



AutoCAD to BricsCAD MIGRATION TOOLS

FREEWARE FOREVER



DesignSense



Bricsys® Premium Partner
part of Hexagon

DesignSense Software Technologies

One of the first things you look for when you switch from one CAD environment to another is if you have all the familiar tools and conveniences you need. For a CAD user making the switch to BricsCAD, 99% of the familiar-interface is already in place, thanks to the high level of compatibility BricsCAD already provides. There are still a small bunch of missing tools, probably because it was tricky for Bricsys to add them to the native code without running into copyright issues. We have always cheekily maintained that there are tools that Bricsys forgot to add. We have bridged the gap, that last mile of missing tools via our CADPower productivity software.

These tools are FREEWARE – Forever, meaning that you will never need to purchase CADPower to use them.

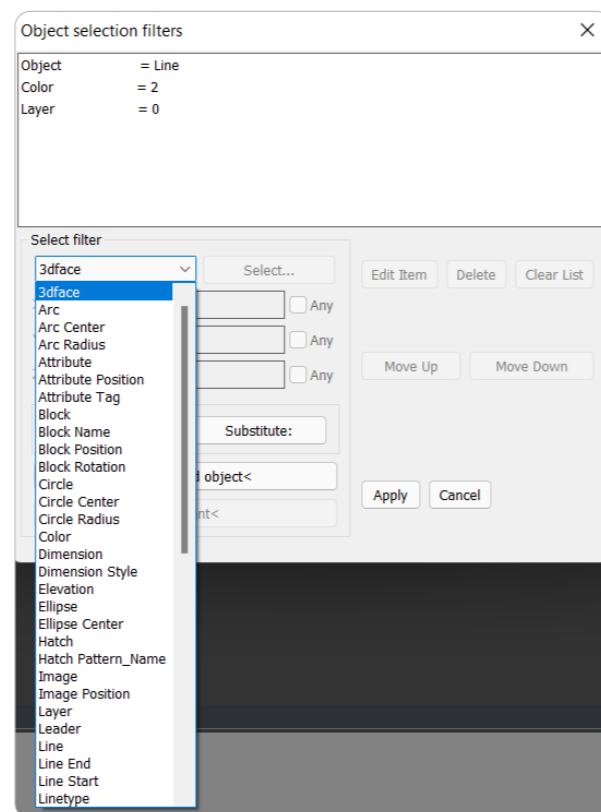
CADPower is used by a large number of BricsCAD users across the globe, not only to ease their transition to BricsCAD, but also to leverage from its other set of productivity tools that bring in a 5x-10x advantage of speed.

We have made the familiar interface of BricsCAD even more familiar.

We have given these tools a new identity by creating a separate menu and toolbar captioned "FREEWARE-By-CADPower" in the CADPower drop-down menu and inside the exclusive migration menu called BricsCAD+. The tools are also available within the main CADPower menu as well. There is a ribbonized interface as well.

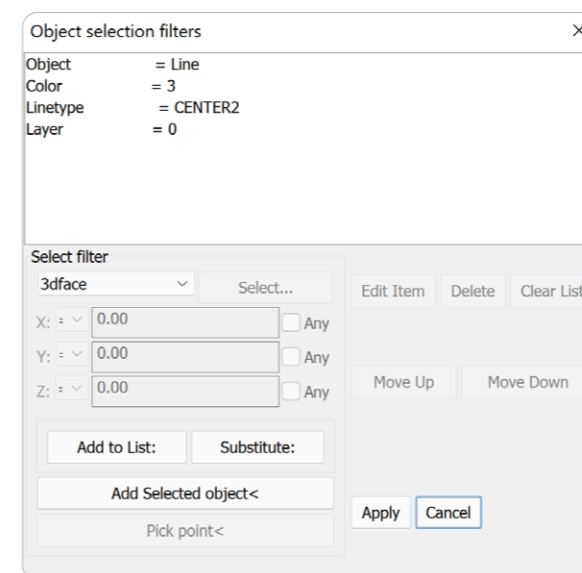
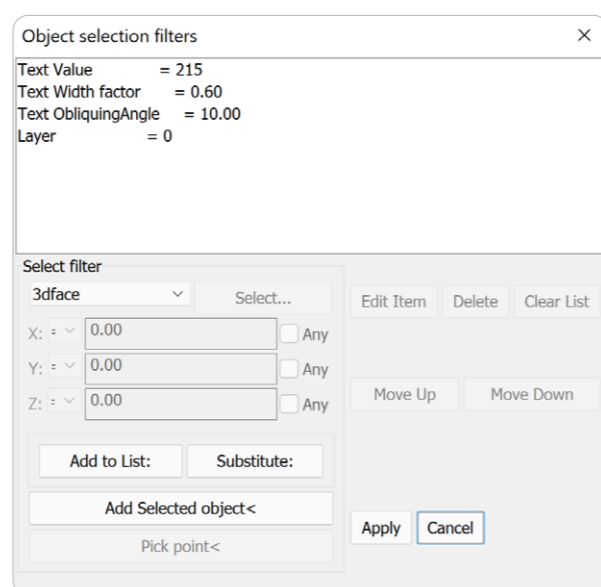
Here is a list of those FREEWARE tools that native BricsCAD does not have, but CADPower brings them to you.

FILTER (CADPower -> Selection -> Object selection FILTER): A 100% identical alternative for the AutoCAD FILTER command. Missing from BricsCAD, now available through CADPower.



The FILTER command in BricsCAD has been improved in CADPower V 22.47 to include additional property filters like linetype and color for picked linear elements.

Picked text objects now allow you to filter by width factor and obliquing angle.



WBLOCKBC (CADPower -> Miscellaneous -> CAD Procedures -> Second Set -> Wblock and preserve AutoCAD Map objects): Modified WBLOCK command for BricsCAD, to be used to preserve AutoCAD Map data,

```
Command: CP_UPDATESUPPORT
1. Update existing PAT file with an updated, enhanced one [includes geological and architectural hatches].
2. Add AutoCAD SHX files and update BricsCAD support folder.
Choose an option [ 1/2 ] <1>:
```

The CP_UPDATESUPPORT command is available on the BricsCAD+ menu under Support and offers the options on the command line.

Option 1 – updates the PAT file

A new default.PAT and iso.PAT file containing additional hatch patterns is copied to the user support folder:
c:\Users\<user_name>\AppData\Roaming\Bricsys\BricsCAD\V21x64\en_US\Support

Option 2 – updates the fonts

A number of commonly required but missing SHX files from AutoCAD support is copied to the below folder:
c:\Users\<user_name>\AppData\Roaming\Bricsys\BricsCAD\V21x64\en_US\Support

The following is a complete list of SHX files copied:

@extfont2.shx, AcadEref.shx, aehalf.shx, AMDTSymbols.shx, AMGDT DWE Edits.shx, amgdt.shx, AMGDTANS DWE Edits.shx, amgdtans.shx, bigfont.shx, bold.shx, Cdm.shx, CDM_NC.shx, chineset.shx, complex.shx, dim.shx, extfont.shx, extfont2.shx, exthalf2.shx, extslim2.shx, g12f13.shx, g13f12d.shx, g13f12w.shx, gbcbig.shx, gbeitc.shx, gbenor.shx, GENISO.shx, geniso12.shx, GENLTSHP.shx, GENPRESE.shx, gothice.shx, gothicg.shx, gothici.shx, greekc.shx, greeks.shx, hand1.shx, iges1001.shx, iges1002.shx, iges1003.shx, ISO.shx, isocp.shx, isocp2.shx, isocp3.shx, isoct.shx, isoct2.shx, isoct3.shx, italic.shx, ITALIC8.shx, italicc.shx, italicct.shx, monotxt.shx, MONOTXT8.shx, romanc.shx, romand.shx, romans.shx, romant.shx, scriptc.shx, scripts.shx, simplex.shx, SIMPLEX8.shx, special.shx, spec_bar.shx, spec_sl.shx, syastro.shx, symap.shx, symath.shx, symeteo.shx, symusic.shx, times.shx, timesout.shx, txt.shx, whgdtxt.shx, whgtxt.shx, whtghtxt.shx, whtmtxt.shx

while working in BricsCAD. The native SaveAs command in BricsCAD will destroy AutoCAD Map object data.

