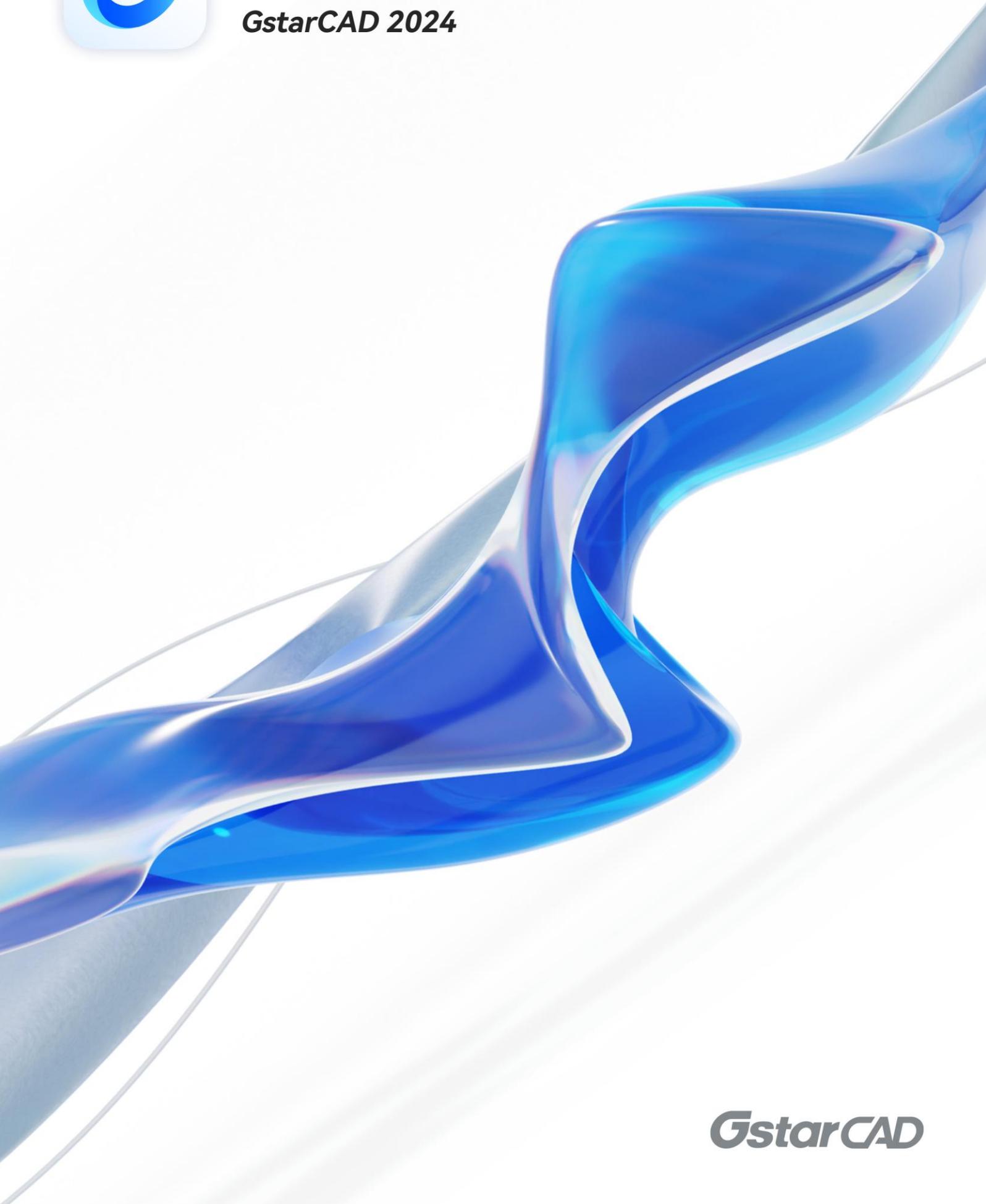




# ***GstarCAD 2024 vs progeCAD 2024***

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***GstarCAD 2024***



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# GstarCAD 2024 VS ProgeCAD 2024

With accelerated performance, enhanced compatibility and elevated user experience, GstarCAD 2024 takes design productivity to new heights. Experience our optimized operation speed and quality, enjoy the expanded compatibility for more file formats and APIs, and discover a new level of design satisfaction with upgraded Dynamic Input tool and adjustable viewports, etc.

## 1. Comprehensive Evaluation

- **Compatibility**

GstarCAD 2024 is not only compatible with all versions of AutoCAD data such as DWG formats, fonts, hatch, and linestyles, but also supports CAD Standard .dws, importing wmf, svg, loading the dbx, fas, vlx and lisp file which ProgeCAD does not support.

- **Performance**

Higher performance plays an important role in GstarCAD. GstarCAD not only constantly provides users with more useful functions, but also delivers great performance in both 2D and 3D operations. GstarCAD is especially outstanding in dealing with the big size drawings that contain a large number of entities. The basic operations, such as move, copy, rotate, scale and so on are significantly enhanced to boost the working efficiency of designers.

- **Functionalities**

GstarCAD 2024 continuously enhances its features and has added plenty of new features according to user's demands to improve your design efficiency.

ProgeCAD 2024 adds some new features, such as Viewcube, Datelink, AIDIMSTYLE, Layer Merge, PDFEXPORT, Restore suppressed messages, and Preview Sheet in the print dialog box have already been supported by GstarCAD.

- **User Experience**

GstarCAD brings you a better user experience in many aspects, such as interface, ease -to-use features, licensing.

