aligned text.
- Improved the onscreen appearance of the point object.
- Improved the onscreen appearance of construction and handle points.
- Changed the default running snap preview color and entity placement colors and line widths until the user has set them and saved the environment.
- Changed the default text, hatch, and fill layer to use the current layer until the user has set them and saved the environment.
- Fixed taskbar not unhiding in some cases when VCADD is maximized.
- Changed the automatic view activation of mouse moves with multiple views to always activate on any tool state.
- Fixed a spurious mouse click which may occur when clicking in a drawing view window to activate it.
- Fixed the rubberband not always erasing when moving from one drawing view to another.

- Added tab stops to leader styles.
- Fixed a spellchecker memory leak which may occur with foreign language dictionaries.
- Changed the page order for the dimension wizard so that the color is set before the arrow type.
- Added command prompts for ZmAutoPan/AA and RegenArea/RW.

## **API and ActiveX/COM – v8.0.0.46 - Beta 3**

- Added API functions for image placement lock aspect and auto-position.

## **Features – v8.0.0.44 - Beta 2**

- Added RFDetail/RFD tool to place reference frames with exact scale and view.
- Added RFTrim/RFT to trim reference frames at the same scale.
- Added feature to trim RF after placement with RFPlace/RFP.
- Changed RFPlace/RFP to allow scales other than (1.0, 1.0).
- Print and PDF Export watermarks now support text substitution.
- Added a description tooltip to the hatch patterns on the Hatch and Fill Settings page.
- Added text properties tab to Text/TL and TextSet/TT ribalog.
- Added leader properties tab to Leader/LE ribalog.
- Added UndoVertex/UV to the Curve and Continuous Bezier tools.
- The Symbol Place tool is now started when a symbol name is clicked in Symbol Manager (MGY).
- Numeric keypad numbers now work with Ctrl+number scripts.
- Added an XML declaration and Byte Order Mark to generated and translated XML configuration files and files saved by VConfigEdit.
- Added XML Export Traits for continuous objects, hatches, and fills.
- Added a user definable Computer Name to activation.
- Added attribute, image, and reference frame settings to Save Style options.
- Backwards Redraw renamed to Inverse Selection Search.
- Added toggles as script \$-variables.
- Added a nesting limit warning to scripting.
- Added group information to the selection statusbar prompt.
- Added text and background color 3 support to selection statusbar pane to indicate group selections.

## **Fixes & Corrections – v8.0.0.44 - Beta 2**

- Changed RFCreat/RFC to display dialog first.
- Fixed a rare bug with RFPlace/RFP in a script.
- Open Referenced File (RFR) now activates the view of an already open drawing instead of opening a new instance of the file.
- Fixed RFZoomArea/RFW, RFZoomPan/RFN, and RFZoomAnchor/RFK for the cursor disappearing outside the refframe.
- Revised default main menu.
- Fixed an unnecessary window resize when the toolbar is reloaded.
- Fixed an incorrect cursor after some popup context menus.
- Improved the positioning of the Print watermark.
- Fixed incorrect undo behaviour in Window and Object Shortcut Commands.
- Fixed incorrect scripts for Ctrl+number keys.

- Fixed the behavior of Snap Near Point (NP) and Snap Last Point (LP) when used in scripts.
- Fixed "Always Center on Page" for PDF Export.
- Fixed the Layer Group name drawing outside of its box on the main speedbar.
- Fixed length calculations for very small curves.
- Eliminated unnecessary toolbar updates with some selections.
- Fixed the length calculation for multilines with 'CloseContour' set.
- Fixed a vertical position problem with dimension text.
- Corrected \$-variables in scripts and edit boxes for distance entry units.
- Fixed \$MulSetOffset for database scale.
- Fixed \$LdrShldrAng and \$LdrTextRot for angle entry units.
- Fixed a typo on the General (TBG) settings page.
- Fixed vanishing rubberband in the Stretch tool.
- Fixed real world script \$-variables for database scale.
- Fixed the = key not starting the Match tool in the Change (CG) and Properties (PP) ribalogs.
- Fixed preset VCCFG toggle settings for strict true/false.
- Fixed missing preview on Image Export dialog.
- Disabled the Alt key accelerators for the QAT.
- Fixed a crash in the Split Polygon tool.
- Improved the cursor position and rubberband for UndoVertex in several tools.
- Fixed image corruption or crash if a color palette is imported with TBR.
- Fixed the script variable \$PrtWtrMrkGry.
- Corrected natives MulSetRealW and MulSetOffset to support database scale.
- Revised script-only native PrtAllBlack for gray-scale option.
- Disabled the Alt key accelerators for the Quick Access Toolbar.
- Fixed a crash in the Split Polygon tool.
- Improved the cursor position and rubberband for UndoVertex in several tools.
- Fixed image corruption or crash if a color palette is imported with TabColor/TBR.
- Fixed incorrect colors in PDF export of nested symbols.
- Fixed an occasional missing preview image on the File Open dialog.
- Fixed TextColor3 for statusbar panes.
- Fixed the MGY and MGL dialogs remaining visible after VCADD is minimized.
- Fixed incorrect cursor after running snap overridden with Alt key.
- Fixed a rare problem with the selection filter and save or export of selected objects.
- Fixed the incorrect display of a crosshair cursor if the Selection tool is restarted.
- Fixed missing tooltips on the Symbol Manager dialog.
- Fixed a rare problem with keyboard focus on startup.