CP_UPDATESUPPORT (BricsCAD+ -> Support -> Update Support folder with enhanced HATCH and fonts): The CP_UPDATESUPPORT command is used to update the BricsCAD user support folder with an updated (enhanced) version of the hatch pattern files and text fonts. These fonts and hatch patterns are taken from AutoCAD and other public sources and contain enhanced geological and architectural hatches, as well as some text fonts that are unique to AutoCAD installations and not found in BricsCAD.

Once you update BricsCAD support folders with these files, you will have better fidelity when you open AutoCAD drawings and you will not have issues like un-editable hatches, missing or misplaced text characters etc.

TORIENT (CADPower-> Text-> Display -> Text Orient: Make Text / Mtext readable): Missing from BricsCAD, now available through CADPower. The eTORIENT command also allows the selected text to be aligned to a segment of line (or polyline).

CONVERTPOLY: (CADPower-> Conversion-> Polyline Types-> Light-Weight to Heavy-weight & vice-versa): Now available in V16++ as a native command, but this was missing from BricsCAD until V15.

CHCASEQUICK: (CADPower -> Text -> Conversion -> Quick Change Case): A command-line tool to change the case of text, mimics the AutoCAD tool by the same name. The more elaborate version of this tool called CP_CHCASE and is available in the full version of CADPower.

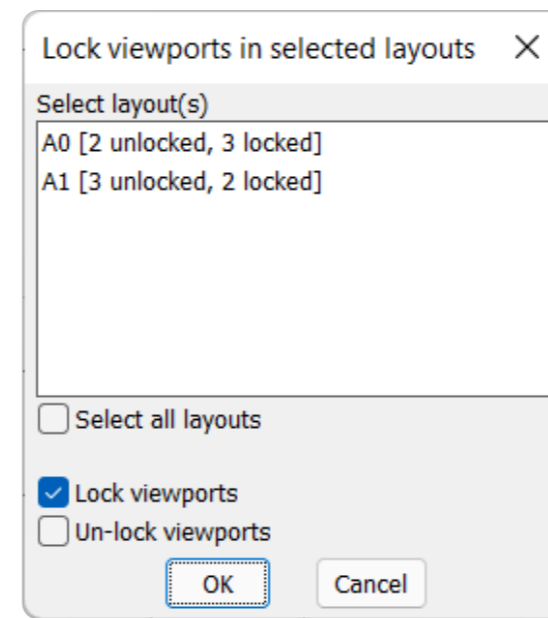
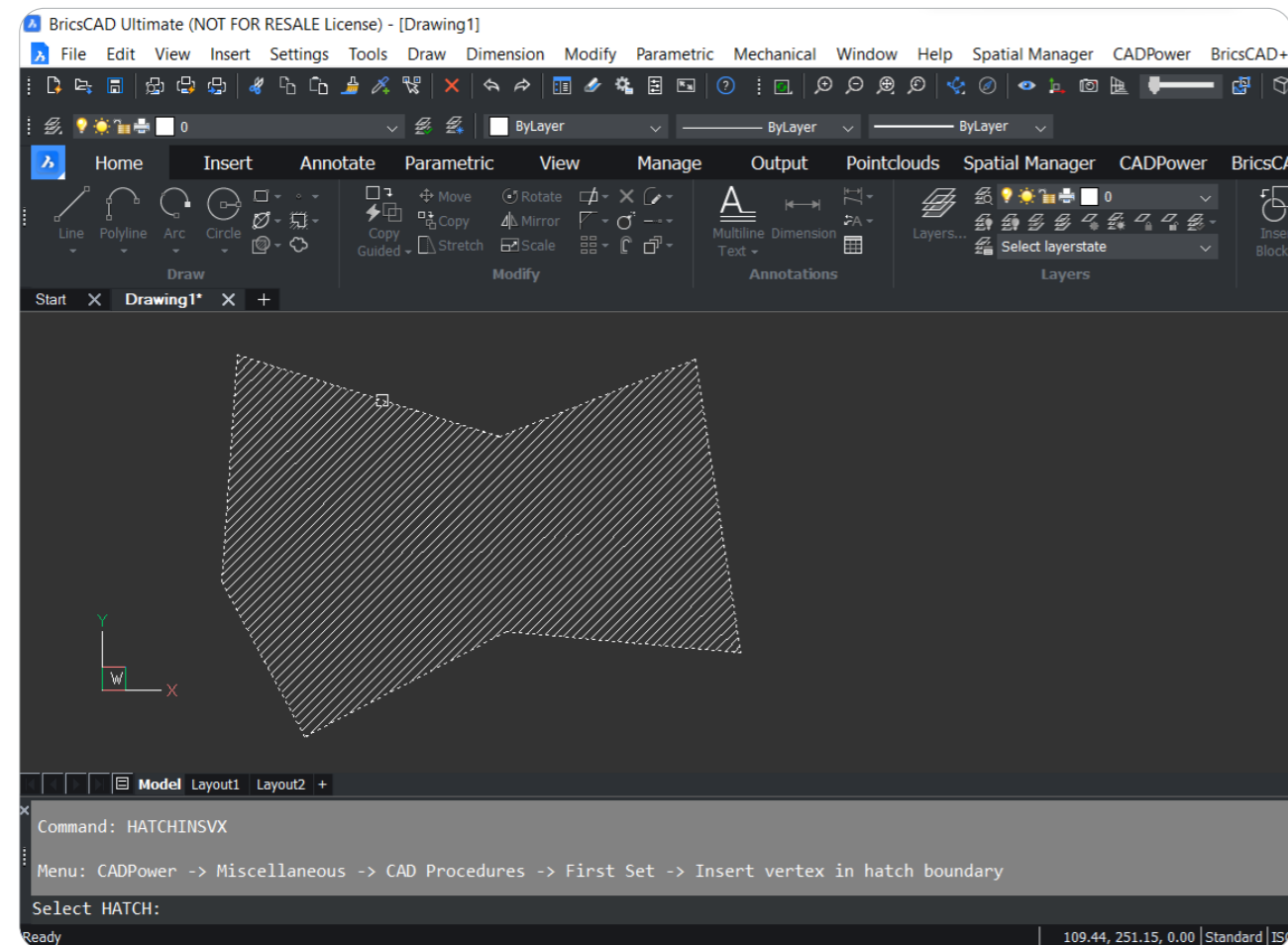
HATCHINSVX: (CADPower -> Miscellaneous -> CAD Procedures -> First Set -> Insert vertex in hatch boundary): Allows the add vertices in hatch boundaries. It is even better than the AutoCAD version because you can specify exactly the perpendicular distance from existing segment to new point.

HATCHDELVX: (CADPower -> Miscellaneous -> CAD Procedures -> First Set -> Delete vertex from hatch boundary): Allows the delete vertices from hatch boundaries by a single pick.