## 2. Compatibility Comparison

The main compatible file formats and application development interface comparison:

Item	GstarCAD 2024	ProgeCAD 2024
2018 DWG/DXF	✓	✓
2.5-2018 DWG/DXF	✓	✓
Template file DWT	✓	✓
Standard file DWS	✓	×
Interface file CUI/CUIX	✓	✓
Sheet set file DST	✓	✓
Hatch file PAT	✓	✓
Font file SHX	✓	✓
Linetype file LIN	✓	✓
Print style file CTB	✓	✓
Import WMF	✓	×
Import/export SAT	✓	✓
Import 3DS	✓	✓
Import PDF	✓	✓
Import DGN	✓	✓
Import/Export DWF/DWFX	✓	✓
IFC Format	✓	✓
Import SVG	✓	×
Import STEP/IGES	✓	✓
Import ESRI file	×	✓
Export STL	✓	✓
Export EMF	✓	✓
DWF underlay	✓	✓
Open DWF/DWFX	×	✓
DGN underlay	✓	✓
PDF underlay	✓	✓
Load LISP program	✓	✓
Load DBX program	✓	×
Load FAS program	✓	×
Load VLX program	✓	×
VBA develop interface	✓	✓
.net develop interface	✓	✓

### 3. Performance Comparison

The performance of common-use operations like "OPEN", "Save", "Move", "Undo", "Redo", "Mirror" are significantly faster than ProgeCAD 2024.

The chart below provides an overview of the the performance. We build an operation speed comparison of the basic features between GstarCAD and ProgeCAD.

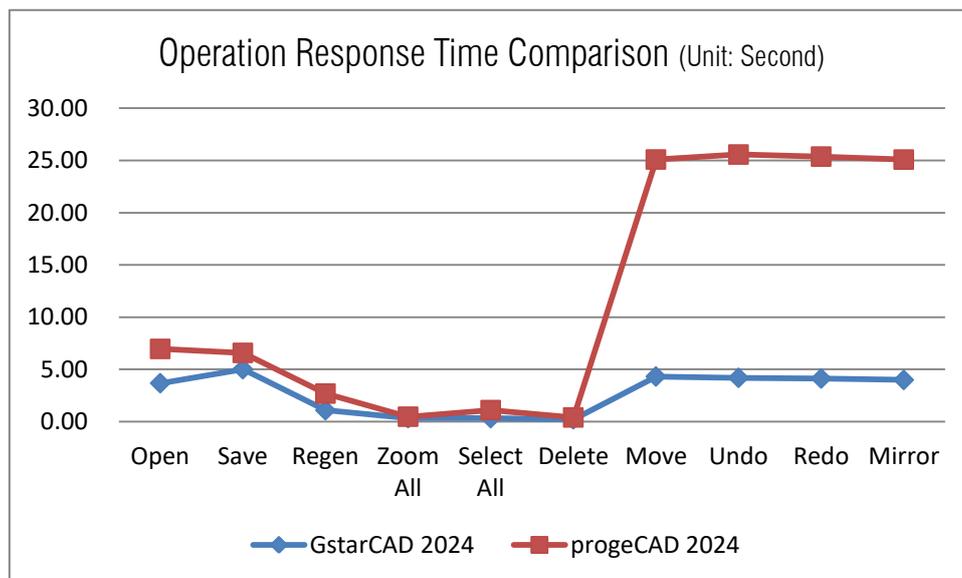
#### Operation Time Comparison between GstarCAD 2024 and ProgeCAD 2024 (Unit: Second)

##### Testing environment:

WIN11 64bit Professional; 16G storage; CPU: 12th Gen Intel(R) Core (TM) i5-12500 3.00 GHz; Graphic Card: Intel(R)UHD Graphics 770

**Drawing size:** 48MB and 114MB

- We tested the operations with two 48MB and 114MB drawings, and got the average time.



It's obvious that GstarCAD 2024 is faster than ProgeCAD when executing the regular commands. Overall, GstarCAD provides the perfect performance to enhance your working speed.

## 4. Comparison Table

ProgeCAD 2024 lacks many important functions such as Dynamic block editing, ACAD Tool Palettes Import Tool, Shortcut customization, Make shape, Attribute Increment, Define Layout Viewport from Model Space, Layout Merge and so on.

### 4.1. Key Functions Comparison Table between GstarCAD and ProgeCAD

Features	GstarCAD 2024	ProgeCAD 2024
ACAD Tool Palettes Import Tool	√	×
Attribute Increment (ATTINC)	√	×
Auto Layer	√	×
Background Command	×	√
Batch Digital Signing Tool	√	×
Change Text	√	×
Check spelling settings in Mtext	√	×
Collaboration	√	×
Define Layout Viewport from Model Space (M2LVPORT)	√	×
DIMTOFFSET	√	×
Distance from Endpoint and Divide Segments options	√	×
Drag and Drop Customization	√	×
Drawing Compare	√	×
Dynamic block editing	√	×
Edits block attribute in place(ATTIPEDIT)	√	×
Freeze Other Layer	√	×
GstarCAD Tools	√	×
Import WMF	√	×
Import Layout as Sheet in Layout Context Menu	√	×

Import Point	×	√
Invert Fillet	√	×
Layer Translator	√	×
Layer Unlock All	√	×
LAYOUTMERGE (LAYOUTMERGE)	√	×
Layout Viewport settings dialog box	√	×
Lisp Debugger	√	×
Lock Other Layers	√	×
LOCKUP/UNLOCK	√	×
Magnifier	√	×
Match Properties Across Drawings	√	×
Measure Volume	√	×
Mtext supports match text formatting	√	×
Off Other Layer	√	×
Offset Multiple	√	×
Outline Objects	√	×
Password Protection	√	×
Plane Boolean	√	×
Plot tools	√	×
Quick Edit Block Attribute Text	√	×
Rapid Distance	√	×
Reset Settings to Default	√	×
Right-Click + Drag Method	√	×
Section Plane	√	×
Shortcut Customization (CUSTACC)	√	×
Statistics Summation	√	×
SURFOFFSET	√	×
Symmetric Draw	√	×

Text Match	√	×
Text Incremental Copy	√	×
Text on line	√	×
Visual Menu Customization	√	×
Visual Styles manager	√	×
3D Mouse	×	√

From the commonly used functions comparison table above, you can see GstarCAD 2024 provides richer functions than ProgeCAD 2024.

## 4.2. GstarCAD Innovative Features

GstarCAD has customized a large number of unique functions according to user needs.