## **API and ActiveX/COM – v8.0.0.44 - Beta 2**

### New Functions

- VCGetMacroVariableEx() to get variables in inches, degrees, or user distance and angle entry units.
- VCGet/SetMacroAngleVariable and VCGet/SetMacroLengthVariable.
- VCGetAngleConversionFactor and VCGetDimAngleConversionFactor.

### Fixes & Corrections

- SDK examples updated with statusbar user panes and user data tags code.
- Corrected the toolbar height returned by VCGetRibalogSize.



- Corrected \$-variables in VCStringToDist() for distance entry units.
- Revised VCGet/SetPrintPresetAllToBlack for gray-scale option.
- Fixed a crash which may occur when using VCScaleSelected.

## **Feature Highlights – v8.0.0.42 - Beta 1**

### More customizable User interface

- Added customization for a quick access toolbar and an app button.
- Allow valid 2 and 3-letter shortcuts when no drawing is open: FN, FO, XIC, XIX, FU, and FX.
- Added tabbed MDI interface and new MFC toolbars.
- Added user definable status bar.
- The statusbar now has pane-specific context menus.
- Toolbars now scale with the Windows DPI setting.
- Ribalog control and text sizes now scale up when Large Icons is selected.
- Added a dialog scaling feature, with native DialogScale to optionally set it in a script.
- File names in the menu MRU list now always show the full path, irrespective of the current directory.
- Changed the statusbar prompt strings for selected objects to full, unabbreviated text.

### Custom Color Palette supporting full 24-bit color

- Added support for color palette as a drawing setting.
- Added a 24-bit full color palette editor.
- Added support to save and load custom color palettes.
- Added color palette names HardBlack and HardWhite for the non-VGA black and white.

### Mask tool and options to draw opaque backgrounds

- Added mask fill feature to hatches/fills to create opaque fills using background color.
- Added MaskBnd/MK tool to draw opaque fills using background color using a boundary.
- Added native ShowMask to toggle display of mask boundary.

### DWG Import/Export

- Added support for AutoCAD 2018 drawings.

### Bezier edit tool for complete edit control of curve points

- Added BezEdit/BE tool as an editor for single and continuous Bezier and spline curves.
- Made BezEdit/BE optionally persistent when preceded by Persist/PE.

### Settings dialog TabOptions/TBO expanded

- Added color palette editor TabColor/TBR.
- Added running snaps settings SnType/RN.
- Added image import settings TabImageImp/TBI.
- Added reference frame settings TabRefFrame/TBM.
- Added style save options StyleOpt.
- Added user interface settings TabUI/TBU.
- Added multiline settings MultiSet/MS.
- Added script editor ScriptAssign/AS, including commands and shortcuts.
- Added spelling options SpellOpt/TBK.

### Drawing Settings and general user interface improvements

- Made background, cursor, selection, and rubber-band colors a drawing setting rather than system setting.

- Added fill entity placement properties to TBH.
- Separately save and use the last file extension used by ImportCAD/XIC and ExportCAD/XPC.
- Added SaveEnvGbl/ENG and EnvSaveDraw/END commands to separately save global and drawing environments, respectively.
- Changed alias for SaveEnv command from EN to ENA, for environment save all.
- Added separate global and drawing settings for "Save Environment on Exit".
- Added a "by-layer" indicator to properties comboboxes.
- Added a right-click popup menu to the property comboboxes to clear dormant by-layer.
- Implemented displaying radian/r or gradian/g units in angle edit boxes to distinguish from degrees, where appropriate.
- Added an angle unit 'd' and 'D' to indicate degrees when in radian or gradian angle mode.