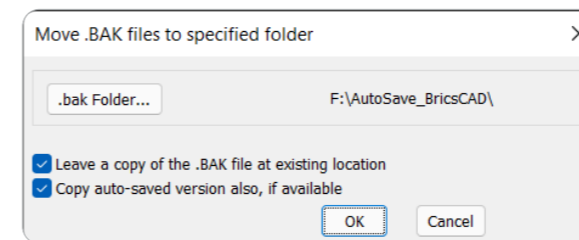
LOCKVPCURLAYOUT: (CADPower -> Viewports -> Lock All Viewports in current layout): Available in AutoCAD, now in BricsCAD also via CADPower.

UNLOCKVPCURLAYOUT: (CADPower -> Viewports -> UnLock All Viewports in current layout): Available in AutoCAD, now in BricsCAD also via CADPower.

LOCKVPORTS: (CADPower -> Viewports -> Lock Viewports): Available in AutoCAD, now in BricsCAD also via CADPower.



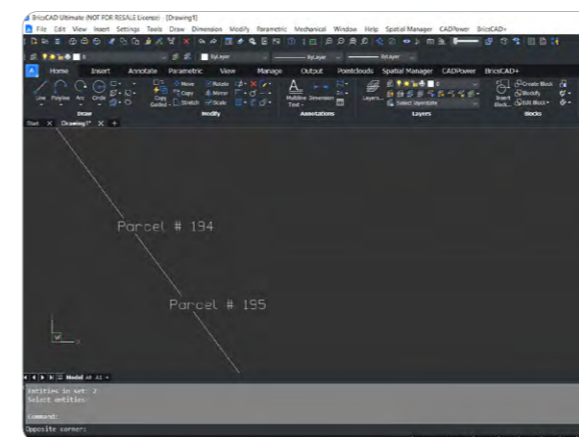
MOVEBAK: (Move the backup .BAK files to a specified folder): Available in AutoCAD, now in BricsCAD also via CADPower.



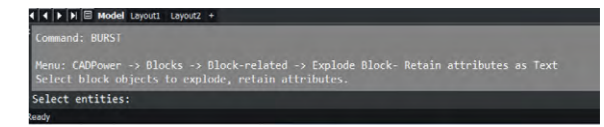
VPMAX: (Maximize a paper-space viewport): Available in AutoCAD, now in BricsCAD also via CADPower.

VPMAXRESTORE: (Restore original view setup after running VPMAX): Available in AutoCAD, now in BricsCAD also via CADPower.

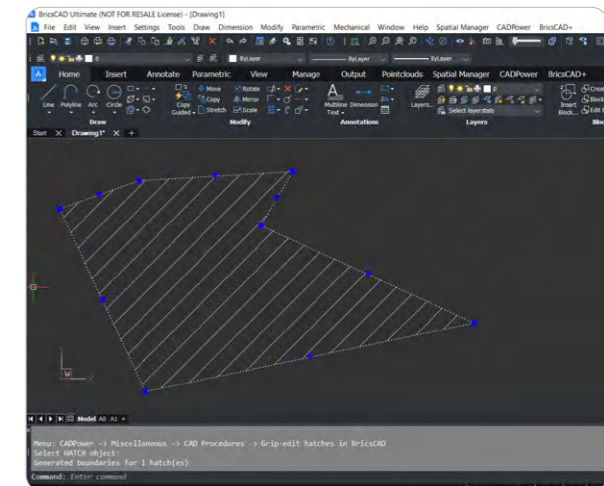
TEXTMASK: (CADPower-> Text-> Display -> TEXTMASK): Available in AutoCAD, now in BricsCAD also via CADPower.



BURST: (CADPower -> Blocks -> Block-related -> Explode Block- Retain attributes as Text): Available in AutoCAD, now in BricsCAD also via CADPower. Calls the CP_XP_ATT command internally.

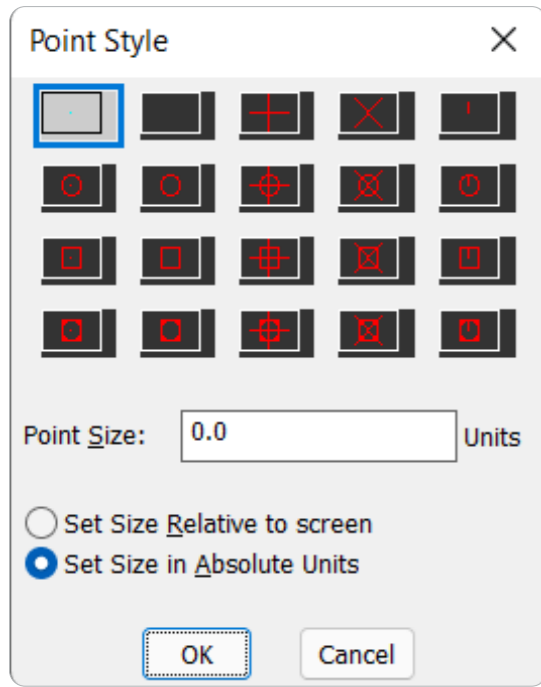


GRIPHATCH: (Display grips in hatches): Available in AutoCAD, now in BricsCAD also via CADPower.



CP_RECOVERYMANAGER: (CADPower -> Miscellaneous -> File Management -> Drawing Recovery Manager): The familiar drawing recovery manager from AutoCAD is now available in BricsCAD via CADPower. The CP_RECOVERYMANAGER is a FREEWARE command and available in the BricsCAD version only. It provides a work-around for the Drawing Recovery tool that is available in AutoCAD and which is missing in BricsCAD. This tool tracks the auto-save file that is created in the TEMP folder and restores the latest version available and offers to copy it to the same folder as your current drawing. The recovered file has a name _RECOVER.dwg and it functions almost identically to the AutoCAD tool.

DDPSTYLE (BricsCAD+ -> Point Style Dialog): The DDPSTYLE command mimics the AutoCAD Point Style dialog (the PTYPE command) which allows you to set the point style and size through a dialog box. Native BricsCAD allows you to do the same via Settings, but the user-interface is somewhat different and not what AutoCAD users are accustomed to.



CP_TCOUNT (or TCOUNT) : (CADPower – Text-> Display -> Count occurrence of text objects)

Also, in BricsCAD+ -> FREEWARE-By-CADPower -> TCOUNT (Count occurrences of text objects):

The CP_TCOUNT command (or TCOUNT) is a simple text string counter. It counts the number of occurrences of unique TEXT & MTEXT strings selected and displays them in a table. It is also possible to export the same to CSV file.

CADPower FREEWARE now brings you the two most popular commands from Express Tools:

TCIRCLE – CADPower implementation, offers more options than the original.

BREAKLINE – CADPower implementation, compatible with the original, but better and has more options.

You can find these tools in the FREEWARE-By-CADPower menu option of the BricsCAD+ menu, -or- Simply type the command on the command line.

TCOUNT is a FREEWARE command and will not expire in CADPower. This command is usually found in Express Tools in AutoCAD.