The innovative features of GstarCAD:

### GstarCAD Innovative Features

Features	Description
Align Tool (ALIGNTOOL)	Allows you to align the selected objects along the X or Y axis coordinates.
ACAD Tool Palettes Import Tool	Import AutoCAD© customized Tool palettes in the WINDOWS Start menu easily.
Area Sum (AREASUM)	Displays the current closed region value and area sum sequence in command line.
Area Table (AREATABLE)	Dimensions and counts the area of an enclosed object and exports the result to a table in the current drawing area.
Arrange Tool (ARRANGETOOL)	Aligns multiple objects left, right, top, bottom, center, vertical or laterally.
Attribute Increment (ATTINC)	Attributes values increment automatically or manually according to specified method.
Auto Layer (AUTOLAYER)	Customizes and predefines the associated layer of a command to streamline drafting workflow.
AUTOXLSTABLE	Allows to insert excel, and static block quantity, area and length and auto update the data according to the changes of the object.
Barcode (BARCODE)	Allows inserting the barcode to objects to corresponding paper documents and electronic drawing file.
Batch Print(BP)	Batch prints the drawing frames by pages.
Batch Purge (BATPURGE)	Batch purges the redundant blocks, layers, linetype, dimensions and text, etc in drawings.
Block Break (BLOCKBREAK)	Allows you to wipeout or break an object that is overlapped by a reference block.
Break Object (BREAKOBJECT)	Breaks the intersected lines and allows you to set the gap value.
CAD table to EXCEL (GC_CTE)	Converts sheets, composed by line/Spline and text/Mtext in CAD, to EXCEL.
Change Base (CHANGEBASE)	Modifies the base point position of the block.
Change Text (CHANGETEXT)	Modifies several texts simultaneously.

CIRCLE(C) Parameter	CIRCLE(C) parameter; Draws multiple concentric circles with one radius.
Collaboration	The GstarCAD Collaboration Tool is an embedded plugin available for GstarCAD platform aimed to help CAD designers work together among a single referenced drawing file at the same time, control drawing revisions and manage medium, big or complex projects with ease and reliability, reducing communication barriers across different industries.
Define Layout Viewport from Model Space(M2LVPORT)	Creates a viewport on layout space by selecting objects in the model space.
Dimension Coordinate (DIMCORD)	Marks X, Y coordinate values of the point.
Distance from Endpoint Snap	Allows to snap a certain distance from any endpoint of objects and the distance value can be modified at status bar at any time.
Divide Segments Snap	Allows snap the divided segment points of objects and the divided segment number can be modified at any time.
Export Coordinate (COEXPORT)	Exports the coordinate of the picking point to txt or xls files.
FILLET(I) Invert Parameter	Creates a reverse fillet by this option.
Frame Automatically (FRAMEAR)	Automatically searches for the frame, calculates according to the frame size, and arranges multiple drawings on a large-format drawing reasonably.
Free Scale (FREESCALE)	Scales an object without restrictions under three modes; Non-Uniform, Rectangle and Free.
Freeze Other Layer (LAYFRZOTHER)	Freezes other layers except the layer where the selected object is located.
Graphic Compare (OCMP)	Compares graphic of two groups of objects or two files.
GstarCAD tools (12 functions)	Allows you to quickly draw the industry drawings with GstarCAD tools
Import HPGL/2 (IMPORTHPGL)	Imports a PLT files.
Get Selection by Block Name (GETBLKSEL)	Multi-selects objects with the same name in specified area.
Get Selection by Object Type (GETENTSEL)	Multi-selects objects with the same entity type in specified area.
Get Selection by Layer (GETLAYSEL)	Selects all the objects in specified layer and specified region at one time.
Get Selection by Color (GETCOLSEL)	Quick selects the objects with the same color.
Get Selection by Object/Layer (GETENTLAYSEL)	Selects entities by entity type and layer.
Get Selection by Object/Color (GETENTCOLSEL)	Selects entities by entity type and color.

Get Selection by Layer/Color (GETLAYCOLSEL)	Selects entities by color and layer.
Dimension Coordinate Position (HCZZBD)	Dimensions the coordinate position.
Layer Draw Order (LAYDRAWORDER)	Changes the order of the layers by bringing to front or sending to back.
Lock Other Layers (LAYLCKOTHER)	Locks other layers except the layer where the selected object is located.
Layer Unlock All (LAYULKALL)	Unlocks all layers.
Off Other Layers (LAYOFFOTHER)	Turns off other layers except the layer where the selected object is located.
Magnifier (MAGNIFIER)	Views a specific area of your drawing as a magnifier with the capability of snap points without performing zoom in/out on big drawings.
OFFSET(B) Both Sides	Offsets to both side, no need to operate twice.
Outline (OUTLINE)	Generates the outline by clicking the closed region.
Pline Boolean (GC_BOOLOP)	Operates the closed pline with union, intersection and subtraction.
Print PLT(PRINTPLT)	Prints the generated PLT file.
QR Code(QRCODE)	Extracts data or inputs data to generate QRcode which can be scanned by mobile device to obtain data.
Rapid Distance (RAPIDDIST)	Measures distance and angle between 2D objects along X, Y axis rapidly by moving mouse.
RECTANGLE(O) Parameter	RECTANGLE(O) parameter, Draws an rotate rectangle with (O)option
Region Scale (REGSCALE)	Selects a region of a drawing to be cut and copied to a new location.
ROTATE(Multiple)Parameter	Copies many objects with different rotate angles, or draw circles array.
Shortcut Customization (CUSTACC)	Customizes the shortcut key.
Spline to Pline (Sptpl)	Converts spline to polyline according to the accuracy (number of segments of the arc) that the user assigns.
Statistics Summation (KLL01)	Sums up the selected text or Mtext.
Symmetric Draw	Directly draws symmetrical shapes, it can omit the operation of the mirror.
Text Incremental Copy (GC_dztext)	Accomplishes kinds of incremental methods for text.
Text Align (TEXTALIGN)	Aligns text along X or Y coordinates, or along a line of specific direction.