#### Commands and Tools

- Added Parabola/PB tool to place parabolas.
- Added ParabVertex/PV tool to draw a parabola using its vertex.
- Added MixedJoin/MJ tool to join mixed combinations of lines, Bezier, and splines.
- Added SnGridPt/GN tool to snap to a grid point on demand.
- Added clipboard copy & cut commands, CBCopyRef and CBCutRef, which have a user selected reference point.
- Added RFOpenRef command to open the VCD file referenced by a reference frame.
- Added ReadStyle command to load an XML style in a script.
- Added an OLE object manager OleMgr.
- Changed Show Aperture on RN to apply when RS is on with new command RSAperture.
- Added a user interface for extended data, commands ExDataHdr and ExDataObj.
- Added native commands to set print watermark and custom stamp text.
- Added CleanDataWnd command as a variant of CleanData which removes objects outside a user drawn window.
- Added SnFocus/NF command which snaps to the focal points of arcs, circles, ellipses, elliptical arcs, and parabolas.
- Added DBSolid, FilletPrv, and OffsetFixed commands.
- Added DatumSet command for a command ID used in a popup menu.
- Added SymSelect toggle to Select/SE symbols by click point to the closest individual objects.
- Added ModBoundary command to toggle the boundary display of selected reference frames, hatches, and fills.
- Added ModBoundary to selected hatch and fill mouse popup menus.
- Added DispAngUnits and DimAngUnits commands for hide/show angle units.
- Added toggles for line break after a dimension prefix or before a dimension suffix with DimPrfxAbove and DimSufxBelow commands.
- Added grid snaps to running snaps as native command toggle RSGrid/XSG.
- Added TextUnicode command to toggle text as Unicode.
- Added DimStacked and DimNoBreak command so toggle the respective dimension settings.
- Added an option to allow Snap Near Point (NP) to snap to hatch pattern lines, with native SnapHatchPt command to toggle.

#### Script-Only Commands

- Added SetByLayer and ApplyByLayer commands.
- Added single unit fraction text height setting for text, leaders, and dimensions, with TextFracHt, LdrFracHt, and DimFracHt commands.
- Added Stack command which can be used for temporary storage of variables in scripts.
- Added commands to set dimension part line real world line widths.
- Added several commands to set the properties of leaders and their parts.

## Scripting

- Custom commands can now use internal bitmaps.
- The AS command lists now include custom commands.
- Scripts now detect and warn about parameters which cannot be evaluated.
- Custom shortcuts defined in AS now take effect without a restart of VCADD.
- Added a "show by example" feature to scripting, with Length and Angle commands to get the respective length or angle.
- Added a "wait for macro" feature to scripting.
- Added keyword expansion to the script Filename command.
- Added a right-click popup menu action to edit the selected command in the Native Command list on the Custom Commands dialog.
- The Native Commands list on the Shortcuts dialog now updates when the shortcuts are updated.
- Improved the behavior of the Modify Shortcut commands when used in scripts.

## **More Features – v8.0.0.42 - Beta 1**

- Added SnMidPt/SM support for single and continuous Bezier, curves, circles, ellipses, elliptical arcs, and multilines.
- Added SnPercent/SR support for single and continuous Bezier, curves, ellipses, elliptical arcs, and multilines.
- Added MidLine/ML as a default tool.
- Added PlaceImage/IG, RFCreate/RFC, and RFPlace/RFP as persistent tools.
- Added support for negative hatch scales to facilitate mirroring of patterns.
- Clipboard copy (Ctrl+C) now copies text from a single selected text-type entity.
- UndoVertex support added to the Track tool.
- Added Filter/SF and FltActive buttons to default main toolbar.
- Changed speedbar property boxes so that a layer change does not force that layer's by-layer properties.
- Improved editing of offsets and real widths in multiline, dimensions, and leaders.
- Added by-layer support to natives SetColor, SetType, and SetWidth.
- Allowed DBMove to run without a selection.
- Added support for reference frames containing drawings using database move and/or scale.
- Improved reference frame behaviors in TBM, RFC, RFE, and the RF zoom tools.
- Improved the accuracy of Snap Perpendicular when used in conjunction with Near Point.
- Implemented angle formats in angle edit boxes.
- Improved distance calculations for clicks to select hatches, fills, and symbols.
- Allow most angles in the UI to show as negative angles rather than 0-360 degrees.
- Improved behavior of angle-constraining snaps, such as LL, ST, and SP when used in conjunction with ortho mode.
- Implemented RW width in TBH and HC.
- Implemented real world width in width combobox of TBT.
- Added list control support for NOCHANGE "\*\*\*" on multiple layer selections in MS.
- Changed TBL to use <current> layer rather than Use Leader Layer.
- Changed edit for leaders to use the layer list without Use Leader Layer.
- Changed TBD to use <current> layer rather than Use Dimension Layer.
- Changed DE to use the layer list without Use Dimension Layer.
- Symbols now have a color filter in the Selection Filter dialog.
- Added a layer combobox option to YD, YH, and related layer ribalog tools.
- Added vertical text alignment to TE and TBT dialogs, both for placement and edit.
- Added single unit fraction font size setting to TE and TBT dialogs, both for placement and edit.

