



AutoCAD® Alternative

Featuring **Mech-Q**

Free 30 day trial available, no CC req'd

Huge performance improvements now available.

We are happy to announce a brand new AViCAD release. Below are some of the improvements included in AViCAD 2024.

New CAD Engine

A brand new and improved CAD engine. Fast Open, Regen and Osnap operations.

Enhanced Graphics

Faster smoother transitions with animation while panning, zooming, or changing views .

Advanced Grips

Improved Stretch, Scale and Rotate commands. Advanced grips for blocks and 3D solids added.

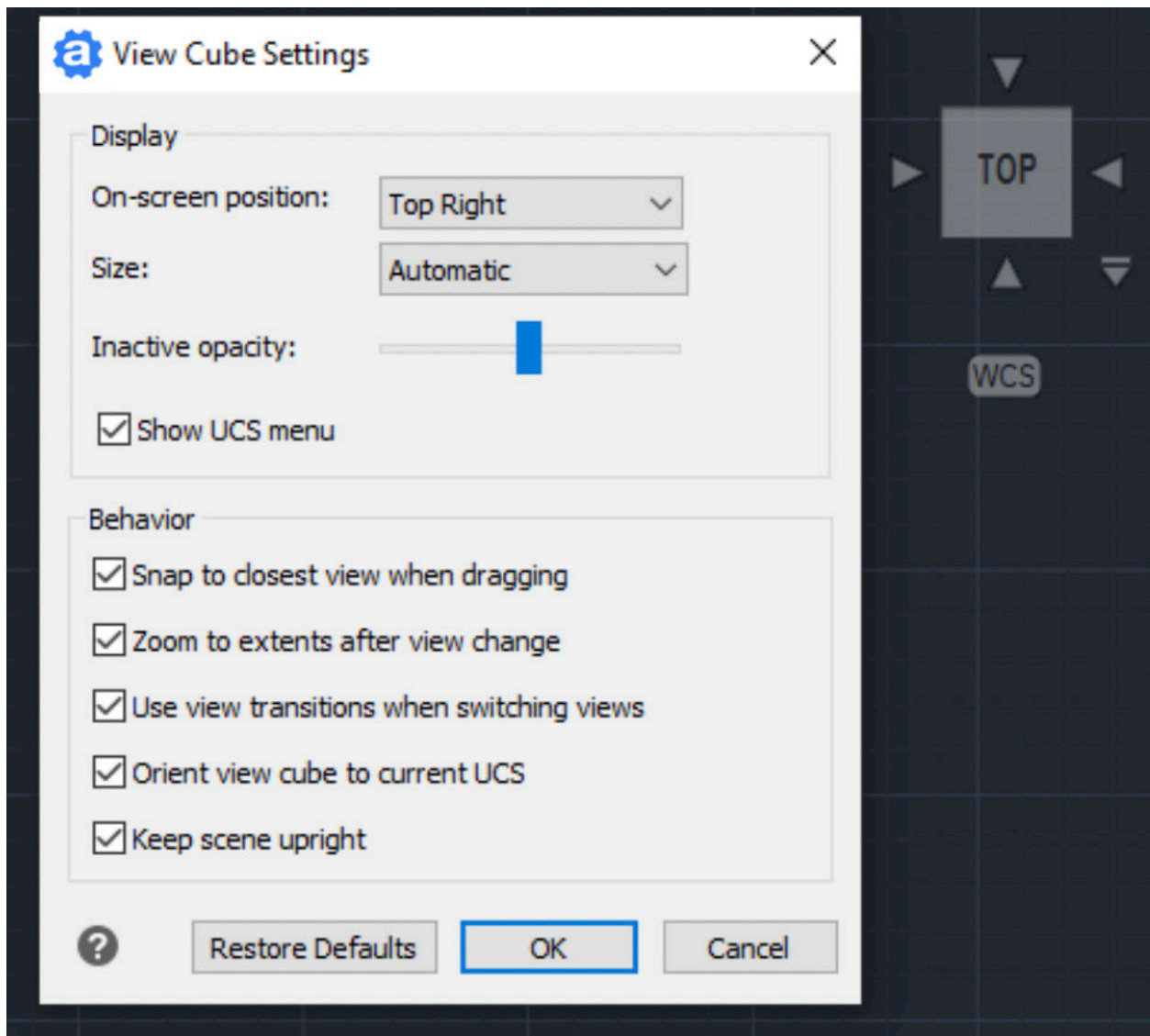
More improvements and features added

Brand New Engine

Based on the latest IntelliCAD 11.1 source code. Hundreds of bugs fixed, new features and improved interface.