Text Match (TEXTMATCH)	Matches both text and Mtext attributes in the current drawing, avoiding select and edit text attributes one by one.
Text Online (TEXTONLINE)	Distributes the text uniformly along a selected spline, polyline or arc. It can also create text online quickly for multiple curves.
Total Length (MEASUREGEOM)	Inquire total length of the selected lines.
WIPEOUT (supports circle and arc)	Generates wipeout by clicking circle or a pline object contains arcs.
.....	

Besides developing plenty of innovative features, GstarCAD has improved the basic operations in order to simplify the operation steps. For example, Adds the angle parameter to line and spline, when drawing an object, you can not only set the value between object and X axis, but also set the angle parameter between the selected line and the previous line; Adds the concentric circle and rotated rectangle; Adds multiple copies in rotate command, realize the copy rotate and circle array; Adds divided by segment and distance from endpoint, etc. to accomplish the liner array. Supports invert fillet option in fillet command which is welcomed by designers.

The innovative features enhance your drawing efficiency greatly.

### 4.3. Function Detail Comparison

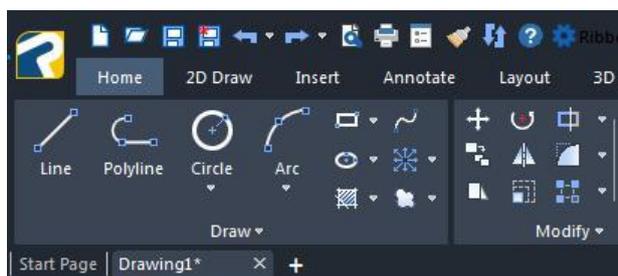
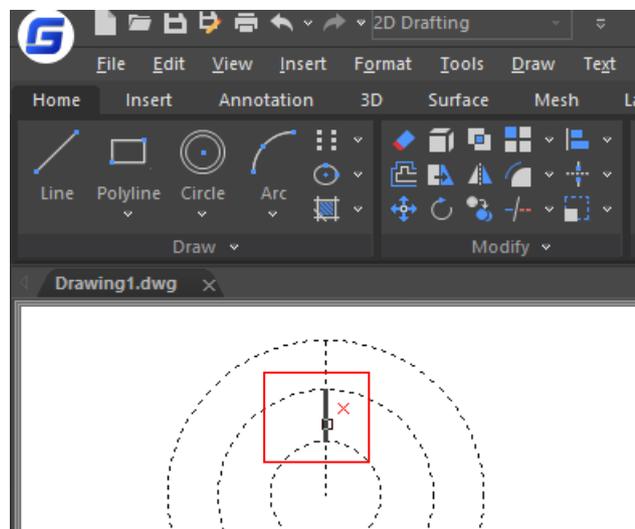
GstarCAD 2024 not only has more commands than ProgeCAD 2024, it is also better in the details of some interfaces and functions. The following is a comparison of important functions.

ProgeCAD 2024 lacks important functions such as dynamic block editing, and the drawing editing functions are relatively weak. For example, it does not support dynamic preview of trim/ extending/ hatch/ offset, grips edition of arc. Text and layer processing and object selection are also relatively weak.

In addition, there is also a certain gap with GstarCAD 2024 in terms of additional tools. For example, it does not support functions such as magnifier, divide segment, distance from endpoint, symmetric drawing and navigation tool.

- **Hatch, Trim, Extend Preview**

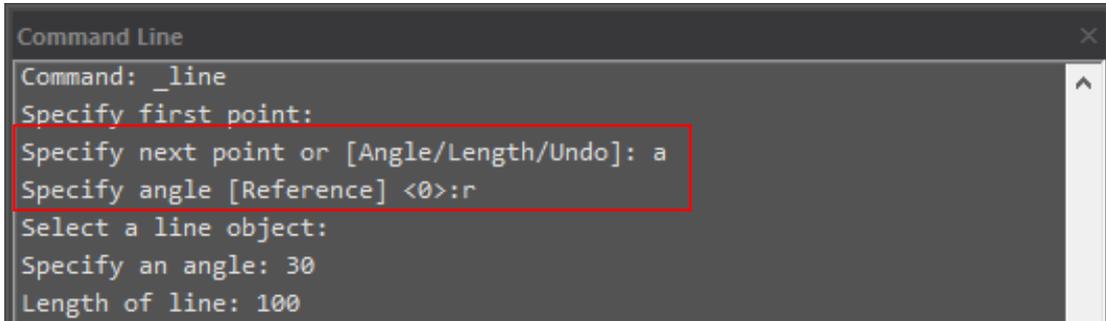
GstarCAD supports preview effects when trimming, extending and hatching, which can help users judge the correctness of the operation.



ProgeCAD does not support preview effects when trimming, extending, and hatching.

- Line

GstarCAD can set the reference angle or included angle with the reference object or the previous section when setting the angle.

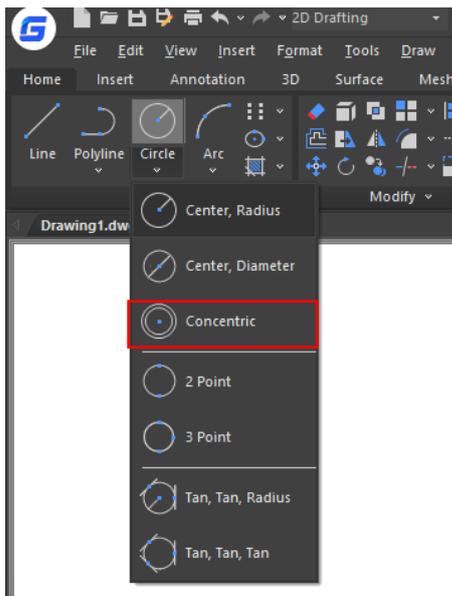


ProgeCAD can only input the angle relative to the positive X axis

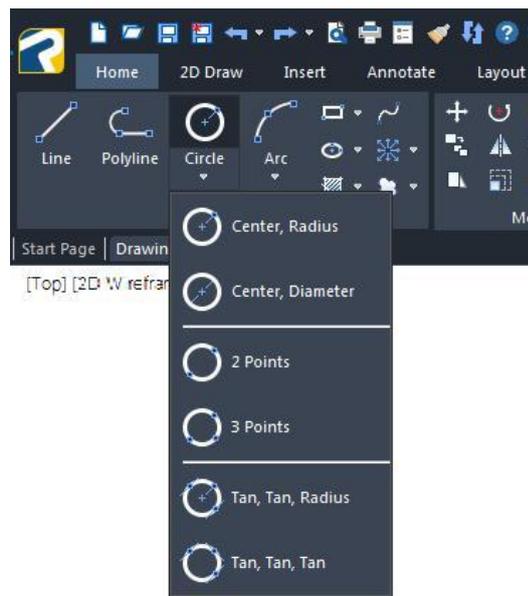


- Circle

GstarCAD supports concentric option which can draw circles with the same center point.