- Added tooltips to the TE dialog.
- Implemented tooltips in lists in TBT, TBD, TBL, and MS.
- Added footnote flags to native list in AS.
- Added an addon filter to the Custom Command dialog.
- Added RF commands to main menu.
- Moved TBO, SK, and AS from left toolbar to main speedbar.
- Added Paste Special, RN, TBR, and NL to main speedbar, with new bitmaps where needed.
- Added to and changed the main drawing menu.
- Implemented a user defined hotkey for the app button.
- Added CBCutRef and CBCopyRef to menus and main speedbar.
- Changed behavior of MS for settings and edit modes to be more like other settings and edit tools.
- Added OleMgr to drawing menu under Edit.
- Improved handling of contrast among the various UI colors.
- Moved database offset and scale from TBG to WIP.
- Replaced 'All Colors To Black' button with 'Color, Grayscale, Black' listbox on PR and XPP.
- Added a message log file feature.
- Added indenting to saved XML format files.
- Added a center horizontal alignment to leaders.
- Layer information, such as names, is now saved with bound reference frames.
- System cursors used with running snaps and real mouse position now use the VCADD cursor color.
- The initial sort order of the font list on the Fonts settings page now matches the system font sort setting.
- Added a Pick cursor for tools which pick an object instead of selecting.
- Added feature to place floating text linear dimensions.
- Added an option for custom stamp text when printing.
- Added an option to disable AutoPan with the middle mouse button.
- Added user selectable font size for the Text Editor editbox.
- Named views now export as named destinations in PDF export.
- By layer properties are now saved with the drawing environment.
- By layer properties and layer names and display now have separate style options.
- Added a CleanData log which records the removed objects.
- Added a tooltip to the Font settings page (TBF) which provides the ratio of the default text height to full height for TrueType fonts.
- Remove LayerGroup/LG from menus.
- Prevent wrong custom file list on menus.
- Line type and width are now visible for all entity kinds in the Selection Filter dialog.
- Tracking now draws the rubberband for the underlying tool after the first point click.
- Symbol icons in MGY now always show the symbols' true colors and orientation.
- The symbol preview in MGY now always includes the symbol handle point.
- Updated the "Select path" dialog.
- The RW width text in the width combobox is now left aligned to show the most significant digits.
- Added tools which can be made persistent by Persist/PE: HatchBnd/HB, SeedHatch/HD, FillBnd/FB, SeedFill/FD, MaskBnd/MK, Offset/OF.
- Added feature for horizontal alignment of leader text.
- Added ortho and running snap support on FenceTrim/NT.
- Added a separate hide/show angle units for display/entry and dimensions.
- Added support for retaining full precision in rounded angle boxes if no edit change is made.
- Added support for retaining full precision in rounded distance and scale angle boxes if no edit change is made.

- Added TabAdv/TBA feature to turn off 'show by example' to avoid conflicts with data entry when necessary.
- Implemented contrasting color for normal entity draw.
- Changed SE window drag and SS to always use a solid rubberband.
- Changed SnPerp/SP, SnPara/LL, SnTangent/ST, and SnAngle/SV to support the same tools.
- Added fixed tolerances to secondary dimension.
- Added feature for dimension text aligned with arc in angular dimensions.
- Added New Line options to prefix and suffix on dimension tabbed ribalog.
- Added Float option to vertical position on dimension tabbed ribalog.
- Updated Symbol Manager to be network aware.
- Added option to open image file after ExportImage/XPI.
- Added Divide/IV tool support for ellipses, elliptical arcs, single and continuous Bezier, and spline curves.
- Improved accuracy of length calculations of ellipses, elliptical arcs, single and continuous Bezier, and splines, including accuracy of Divide/IV.
- Added dimension line extension when above-line dimension text is outside the arrows.
- Added feature to XIC and XPC to change the folder on changes to the file type until the user directly changes the folder himself.
- Improved the DimDispSet/DMD ribalog.
- Added by-layer support to DimDispSet/DMD.
- Changed BirdsEye/ZB and RFBirdsEye/RFB to switch between each other based upon selection of a reference frame.
- Changed Break/BR to not use an existing selection when it starts.
- Added a running snap cursor for no snap with cursor free off.
- Added a cursor for cursor free off controlled by a TBA toggle.
- Made SnPrev/RV always on and obsolete.
- Made Quick Search, QSearch/QS, always off and obsolete.
- Added By-Layer table data to XML export.
- Made minor improvements to the database viewer dialog.
- The ObjectInfo/OI dialog now has different indicators for active and dormant by-layer properties.
- Hatch descriptions in Hatches.vchat are now an XML element instead of a comment.