CP_BCOUNT (or BCOUNT) : (CADPower -> Blocks -> Block-related -> Count occurrence of block objects)

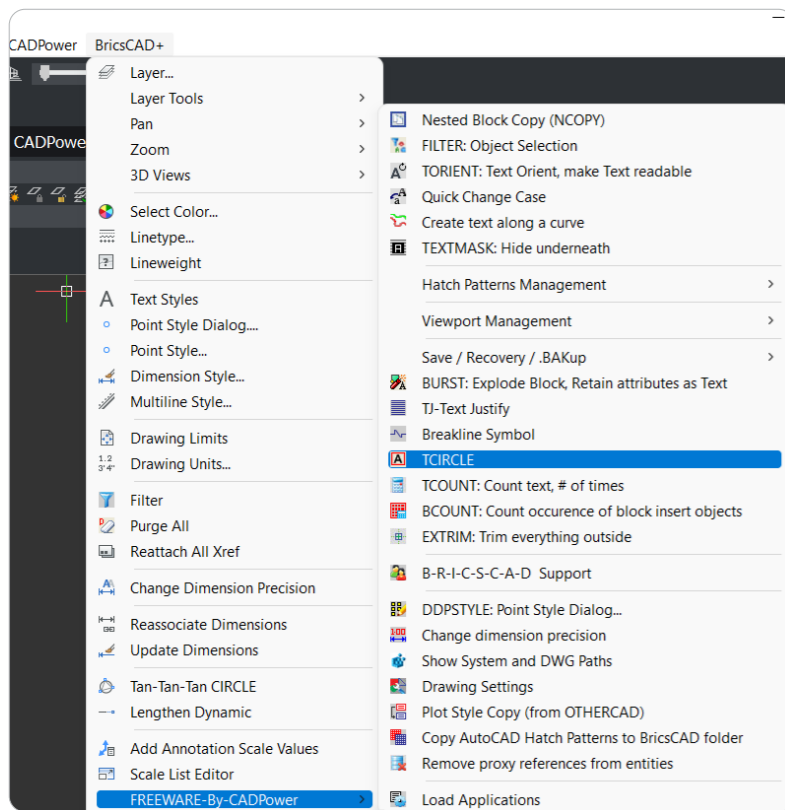
Also, in BricsCAD+ -> FREEWARE-By-CADPower -> BCOUNT (Count occurrences of block objects):

The CP_BCOUNT command (or BCOUNT) is a simple block counter. It counts the number of occurrences of unique block names selected and displays them in a table. It is also possible to export the same to CSV file.

BCOUNT is a FREEWARE command and will not expire in CADPower. This command is usually found in Express Tools in AutoCAD.

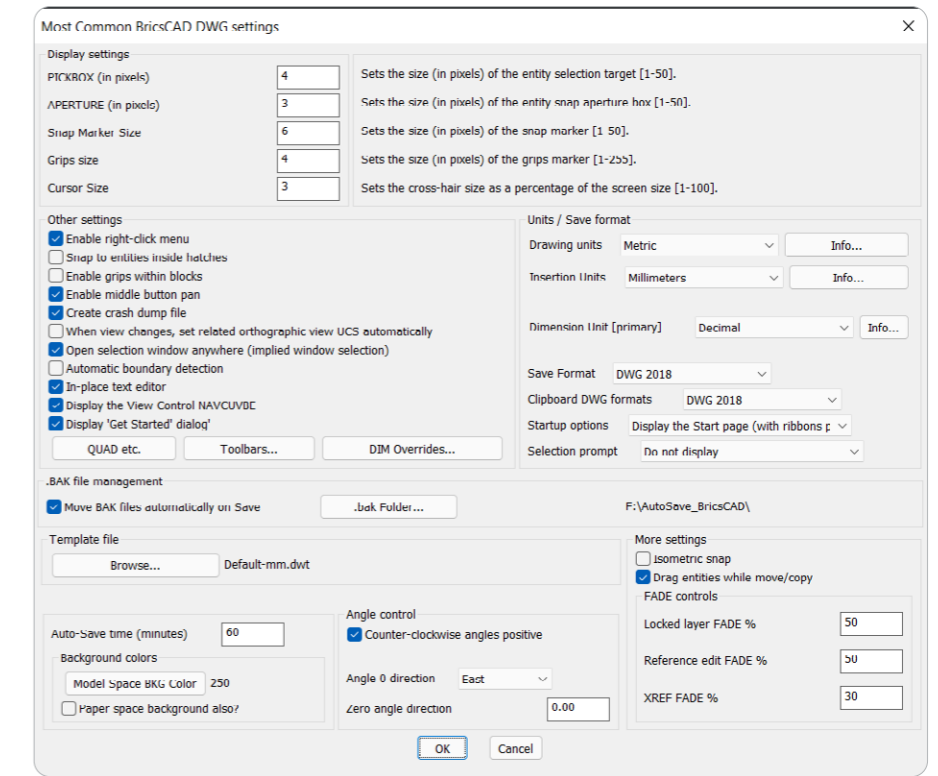
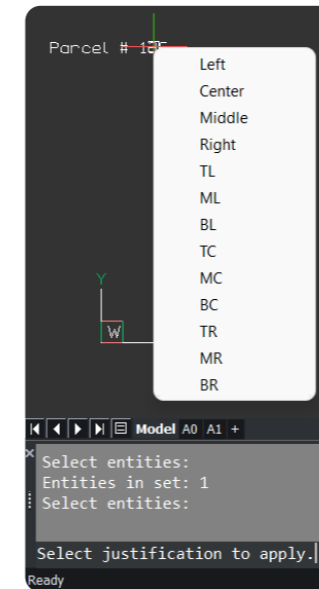
The TJ command: BricsCAD+ -> FREEWARE-By-CADPower -> TJ – Text Justify:

The TJ command, enabled by BricsCAD+ FREEWARE in



CADPower, allows you to set the selected text objects to any specified alignment without changing the physical location of the text.

CP_DWGSET (BricsCAD+ -> Support -> Drawing Settings): The CP_DWGSET command provides a quick interface to some of the drawing settings that first-time BricsCAD users most often want and find it difficult to find.



The CP_DWGSET dialog

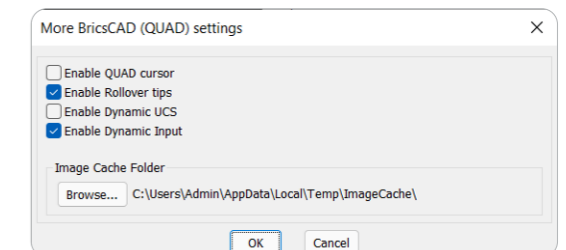
The CP_DWGSET command provides a quick interface to some of the drawing settings that first time BricsCAD users most often want and find it difficult to find.

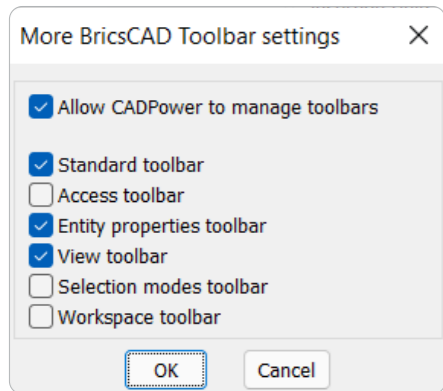
The current list of settings supported are:

- Sets the size (in pixels) of the entity selection target [1-50]
- Sets the size (in pixels) of the entity snap aperture box [1-50]
- Sets the size (in pixels) of the snap marker [1-50]
- Sets the cross-hair size as a percentage of the screen size [1-100]
- Sets the size of the grips
- Enable/disable right-click menu
- Enable/disable middle button pan
- Enable/disable grips within blocks
- Create crash dump file
- Set Model/Paper Space background Color
- Enable/disable When view changes, set related orthographic view UCS automatically
- Enable/disable Open selection window anywhere (implied window selection)
- Enable/disable Automatic boundary detection
- Enable/disable In-place text editor
- Display/Hide the View Control NAVCUVBE
- Display/Hide 'Get Started' dialog'
- .BAK file management. Specify folder for .BAK save
- Set Drawing units
- Set Insertion units
- Set SAVE format
- Set CLIPBOARD format
- Define the Startup Options
- Define the position of the Selection Prompt helper dialog
- Enable/disable isometric snap
- Enable/disable dragging of entities
- Control QUAD/RollOver tips and popular toolbar settings
- FADE control settings
 - Locked layer FADE
 - Reference Edit FADE
 - XREF FADE