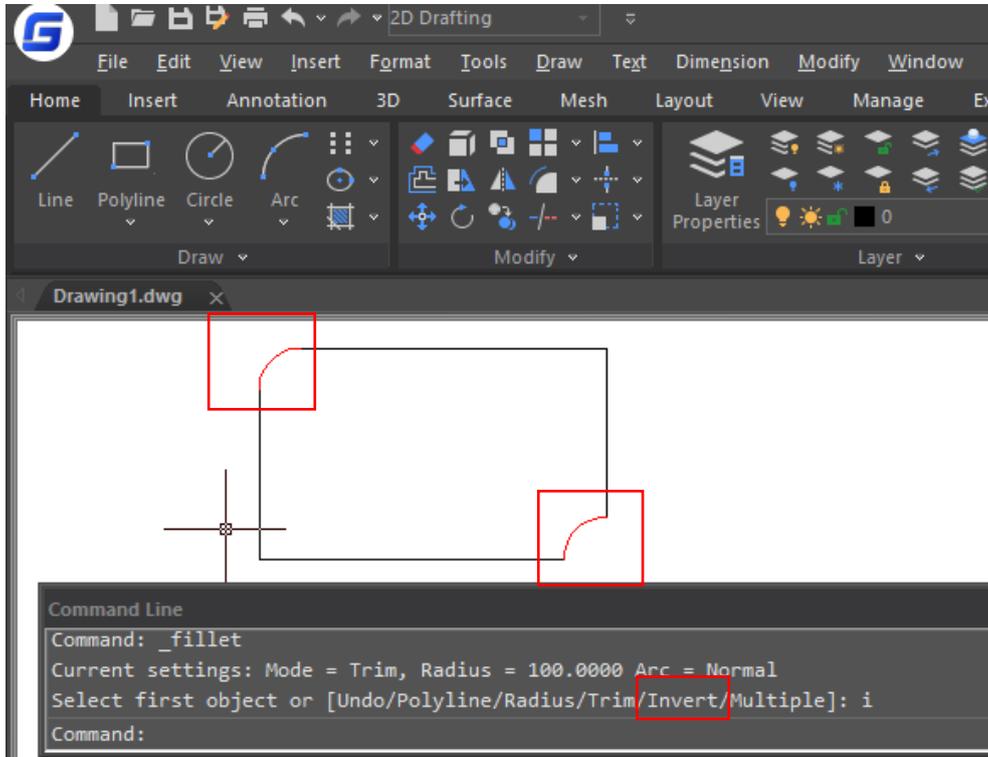
GstarCAD



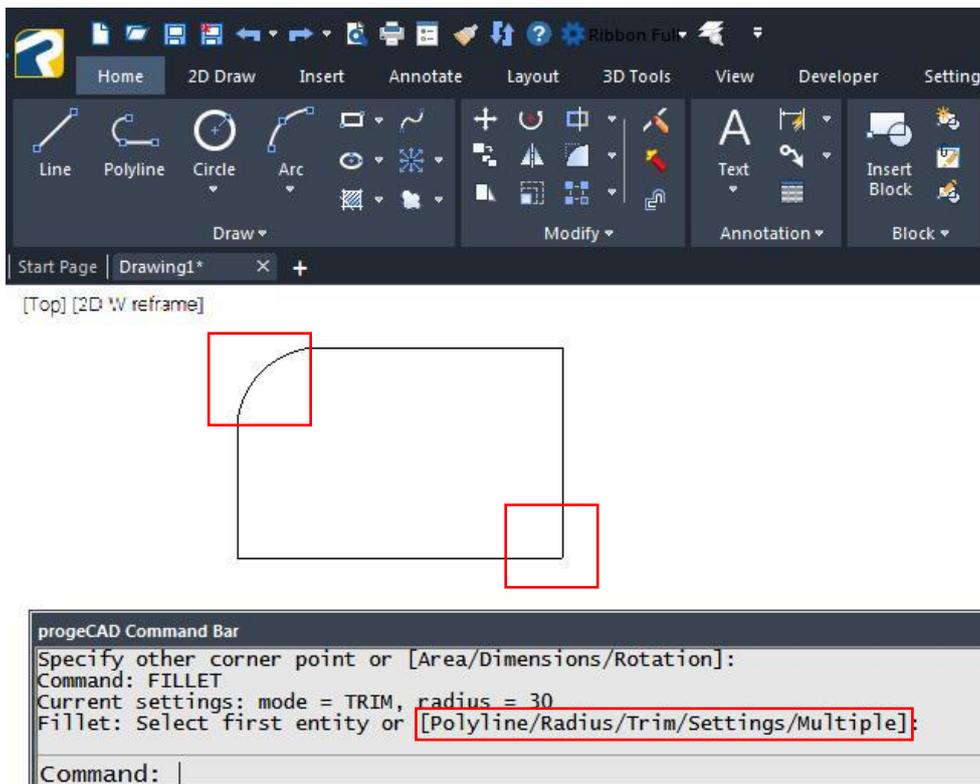
ProgeCAD

- Fillet

In GstarCAD, you can create the normal fillet and reverse fillet.