## **Fixes & Corrections – v8.0.0.42 - Beta 1**

- Fixed an error where an ortho or isometric angle might incorrectly be 0.0 in certain cases.
- Fixed the incremental snap distance for isometric mode.
- Force immediate ortho mode update as soon as any ortho mode setting is changed.
- Fixed a text justification error in the Text Wizard, WizText/WIT.
- Fixed a potential crash in the New Handle tool.
- Fixed parsing errors in direct entry.
- Fixed color list boxes on DWG color import dialog.
- Fixed an issue with fonts in RF frames not displaying correctly.
- Changed justify setting UI to listbox in TE and TBT dialogs.
- Added missing native command resource strings.
- Fixed persistent modify tools for consistency of selection treatment and prompts.
- Fixed MultiLine/MN erroneously creating a zero-segment multiline on an early ESC or PU.
- Fixed MultiLine/MN command line prompt for second point.
- Fixed criteria for closed entities at small scale.
- Fixed potential crash when importing DWG/DXF with too many line types.

- Improved running snap calculations and preview.
- Corrected running snap behavior for OR on and CF off.
- Fixed a Snap Percentage problem where it did not select the correct end of some arcs.
- Snap Percentage on circles now calculates the percentage in a clockwise direction when the pick point is in the bottom of the circle.
- Added a missing tool prompt on Paste.
- Fixed a bug on the running snap preview displaying with no snap.
- Fixed command prompts on IPoly/IP, HatchBnd/HB, and FillBnd/FB.
- Fixed SnNearPt/NP and SnClosestPt/SC to correctly use the search tolerance for snapping.
- Cleanup of RN dialog and XSA behaviors.
- Overhauled mouse popup menus.
- Fixed an angle parsing error in DMS angles with no digit following the second decimal point.
- Fixed a problem where creating a symbol by dragging to the Symbol Manager might use a duplicate symbol name.
- Fixed a crash in the Join tool.
- Mouse clicks in the drawing area when a menu is dropped down are now ignored.
- Fixed text extents error caused by stray SUF characters.
- Improved extents calculation for text with SUF.
- Fixed several command resource strings.
- Changed the preview on PR, XPP, and XPI to match the output settings.
- Fixed previews on PR and XPP to use normal colors to preview selections rather than the selection color.
- Optimized the preview redraws of PR, XPP, and XPI.
- Fixed various leader bugs and improved the handling of the shoulder 'which side' placement.
- Fixed leaders for Scale, Rotate, Mirror, etc.
- Fixed a bug where angle edit boxes would not apply the current angle unit.
- Corrected a double conversion from radians or gradians to degrees which could occur in certain cases.
- Fixed a bug where surveyor or dd:mm:ss input could be treated as radians or gradians.
- Fixed edit boxes to allow all alphabetic characters for entering arbitrary distance and angle units.
- Prevented angles from parsing distance units and vice versa.
- Fixed an angle parsing error in dd:mm:ss entry missing the mm or ss.
- Fixed ortho pane on status bar to show angle in format set in TBN.
- Fixed a rounding error when using radian angle units.
- Fixed various bugs in 'show by example' in ribalogs.
- Fixed distance and angle edit boxes in ribalogs to correctly handle math expressions.
- Fixed bugs related to the selection of images, ref frames, hatches, fills, symbols, and text.
- Fixed several bugs when editing multiple objects would not correctly update settings where the selected objects did not match.
- Fixed bug in TBT-TextEdit for tab stops.
- Fixed bug in TBN-DimEdit for base angle.
- Fixed bug in TBX-DimEdit for character set.
- Fixed bug in TBL-LeaderCh for arrow type.
- Fixed bugs in TBE-LeaderCh for aspect, char space, line space, bold, underline, italic, monospace, fill text, Unicode, tab stops, character set.
- Fixed bug in TBH-HatchCh for alignment.
- Fixed font character set bug when editing multiple text, leaders, or dimensions.
- Modified TabDimText/TBX and DimEdit/DE dialog for new settings and layout, added Show Secondary Dimension.
- Fixed the suffix location for stacked tolerances.
- Made minor dimension spacing changes.