View Cube

The View Cube is a convenient way to control and manipulate the model space viewing angle in AViCAD. The cube can be clicked and held to rotate the model space around, or the side, edge or corner of the cube can be selected to move it to another view. There is also a coordinate system drop-down list underneath the View Cube. Using this list, you can select custom saved coordinate systems, or reset and select the WCS. There is also a dialog to manage all the View Cube Settings.



New command/function DATALINK

Data Linking

Data linking is the ability to link a Microsoft Excel spreadsheet to a AViCAD table dynamically linked to the external file. The best thing about data linking is that any changes that you make to the Excel spreadsheet will update the AViCAD table. Plus, if you set it up this way, you can edit the table and it can write back to the spreadsheet.

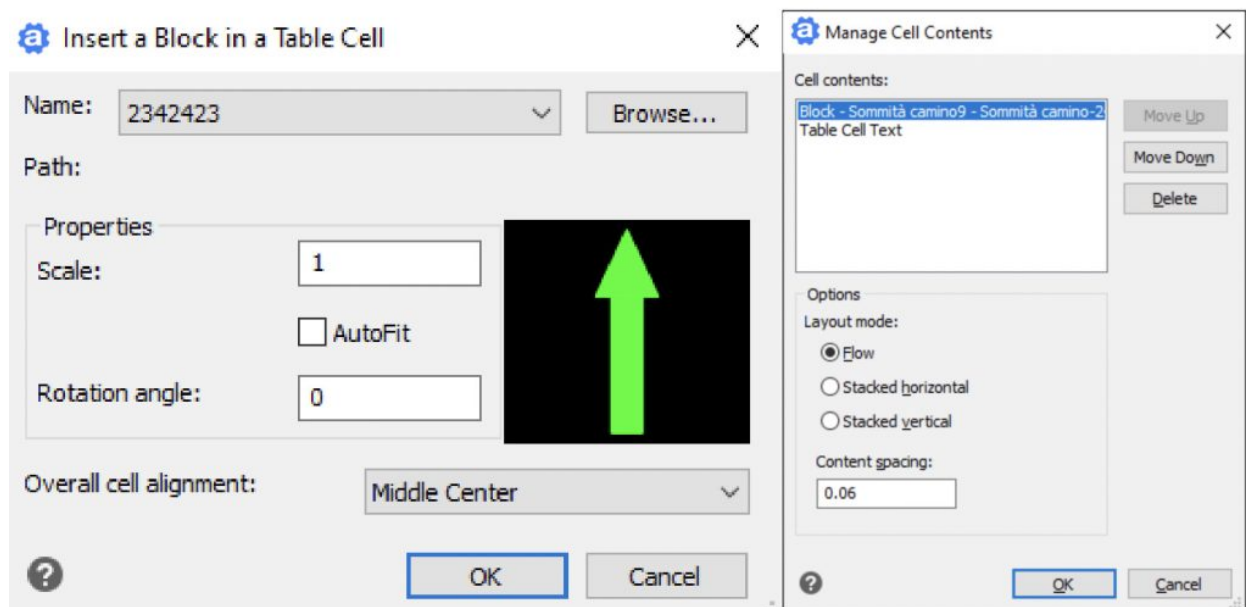
NOTE: The DATALINK function can be used as a single command, or from the table creation dialog.

XLSIMPORT command

Imports directly an .xls or .xlsx file into a new static AViCAD Table. The imported data fill a new table that is created automatically during import, and the new table is formatted automatically to match the format of the original spreadsheet.

Insert blocks preview into Table Cells

When you insert a block into a table cell, either the block can automatically fit to the size of the cell, or the cell can adjust to accommodate the size of the block. Blocks can be inserted from the shortcut menu. Multiple blocks can be inserted in a cell. If there is more than one block in a cell, use the Manage Cell Content dialog box to customize the way the cell content is displayed.