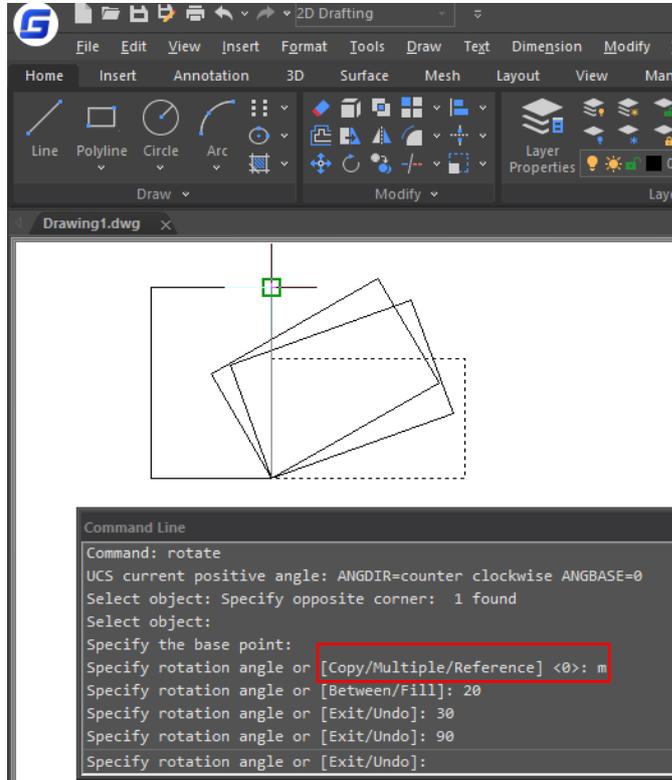


ProgeCAD only supports the normal fillet.

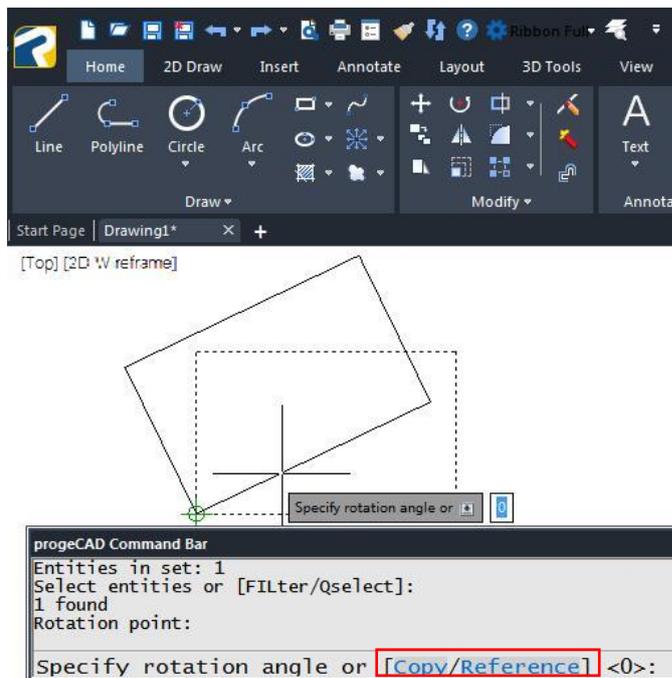


- Rotate

GstarCAD supports multiple copies, you can input multiple angle copies while rotating, or generate a circular array.



ProgeCAD does not support multiple copies when executing rotate.



- Copy

GstarCAD provides three array modes for copy command: measure, divide and path which can be copied along a straight line or curve.

```
Command Line
Command: COPY
Select object: 1 found
Select object:
Current settings: Copy mode = Multiple
Specify base point or [Displacement/mOde] <Displacement>: 0
Enter a copy mode option [Single/Multiple] <Multiple>:
Specify second point or [mEasure/dIvide/Path] <use first point a
s displacement>:
```

GstarCAD

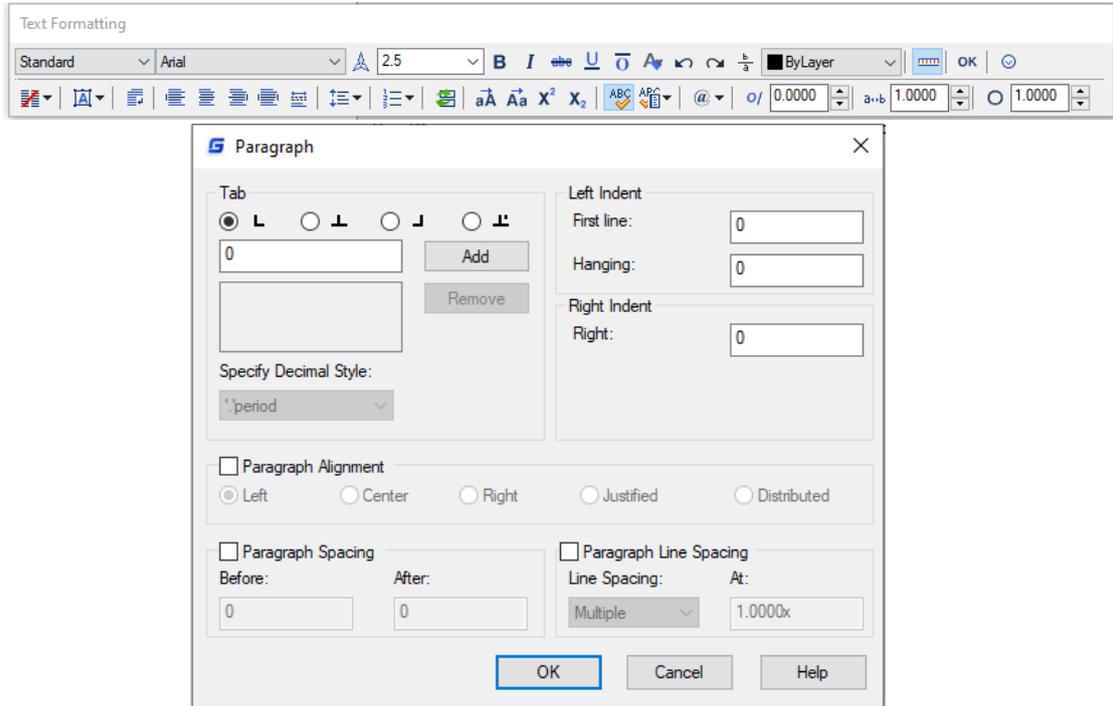
ProgeCAD only supports the array along a straight line.

```
progeCAD Command Bar
Command: copy
Select entities to copy or [FILter/Qselect]:
Entities in set: 1
Select entities or [FILter/Qselect]:
1 found
Current settings: Copy mode = Multiple
Specify base point or [Displacement/mOde] <Displacement>: o
Enter a copy mode option [Single/Multiple] <Multiple>:
Specify base point or [Displacement/mOde] <Displacement>: |
```