- Fixed vertical alignment of prefix and suffix with min/max tolerances.
- Fixed miscellaneous bugs in dimension generation.
- Fixed all known dimension string problems for all string settings options for linear and angular dimensions.
- Stopped the DimLin/DL tool generating SUF control codes in the dimension overwrite string for TrueType fonts.
- Fixed dimension line break with no dimension text.
- Fixed a PDF export problem with images with negative scales.
- Corrected ChangeApply to not run without a selection.
- Fixed spacebar repeatability of several tools.
- Fixed IPoly/IP to do PenUp on abort like LineCont/LC.
- Improved handling of missing or invalid spellcheck dictionaries.
- Fixed a rare crash when loading corrupt OLE objects.
- Fixed a memory leak in leaders with hidden text.
- Fixed minor memory leaks in Fillet/FI.
- Fixed a bug in Divide/IV when applied to continuous lines could create spurious zero-length lines.
- The mouse wheel is now ignored if VCADD is not the active application.
- Improved accuracy of computed lengths of ellipses, elliptical arcs, single and continuous Bezier, and spline curves.
- Fixed the OLE object Properties dialog not showing the correct layer for the object.
- Fixed a small accuracy error in a special case of the tool EllArc/EA.
- Fixed a bug in certain special cases of trimming a Bezier to a line.
- Fix intersections and trims involving Bezier to use such point closest to the pick point.
- Fixed SnObject/SO to always snap to the object, not its extension.
- Fixed SnIntersect/SI to always snap to an actual intersection on both objects, not their extensions.
- Fixed SnIntersect/SI for certain cases of the intersection of a circle and an elliptical arc.
- Fixed a bug in SnIntersect/SI, Trim/TR, and Extend/XT for certain continuous Bezier.
- Changed OI symbol setting string from Symbol Color to Placement Color.
- Fixed a rare problem with the geometry of continuous Bezier curves.
- Fixed several minor bugs in MovePoint/MP.
- Fixed all draw order tools to support reselection with SelLast/LS.
- Fix minor pixel-level differences between circles and filled circles.
- Improved accuracy of drawing entities, especially boundaries of hatches and fills.
- Fixed ref frames with elliptical boundaries not clipping images properly.
- Fixed a bug where the Attribute Edit tool would incorrectly increment the Undo level if canceled.
- Fixed a problem with export to DWG/DXF when a symbol definition is missing.
- Changed HT to use speedbar-style width combobox with real world width.
- Fixed a problem with using up/down arrows in the main speedbar combo boxes.
- Removed unused native command toggle RealWorldLW.
- Fixed Shift+PP and Shift+CG to temporarily toggle fast properties for Properties/PP and Change/CG.
- Disabled FP on PY.
- Fixed some bugs in PY between started as a native or from MGL button.
- Fixed various bugs in LayPropDlg/PY layer properties dialog.
- Fixed the CG tool not correctly setting real world width for some entities.
- Fixed a Join tool bug where it may try to join incompatible objects.
- Fixed plot date stamp settings bug.
- Symbol icons in MGY now use the correct background color for contrasting colors.
- Fixed a problem where the MGY icons may draw in black instead of the correct color.
- Prevented inadvertent drawing outside of the symbol preview in MGY.
- Changed the path validation logic for TBP to be more tolerant of missing network paths.