New command MAPIMPORT

Geo Data and FDO Import – Inserts geometries from SDF files (SDF is a native Autodesk® geospatial file-based format optimized for storing large classified data sets), SQLite and SHAPE (esri) files, or can use a database server service like WFS (the Web Feature Service allows users to share geospatial /or non-spatial data over the Internet. Thus, feature services can be consumed through the Internet in webmaps, desktop and

web applications.), PostgreSQL (in progress) or MySQL.

New command MAPIINSERT

Multiple images insertion. Allows to insert multiple images at the same time (useful for georeferenced images).

New command BREAKATPOINT

Splits 2D entities such as lines, arcs, polylines, infinite lines, rays, splines into two entities at a single break point. Closed entities cannot be split at a single break point.

BIM Management

Working with BIM files:

- Support for Autodesk® Revit® 2022 files.
- Import IFC and REVIT (up to version 2022) with Layers

AViCAD imports BIM files with the layers structure reading from the IFC or Revit files. Through the new variable BIMIMPORTLAYER, the user can choose the level of the tree layers.

BIMIMPORTLAYER values

0 = no layers

1 = objects layers

2 = categories/levels layers (default)

- In the BIM Properties pane, create and assign Visibility States.
- Select, attach, and manage .IFC and .RVT/.RFA underlays using the AViCAD Explorer.
- Use the Audit command to check for errors in .IFC files that are attached as underlays.

New CENTERMARK and CENTERLINE entities

Center Marks and Centerlines are dimensioning references to centers and axes of symmetry. Center Marks and Centerlines are associative objects. If you move or modify the associated objects, the center marks and centerlines adjust accordingly. From the Prop-

erties palette, you can control their geometry and visibility. Current Layer Override: you can specify a default layer that is different than the current layer by specifying the layer with the CENTERLAYER system variable.

Center Mark

General	
Color	White
Layer	0
Linetype	--- CENTER2
Linetype scale	1
Print style	ByColor
Lineweight	Default
Hyperlink	
Transparency	ByLayer
Associativity	Yes

3D Visualization	
Material	ByLayer

Geometry	
Cross size	0.1x
Cross gap	0.05x
Left extension	0.12
Right extension	0.12
Top extension	0.12
Bottom extension	0.12
Show extensions	Yes
Rotation	0.0000

Center Line

General	
Color	White
Layer	0
Linetype	--- CENTER2
Linetype scale	100
Print style	ByColor
Lineweight	Default
Hyperlink	
Transparency	ByLayer
Associativity	Yes

3D Visualization	
Material	ByLayer

Geometry	
Start X	100504.63
Start Y	58190
Start Z	0
End X	100502.55
End Y	58201.51
End Z	0
Start extension	0.12
End extension	0.12

New command 3DPOSITIONER

Displays a visual aid, or gizmo, used to move and rotate entities in the three-dimensional space.

STEP/IGES Import

New Object creation option. You can configure your preferred 3D CAD entity type when importing 3D external files. "Automatic" is the default and recommended mode. The new option is available in the IGESSTEPOPTIONS dialog

Improved Undo

During the Copy command, it is now possible to Undo individual copy operations

New CTRL+R function

Switches between tiled viewports in the Model tab or floating viewports in the current layout

PERFORMANCE

- Faster polyline vectorization.
- The Quick Select command is faster by 2x in large drawings.

New command 3DWALK

Changes the 3D view in a drawing interactively to create the appearance of walking through the model. Manage Settings with the

3DWALKFLYSETTINGS command

New command 3DFLY

Changes the 3D view in a drawing interactively to create the appearance of flying through the model. Manage Settings with the 3DWALKFLYSETTINGS command.

New function for the UCS command

Now it is possible to select Solid entities or Surfaces to define a new UCS.