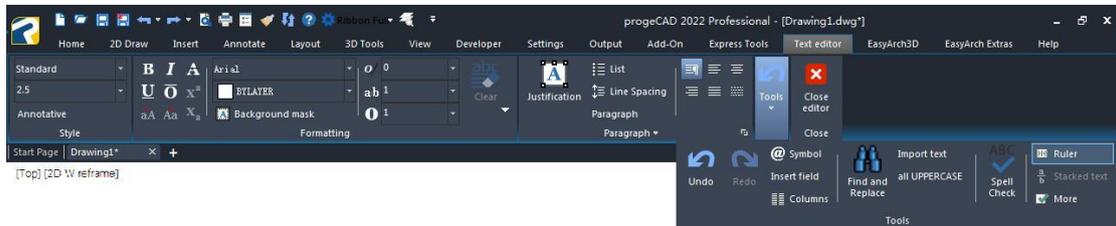
ProgeCAD

- Mtext

GstarCAD provides abundant functions such as columns, numbering, match text formatting, spelling check settings, superscript and subscript, and the paragraph dialog box is also richer.

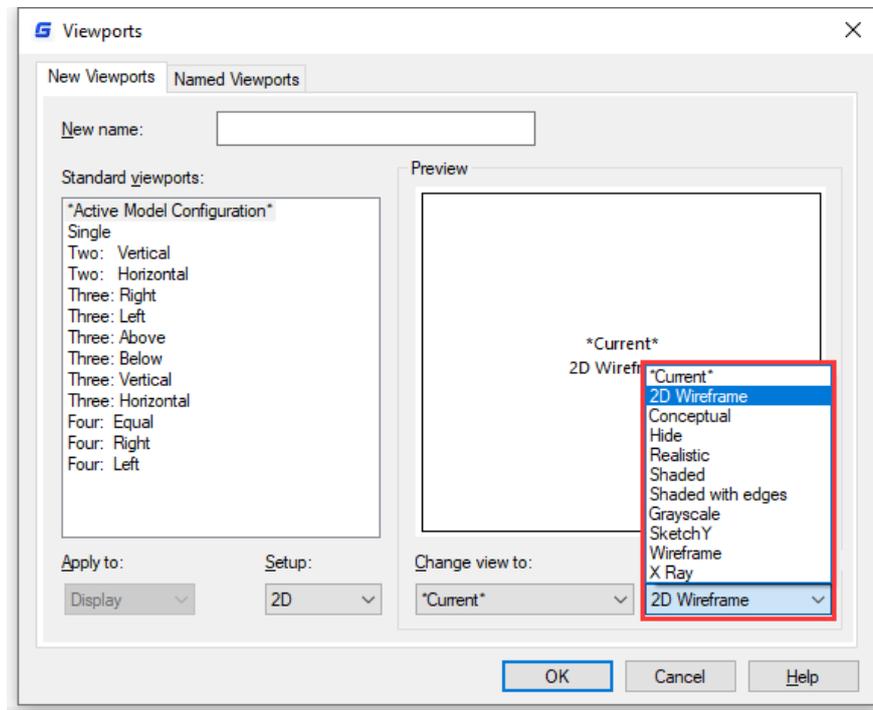


ProgeCAD lacks some efficiency and important options, such as match text format, check spelling settings.



- Layout Viewport settings

GstarCAD supports visual styles in Viewports dialog box.

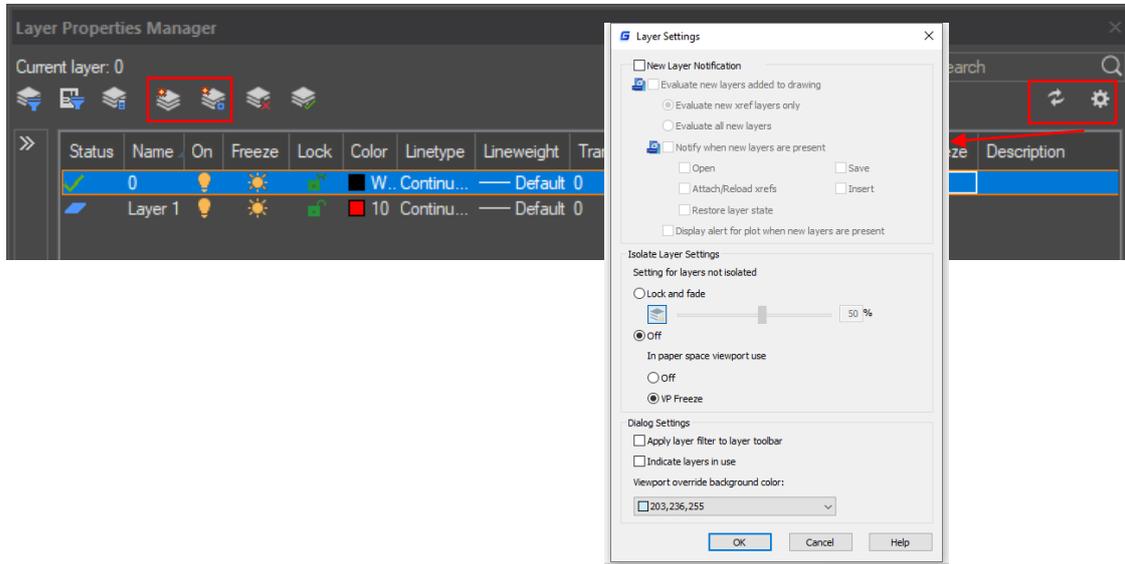


ProgeCAD does not support Viewport dialog box and the prompts are shown in the command line. It supports fewer viewport features than GstarCAD.