- Fixed the selection filter ribalog to check the Filter checkbox when any combobox is changed.
- Improved the selection filter.
- Fixed tab positioning for rotated text using TrueType fonts.
- Fixed a bug in input parsing when variables were used inside math functions.
- Added a redraw after the UseLayProp/BL toggle.
- Fixed the current properties from MatchEnt/ME, MatchTool/MT, and MatchChange/CM when the target is a dimension or leader.
- Fixed speedbar properties for dimension and leader selections.
- Fixed various minor errors in speedbar properties for multiple selections.
- Fixed by-layer usage in the property lists of TBD and TBL.
- Fixed crashes when continuous objects have an invalid number of points.
- Fixed the drawing of non-printable characters in TrueType text.
- Fixed a problem with changing layer in TBT after having changed other properties.
- Fixed speedbar changes for selected hatches, fills, and text incorrectly changing by-layer settings.
- Fixed the MatchTool command not working for multilines and images.
- Bug fixes and enhancements to the Drawing Properties dialog.
- Changed list control item gray out for not shown to be only text.
- CleanData now handles multilines and continuous objects with too few points.
- Fixed selected multilines to correctly show properties in speedbar.
- The extents boxes for File Merge and Clipboard Paste now update immediately when the Tab key is pressed.
- Fixed a bug in dimension and leader edits involving by-layer properties.
- Fixed a problem importing DWG with empty ACIS objects.
- Fixed arrow preview in TBD, TBL, DMD, and LE for various cases.
- Fixed Filter/SF for problems with dimensions, leaders, and multilines.
- Fixed selection count after using SelObj/SB to deselect.
- Fixed minor problem with LayHide/YH ribalog closing after matching.
- Fixed Selection/SE click-and-drag rectangle tools to correctly clear the previous selection.
- Fixed by-layer problems in Hatch Display ribalog, a tab on HatchSet/HT.
- Fixed a problem in Change/CG when changing from a layer with by-layer properties to one without.
- Fixed a minor problem in Properties/PP ribalog related to by-layer.
- Fixed settings update problem in certain cases in Properties/PP.
- Fixed a rare by-layer bug in Properties/PP.
- Fixed several bugs in certain kinds of selections with real world.
- Improved restart after System folder change on TBP.
- Improved Scale/SZ ribalog behavior and prevented using zero scale.
- Corrected several Scale/SZ and DBScale bugs in various entity kinds.
- Fixed several minor bugs related to DBScale and screen-based settings.
- Fixed a centering problem with the initial placement of a reference frame using RFCreate/RFC.
- Fixed linear dimensions for case when extension offset, above, and below are all zero.
- Reduce the occurrence of spurious mouse clicks in the drawing area after a speedbar combobox has dropped down.
- Fixed native TabRefFrame/TBM to update current settings when using 'Drawing Already Open in Visual CADD'.
- Fixed TBM and RFE so using Drawing Already Open in Visual CADD disables Bind Data in the UI as it always has on the OK button.
- Fixed a dimension problem in reference frames in drawings using DBScale.
- Fixed Reference Frame boundaries not obeying by-layer properties for color and line width.
- Fixed Scale/SZ on reference frames for differential scales.



- Fixed a crash when attempting to use AtbMove on a symbol with no attributes.
- Removed system commands and hide title bar item from popup menu for BirdsEye/ZB and RFBirdsEye/RFZ.
- Fixed a crash which may occur if SymPlace (YP) is used in a script.
- Fixed a potential crash in PDF export with very large images.
- Fixed the position of underlines for TT text in PDF export.
- Corrected the position of the file lock warning message.
- Improved handling of errors during XML export.
- Fixed the "closed entity" error message for Trim and Extend.
- Added text line properties missing from styles.

## **API and ActiveX/COM – v8.0.0.42 - Beta 1**

### New Functions

- For natives SaveEnvGlbl and SaveEnvDraw.
  - VCGetSaveEnvOnExitGlobal
  - VCSetSaveEnvOnExitGlobal
  - VCGetSaveEnvOnExitDrawing
  - VCSetSaveEnvOnExitDrawing
- Settings toggles.
  - VCSetToggleState
- Obtain and load styles as strings.
  - VCGetStyleString
  - VCLoadStyleString
- Add, delete, and modify PDF export presets.
  - VCAddPDFPreset
  - VCDeletePDFPreset
  - VCSetPDFPresetStruct
  - VCSetPDFPresetDictionary
  - VCGetCurrentPDFPreset
  - VCSetCurrentPDFPreset
  - VCEnumPDFPaperTypes
  - VCAddPDFPaperType
  - VCDeletePDFPaperType
  - VCGetPDFPaperTypeDef
  - VCSetPDFPaperTypeDef
- XML description of the current entity and to create an entity from XML.
  - VCGetCurrentEntityXML
  - VCAddEntityFromXML
- Tag feature for user data.
  - VCGetCurrentEntityUserDataTag
  - VCSetCurrentEntityUserDataTag
  - VCGetCurrentEntityUserDataTagIndex
- Parameterized points and slopes on geometric entities.
  - VCGetCurrentEntityPointAtParameter
  - VCGetCurrentEntitySlopeAtParameter
- Point and parameter closest to a given point.
  - VCGetCurrentEntityClosestPointAndParameter
- Vertex and focus points of a quadratic Bezier (parabola).