New SURFEXTRACTCURVE command

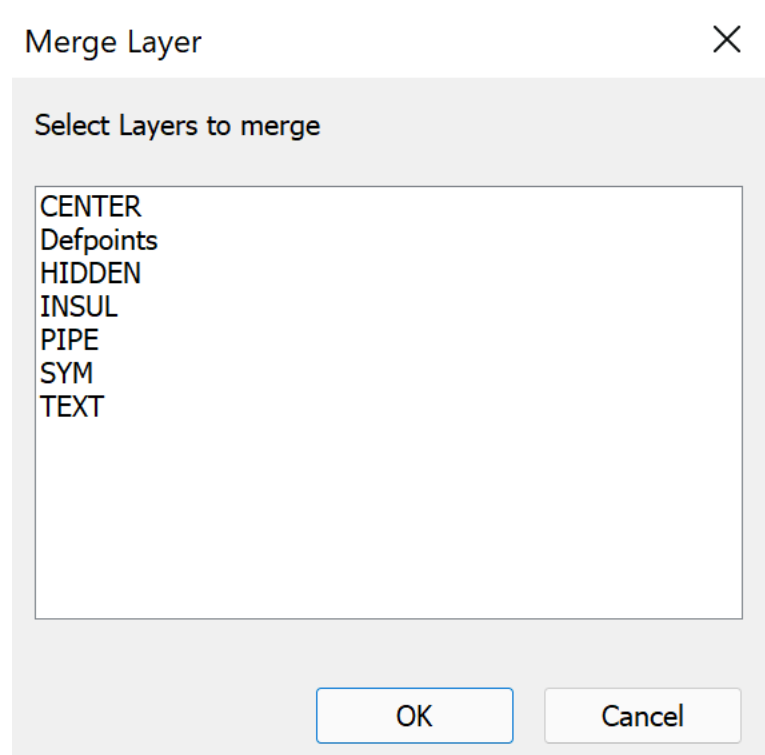
Creates curves in the U and V directions on a Surface or on a 3D solid. The curves can be lines, polylines, arcs, or splines depending on the shape of a 3D object.

New command AIDIMSTYLE

Allows you to create a Dimension Style from an existing dimension. Say you have a dimension and you change its properties by overriding such elements: extension line color, text color, arrowhead size, and text font. Just run the command AIDIMSTYLE and select the dimension and a new style will be created with these properties.

New command LAYMRG – Merge Layers

You can reduce the number of layers in a drawing by merging them. Objects on merged layers are moved to the target layer, and the original layers are purged from the drawing.



New Preview Sheet (paper and margins) in the print dialog box.

Paper and margins preview in the print dialog box

Improved Explode command – Blocks Filter

The “Blocks” option is now available to automatically filter selected objects in order to preserve objects other than blocks, such as Array, Polylines, MTexts, etc.

New command WHOHAS

Information on the drawing user and usage. Displays information about an open drawing file. You can use WHOHAS to find out who has a specified drawing file open. After you specify a drawing file, information is displayed that includes the full path of the file, the current user's login name, computer name, and the date and time that the drawing file was opened.

Improved APPLOAD command

Creates Startup Suites which allow you to specify the custom applications to load automatically when AViCAD starts.

New functions for the PDFEXPORT command

The New interface for exporting drawings to PDF. Now it is possible to export all layouts and also the model space, based on the user selection, to create multi-page PDF files.