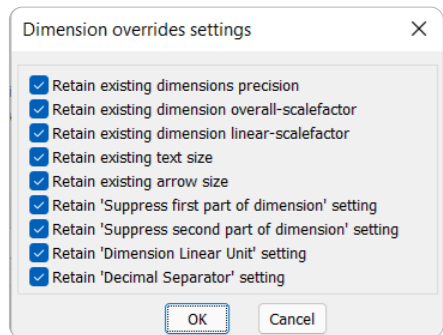
Under 'QUAD settings', you can control the following settings:

- Switch On/Off the QUAD cursor, Rollover tips, Dynamic Input & Dynamic UCS
- Set the Image cache folder location (useful while managing large multi-gigabyte images)





The Most Popular Toolbar Settings



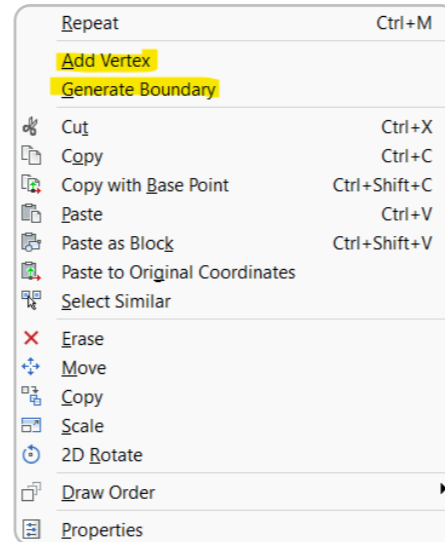
Dimension Overrides Settings

There are a bunch of dimension settings that you can override while using the context-sensitive right click menus on one or more dimension entities. You can set their override / update behavior first using the CP_DWGSET command.

(HATCH) : Add Vertex

If you right-click on a hatch object without a boundary, you can now add a vertex directly on the side that you have picked. This makes hatch editing easier even when there are no boundaries and is a step closer to how AutoCAD does it.

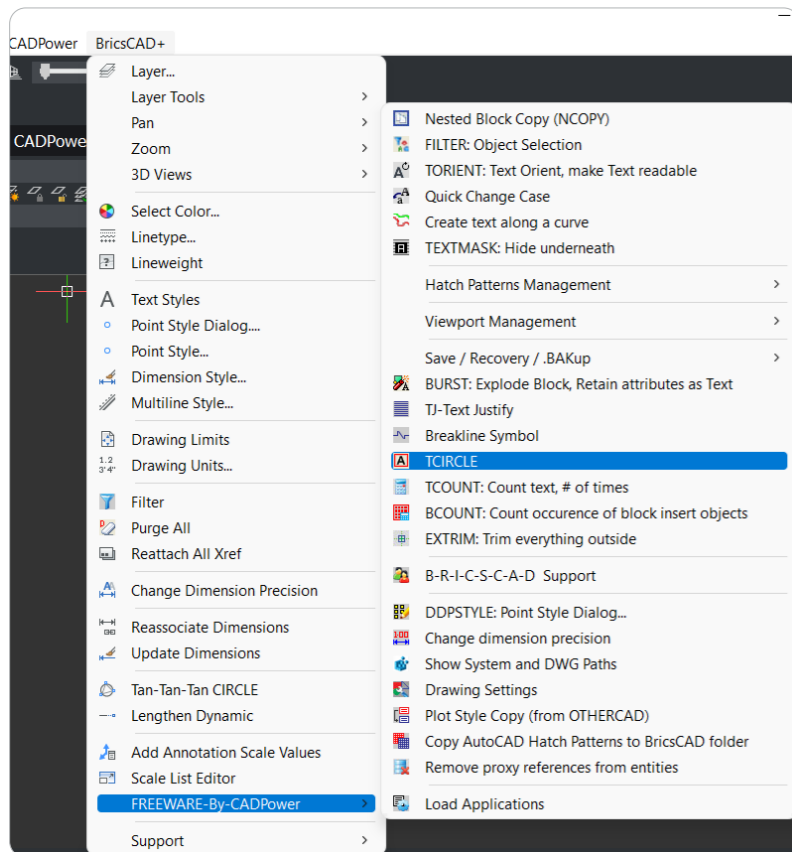
XBIND (BricsCAD+ -> XBIND): The XBIND command is un-available in BricsCAD. It has been enabled on the command line as well attached to the right-click context menu when an XREF object is selected.



TCIRCLE and BREAKLINE

TCIRCLE (BricsCAD+ -> FREEWARE-By-CADPower -> TCIRCLE)

BREAKLINE: (BricsCAD+ -> FREEWARE-By-CADPower -> Breakline symbol)



CADPower FREEWARE now brings you the two most popular commands from Express Tools:

- TCIRCLE – CADPower implementation, offers more options than the original.
- BREAKLINE – CADPower implementation, compatible with the original, but better and has more options.

You can find these tools in the FREEWARE-By-CADPower menu option of the BricsCAD+ menu, -or- Simply type the command on the command line.

Right-click Context menu customization

CADPower Migration Assistance tool also enables a number of handy shortcuts to make them available on your mouse right-click.

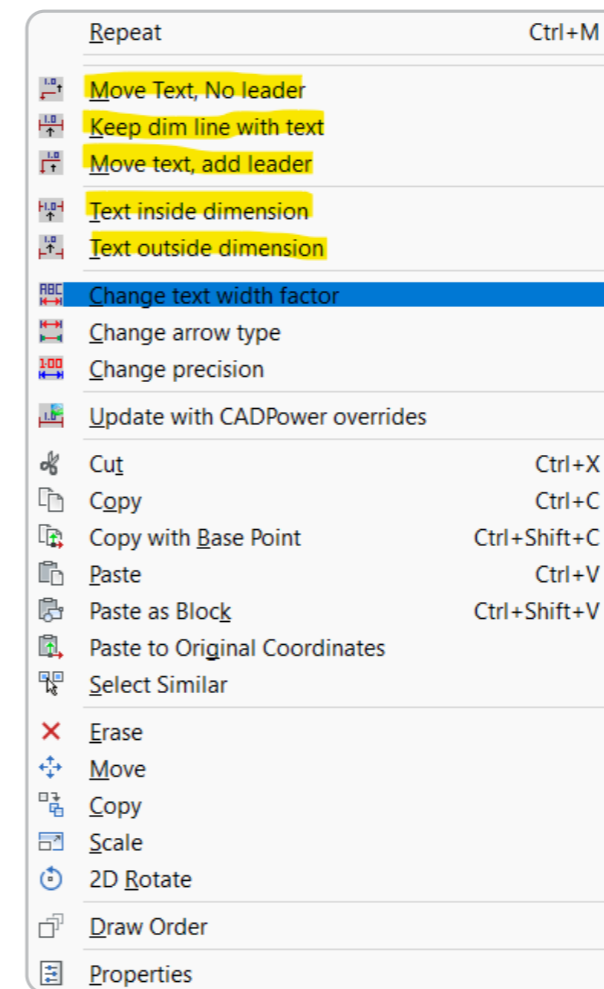
(DIMENSION) Changing Dimension precision / Text Alignment options

AutoCAD allows dimension precisions to be changed from the mouse menu. Native BricsCAD does not, CADPower does!