- VCGetCurrentEntityVertexAndFocus
- Extended data.
  - VCAAddExtendedDataDouble
  - VCAAddExtendedDataText
  - VCSetExtendedDataDouble
  - VCSetExtendedDataText
  - VCGetExtendedDataDouble
  - VCGetExtendedDataText
  - VCGetExtendedDataCount
  - VCGetExtendedDataInfo
  - VCDeleteExtendedData
- Reference frame layer display and printability.
  - VCRFGetLayerDisplay
  - VCRFSetLayerDisplay
  - VCRFGetLayerPrintable
  - VCRFSetLayerPrintable
- Custom print stamp text.
  - VCGetPrintPresetStampCustom
  - VCSetPrintPresetStampCustom
- Script stack variable.
  - VCPopStackVariable
  - VCPushStackVariable
- Boolean operation on two closed objects.
  - VCBooleanOperate
- Reference frame scale to use total scale rather than net scale, and frame center rather than rectangle.
  - VCGetRefFrameScaleEx
  - VCSetRefFrameScaleEx
  - VCGetRefFrameCenter
  - VCSetRefFrameCenter
- Hatch and fill placement properties using by-layer and real world width.
  - VCGetHatchLineWidthValue
  - VCSetHatchLineWidthValue
  - VCGetHatchUseByLayerProperties
  - VCSetHatchUseByLayerProperties
  - VCGetFillByLayerFlags
  - VCSetFillByLayerFlags
  - VCGetFillLineWidthValue
  - VCSetFillLineWidthValue
  - VCGetFillUseByLayerProperties
  - VCSetFillUseByLayerProperties
- Load a status bar definition.
  - VCLoadStatusBar
- Hide/show angle units.
  - VCGetDisplayShowAngleUnits
  - VCSetDisplayShowAngleUnits
  - VCGetDimShowAngleUnits
  - VCSetDimShowAngleUnits
- Opaque background masks.

- VCGetMaskDisplay
  - VCSetMaskDisplay
- Fill properties.
  - VCGetFillLayer
  - VCSetFillLayer
  - VCGetFillLineType
  - VCSetFillLineType
  - VCGetFillLineWidth
  - VCSetFillLineWidth
- Single unit fraction text height setting for text, leaders, and dimensions.
  - VCGetTextFracHeight
  - VCSetTextFracHeight
  - VCGetLeaderTextFracHeight
  - VCSetLeaderTextFracHeight
  - VCGetDimTextFracHeight
  - VCSetDimTextFracHeight
- Line break after a dimension prefix or before a dimension suffix.
  - VCGetDimNoBreak
  - VCSetDimNoBreak
- File types for ImportCAD and ExportCAD.
  - VCGetExportFileType
  - VCSetExportFileType
- Text vertical alignment.
  - VCGetTextVerticalAlign
  - VCSetTextVerticalAlign
- Leader horizontal alignment.
  - VCGetLeaderHorizontalAlign
  - VCSetLeaderHorizontalAlign
- Symbol selection points.
  - VCGetSymSelect
  - VCSetSymSelect
- Dimension prefix and suffix.
  - VCGetDimPrependPrefixAbove
  - VCSetDimPrependPrefixAbove
  - VCGetDimAppendSuffixBelow
  - VCSetDimAppendSuffixBelow
- Status bar customization.
  - VCGetUserPaneHandle
  - VCSetUserPaneWeb
  - VCSetUserPane
- Leader text Unicode.
  - VCGetLeaderTextUnicode
  - VCSetLeaderTextUnicode
- Stacked dimension text.
  - VCGetDimTextStacked
  - VCSetDimTextStacked
- Snap to hatch point.
  - VCGetSnapHatchPoints

- VCSetSnapHatchPoints
- Dialog size scaling.
  - VCGetDialogScale
  - VCSetDialogScale
  - VCGetScaledDialogTemplate

#### New script commands for the API

- Added dummy native tools as markers for the API.
  - native script command DummyNoOp, a nested do-nothing tool
  - native script command DummyEnd, a bully do-nothing tool

#### Fixes & Corrections

- Fixed an error return on VCGetWorldByHWND and VCGetWorldIndexByHWND when an invalid window handle is passed.
- Fixed a crash which could occur if VCDestroyWorld is called with an invalid world handle.
- Fixed a problem with VCBreakEntity which may cause it to corrupt the second break point value.
- Fixed a problem where VCGetWorldExtents and VCGetWorldExtentsAll could change the current API entity.
- Change the behavior of VCGetCurrentEntityLength.
- Fixed a few errors related to database scale.
- Removed support for legacy toolbars in the API.
- Fixed errors in VCDuplicateWithTransform, VCDuplicateWithTransformInDrawOrder, VCDuplicateWithRotate, VCDuplicateWithSkew, VCDuplicateWithScale, and VCDuplicateWithMove when applying scale or rotation to compound entities.
- Fixed a problem in VCDuplicate related to using <current> for text, hatch, fill, or multiline current properties.
- Removed obsolete VCLayerGroupsDlg.