Improved OFFSET command

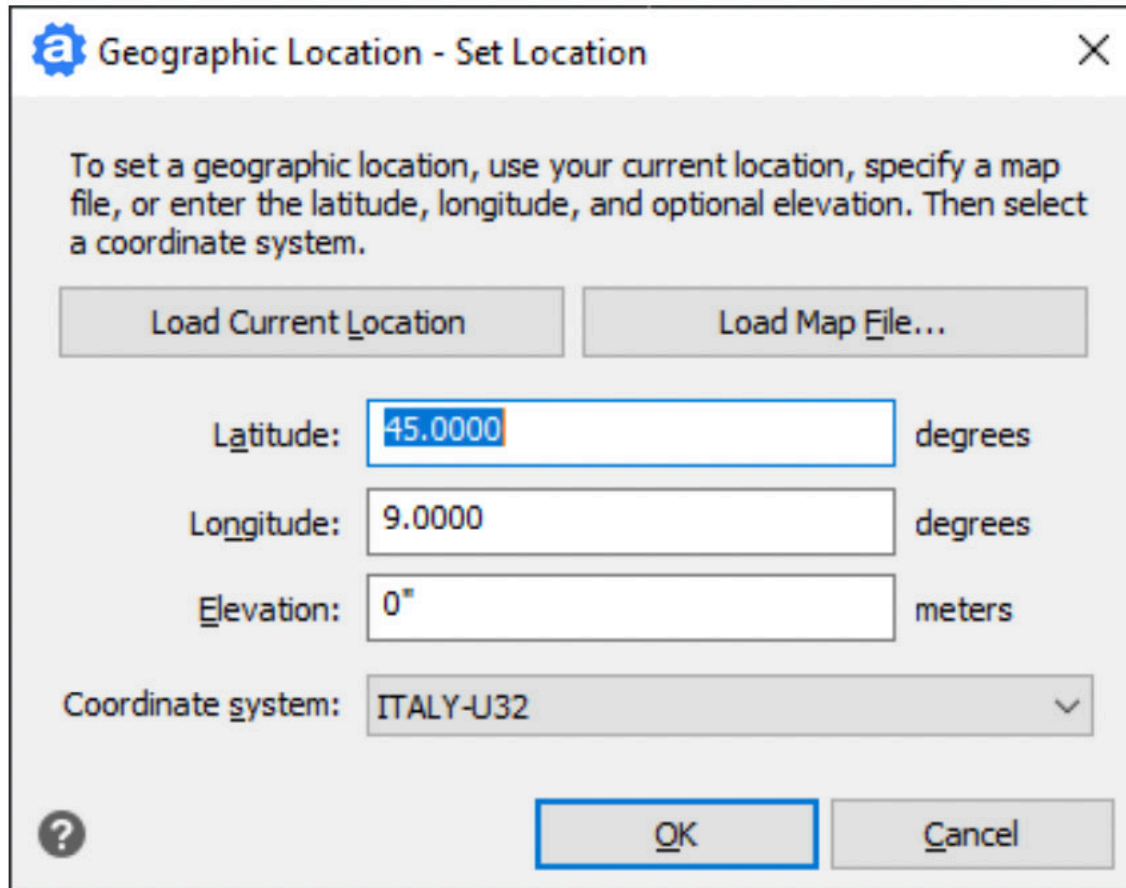
Added "Layer" and "Erase" options in the OFFSET command

"Erase" erases the source object after it is offset.

"Layer" determines whether offset objects are created on the current layer or on the layer of the source object.

Improved Geolocation function

New dialog box for adding a geographic location to a drawing.



New GEOMAPSERVICE command

Use the Map Service command to turn geographic map services on and off. When off, the program is prevented from accessing the Internet to display the online map, and the Mark Position, Capture Area, and Reload Image commands are unavailable.

Improved QDIM command

Updated the Quick Dimension command and added the new Settings option in order to manage the associative dimension priority to the Endpoint or to the Intersection.

New command REGENVISIBLE

Regenerates entities only in the visible area.

Improved TOOLPALETTE

Drag an entity from a drawing and drop it on a tool palette to add the corresponding entity-creation command to the tool palette.

Command Line Font

Displays the Command Bar Font dialog box.

Improved Big Font substitution

Now it is possible to select a replacement font by searching directly on the PC, using the Browse function and not only among the predefined choices.

New command -TABLE

In the command bar, type -TABLE to insert a table without the dialog box.

Network license Groups

(Applies to NLM licenses only) The feature to assign a membership group to each NLM license which allows to break the total number of available NLM licenses into some independent groups. In this way, licenses can be divided among specific offices / work groups.

New function Restore suppressed messages

In the Options dialog, it is now possible to restore the help and warning messages that were definitively hidden by the user.

Save multiple Blocks.

In the Block Explorer, select multiple blocks and right-click them to save them at the same time.

New variable CENTERSNAPMAXVERTEX

For Center osnap with closed Polylines, Spline and 3DPoly

New Express command Smart Join

Joins lines, polylines, splines into a single polyline

PLUS....

- Automatically select all nested entities with in place blocks editing.
- Specify two break points to break the dimension manually when breaking a dimension.
- Select the height of cones and cylinders (as 3D solids) by specifying two points.
- Read and import OBJ material with texture image
- GRIP improvements for clipped blocks
- New REVERSE, Reverses the vertices of selected lines, polylines, splines and helixes

About CADavenue

CADavenue has been serving customers in North America and worldwide since 2009. We specialize engineering add-ons for AutoCAD, Bricscad and IntelliCAD and also offer a stand-alone CAD engineering software called AViCAD, designed for Windows versions XP through

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