There are also options on the context menu to move the dimension text relative to the dimension line, with/without leader etc. This mimics the AutoCAD interface where these controls are available on the mouse.

Coupled with the existing edit options already in place, the DIMENSION management alone in CADPower now saves huge time in repetitive editing.

CADPower eliminates the need to go to PROPERTIES each time and scroll through a long list of options.

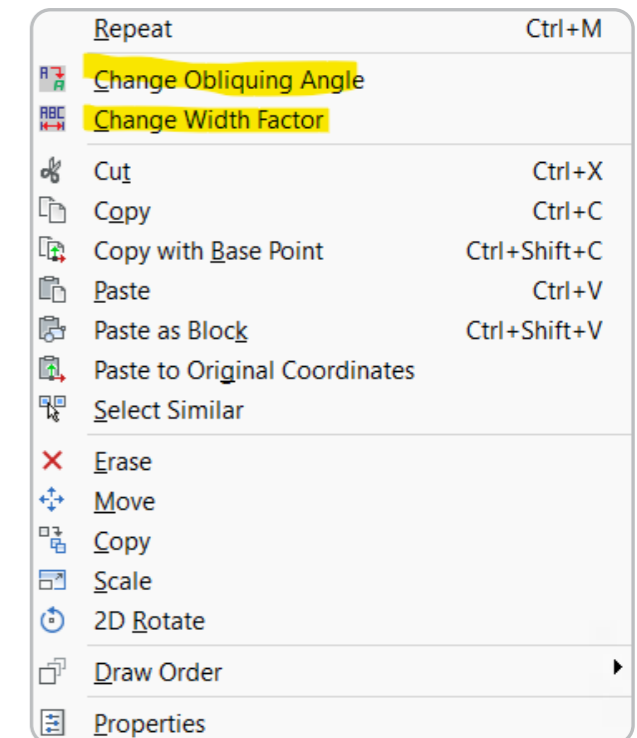


The right-click context menu on a DIMENSION entity has been significantly improved.

The new items added include:

- Change Text Width Factor
- Change Arrow Type

There are also options to override the dimension settings. It is called 'Update with CADPower overrides' and works on multiple selected dimension entities. You can control which properties to update or not by setting it up in the CP_DWGSET command.



We have improved the context menu (right-click menu) on text and mtext entities by adding the text obliquing angle and text width factor to the list.

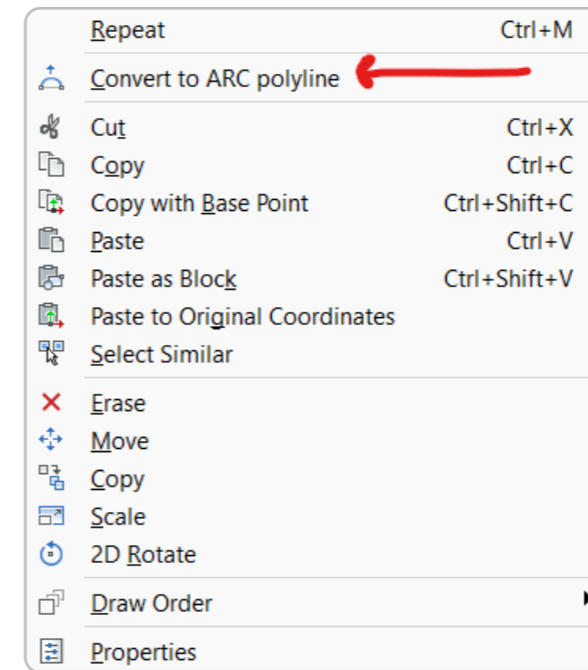
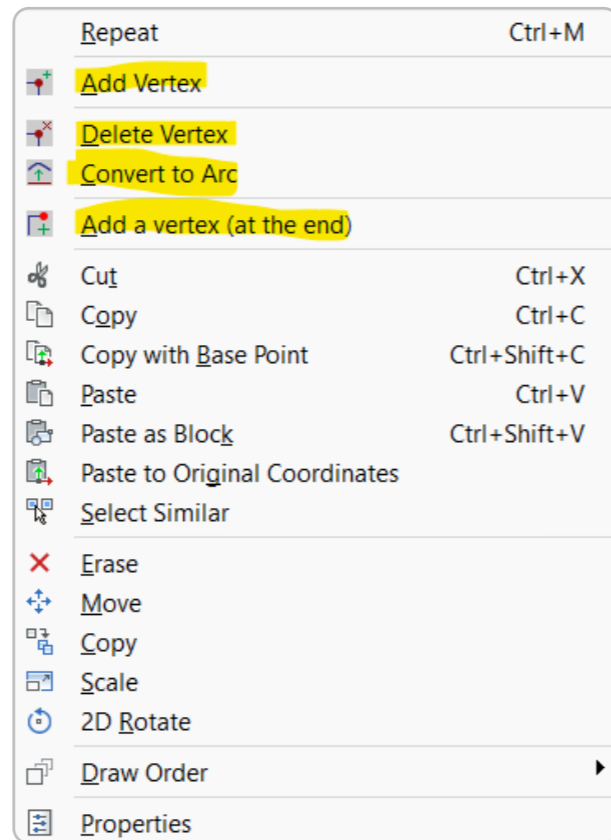
AutoCAD allows dimension precisions to be changed from the mouse menu. Native BricsCAD does not, CADPower does!

There are also options on the context menu to move the dimension text relative to the dimension line, with/without leader etc. This mimics the AutoCAD interface where these controls are available on the mouse.

There are also options to override the dimension settings. It is called 'Update with CADPower overrides' and works on multiple selected dimension entities. You can control which properties to update or not by setting it up in the CP_DWGSET command.

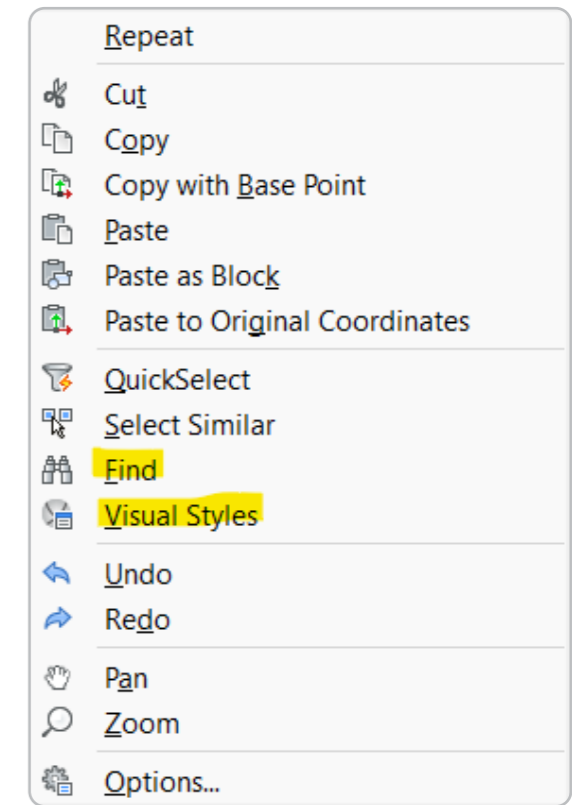
(POLYLINE) Add Vertex, Delete Vertex, Change to Arc

Bricsys forgot to add some of the popular PEDIT options to the mouse menu. But we did not!

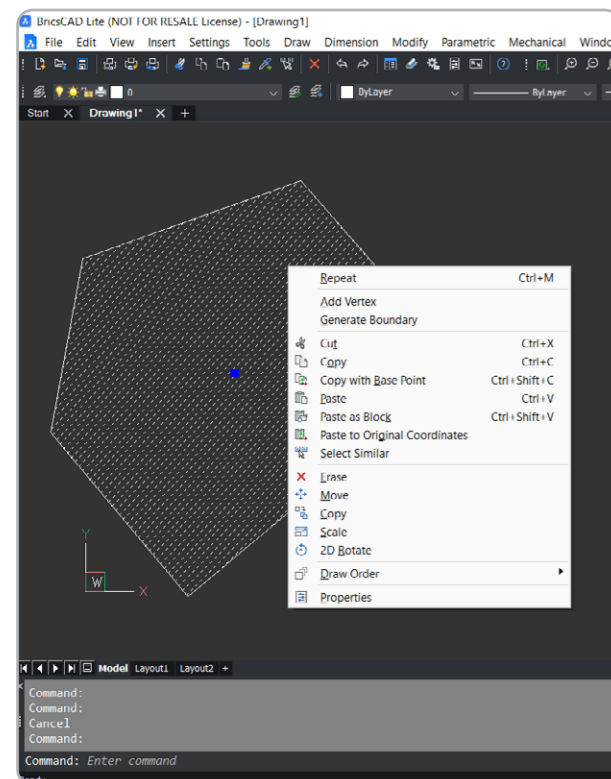


When you right-click on a LINE entity, there is now an option to convert it directly to a polyline with ARC. In other words, you can convert a LINE to a polyline ARC geometry with ease now.

The FIND command is now available in the generic right-click menu that can be started in BricsCAD when no command is active.



The ability to set visual styles is now available at the tip of your mouse button via a right-click context menu customization.

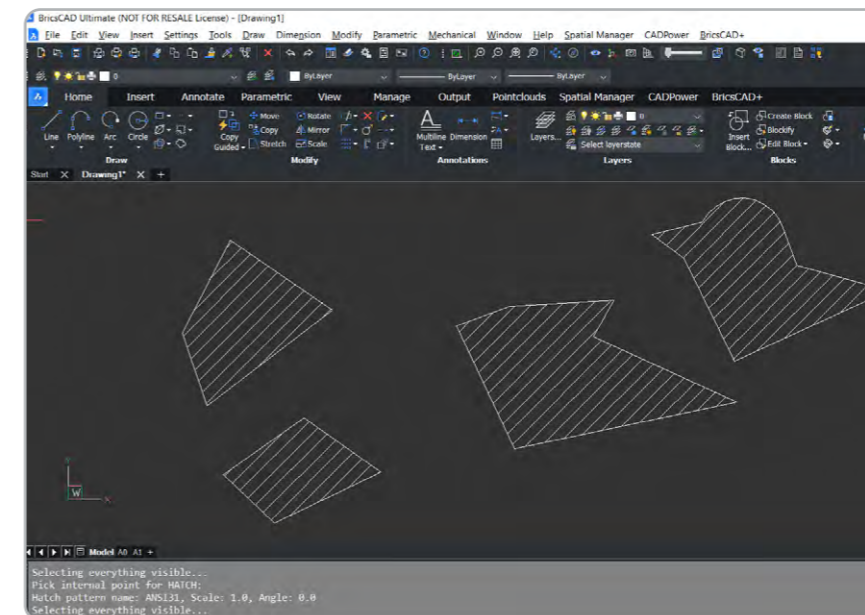
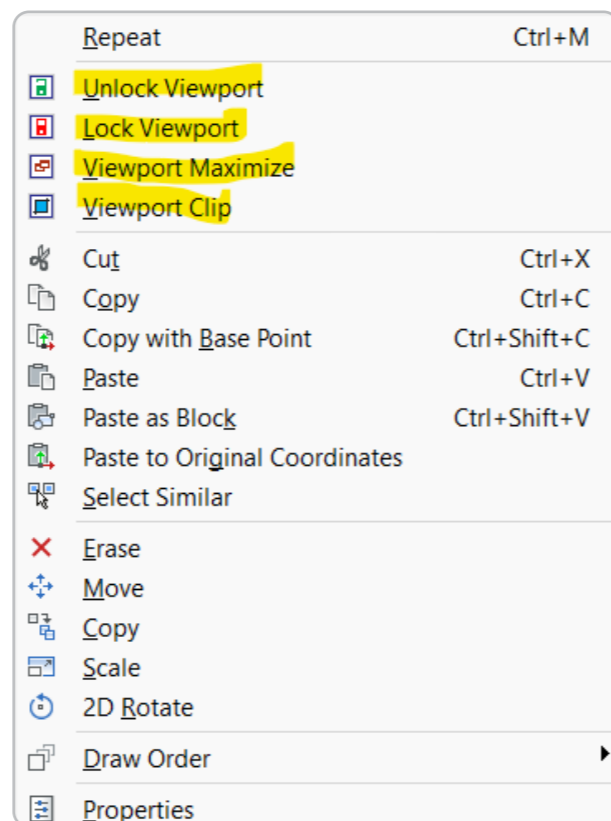


(HATCH): Generate Boundary

An orphaned hatch without boundary is like a ship without a captain. Get it back by being able to regenerate the boundary from the click of your mouse. BricsCAD does this too, but only if you run the HATCH BOUNDARYGENERATE command.

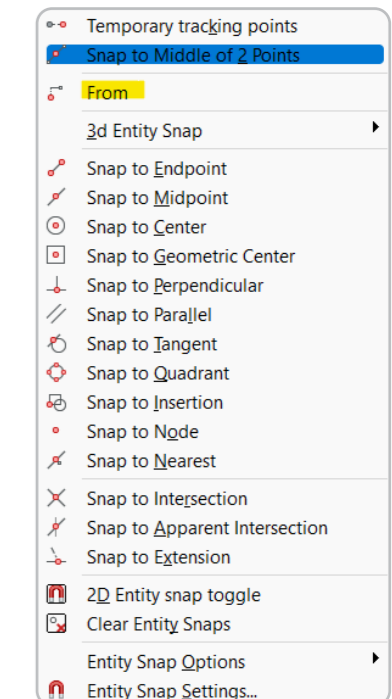
(VIEWPORTS) Lock, Unlock, Maximize, Clip Viewport

The VIEWPORT entity is important for your sheet layout and detailing. We have added the popular options to Lock, Unlock, Maximize and Clip viewports, right on your mouse tip.



The QH command allows you to create a hatch using a single point click. This helps saves many keystrokes when you want to create multiple hatch objects at once.

ESNAP Menu



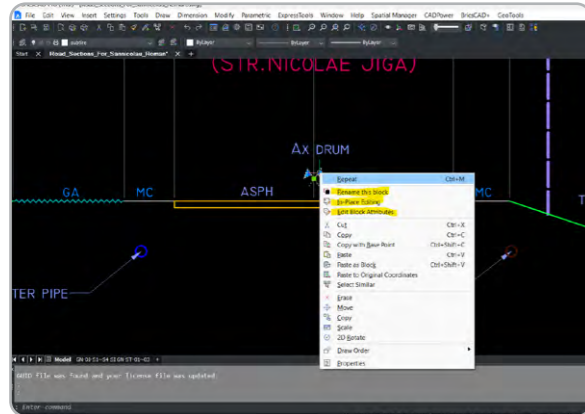
Many AutoCAD users miss the 'From' OSNAP option. Strangely, it is missing from the BricsCAD ESNAP default options. We have made it available in CADPower as a FREWARE item.

Once CADPower is installed, you will see this option sitting comfortably on the object snap menu.

ATTRIBUTED BLOCKS / NORMAL BLOCKS

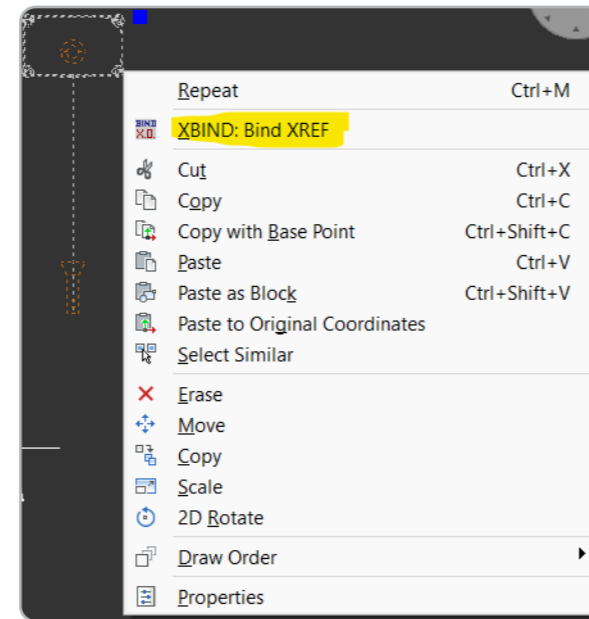
In-place editing of blocks is a critical task in 2d editing. The ability to have the 'In-place editing' attached to the right-click button of the mouse is a huge convenience that users are familiar with.

We have also added the option to 'Rename block' and 'Edit attributes' directly from within the context menu.



EXTERNAL REFERENCE (XREF) objects

Similarly, you can also edit the attributes of the block using the right-click customization. The BricsCAD+ migration genie makes this possible for you.

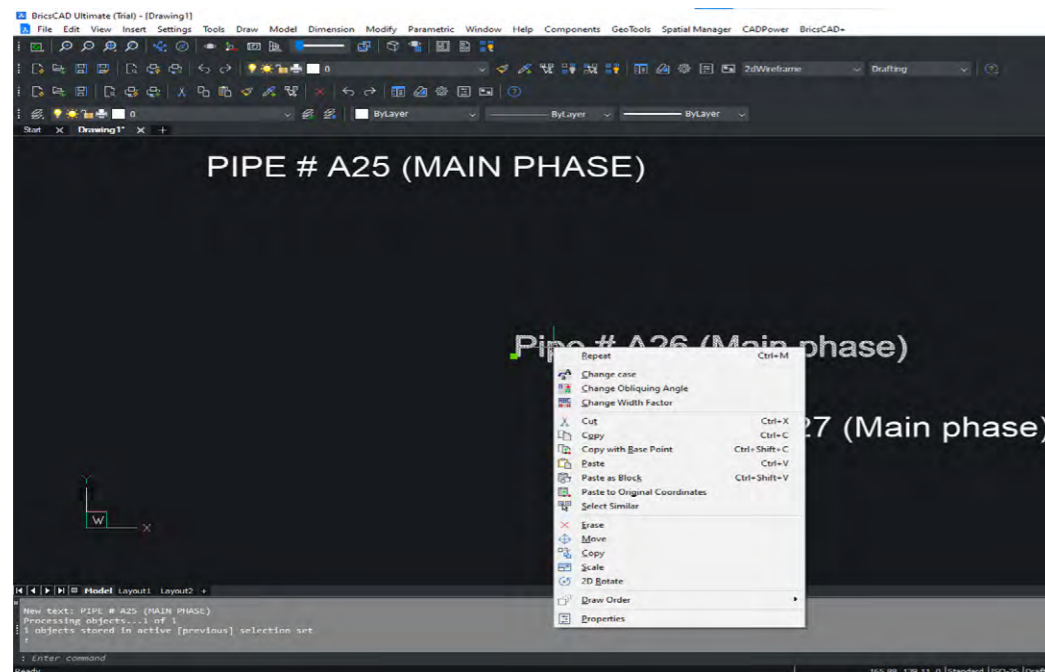


The XBIND command is un-available in BricsCAD. It has been enabled on the command line as well attached to the right-click context menu when an XREF object is selected.

(A2B Migration assistance) Change Text case(right-click context menu added)

A new right-click context-sensitive menu has been added to text entities. This will enable users to change the text case easily, just like in AutoCAD, from the comfort of their mouse click.

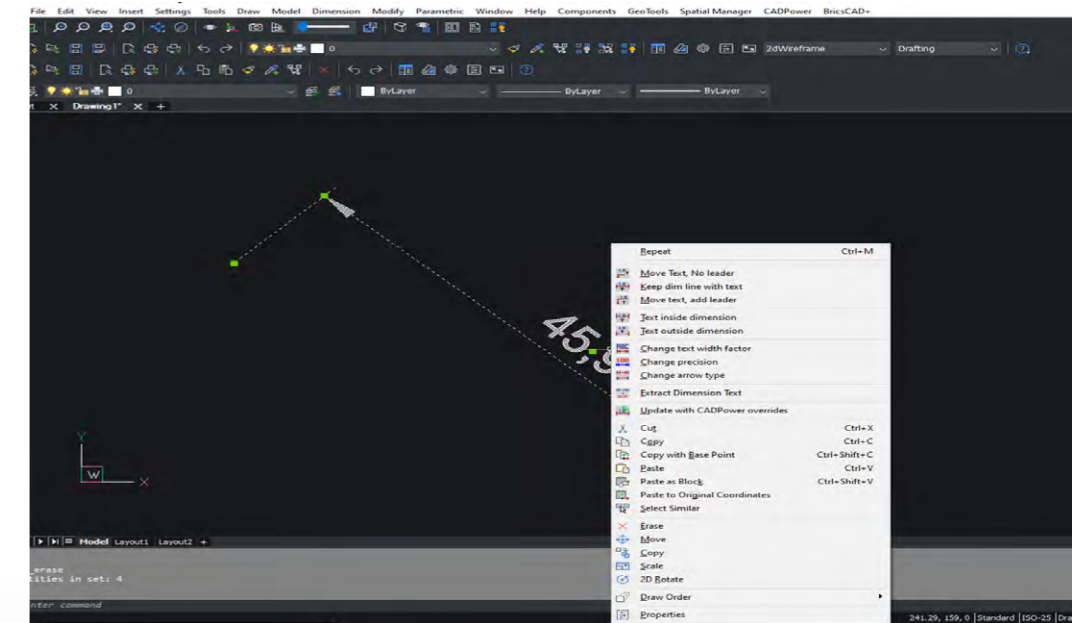
You can change the case of text to Upper, Lower and Mixed with ease. This should come as a welcome relief for countless AutoCAD users who are now using BricsCAD.



(A2B Migration assistance) – Right-click context menu Extract dimension text

The ability to extract the dimension text easily with a single click of the mouse is a feature often missed by BricsCAD users.

We are pleased to announce that CADPower has made this available now in the right-click options when a dimension is selected. The exact displayed text is extracted and placed as horizontal text.



[Download CADPower here!](#)



**DesignSense
Software
Technologies**

#365/8, Hasmatha Avenue 16th Main Road,
Jayanagar 4T Block, Bengaluru – 560 041 India.

M: +91-9243438300 / 8073279755

P: +91-80-41625057

E: rakesh.rao@thedesignsense.com



Technology Partners