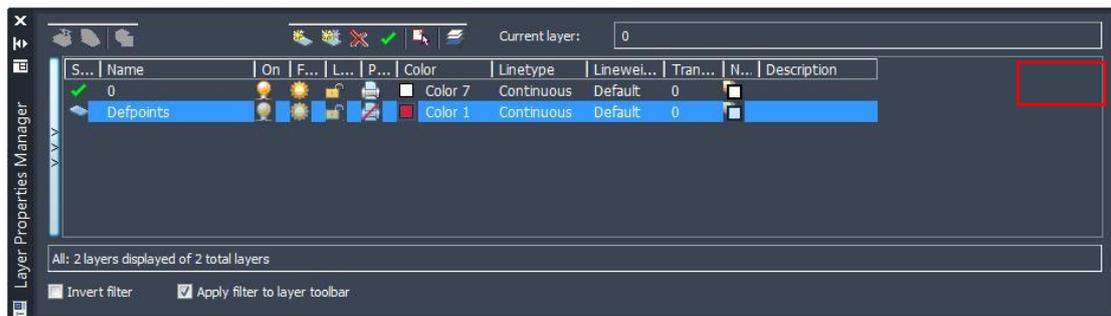
- **Layer Properties Manager**

GstarCAD provides functions such as layer setting and refresh. The layer settings dialog box includes the setting of new layer notification, isolation layer and dialog settings.



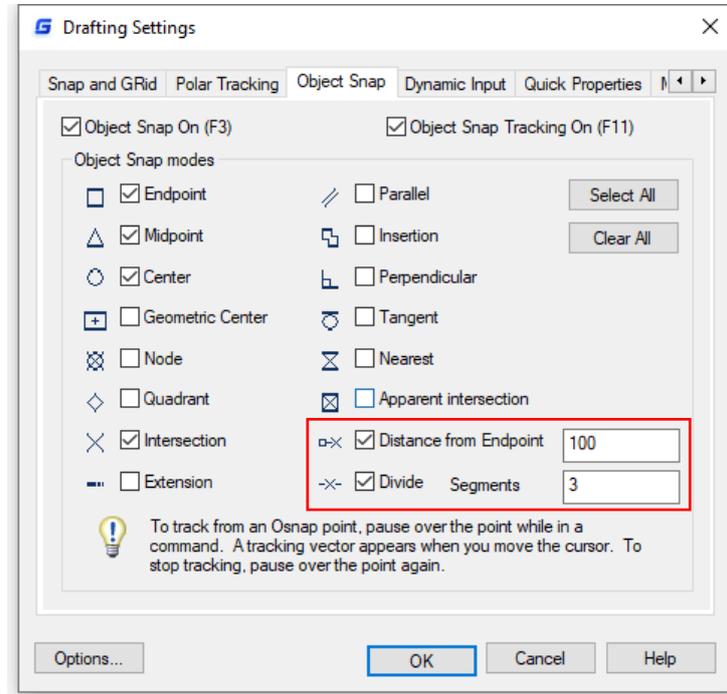
GstarCAD

ProgeCAD does not support layer settings, refresh, and search the layers by name.

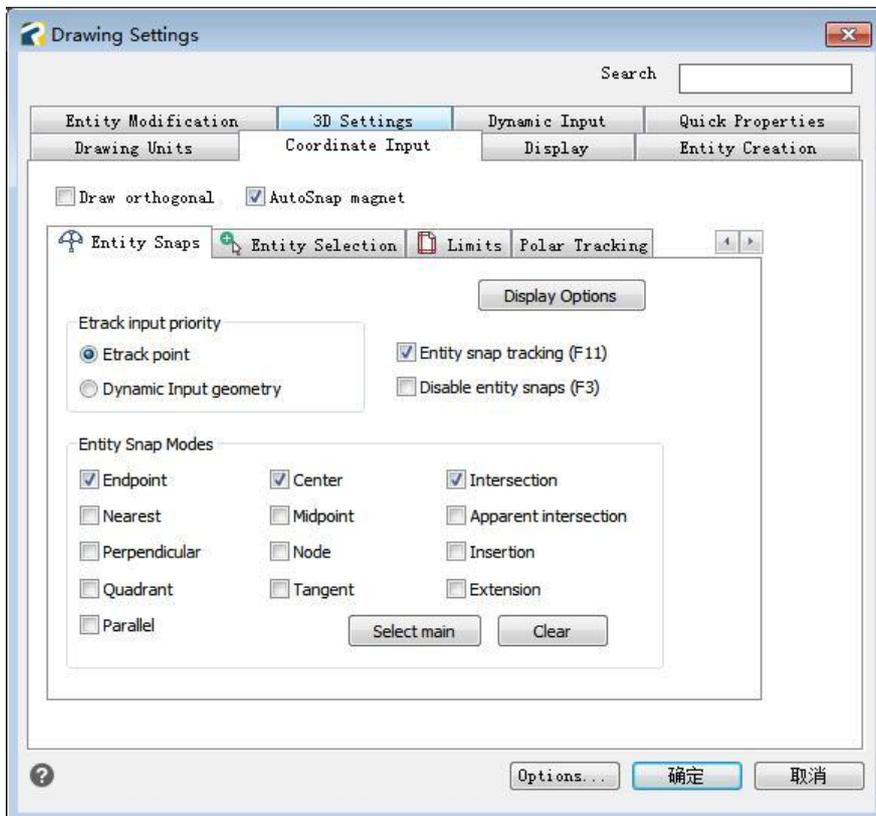


- Snap Options

GstarCAD supports Distance from Endpoint and Divide Segments.

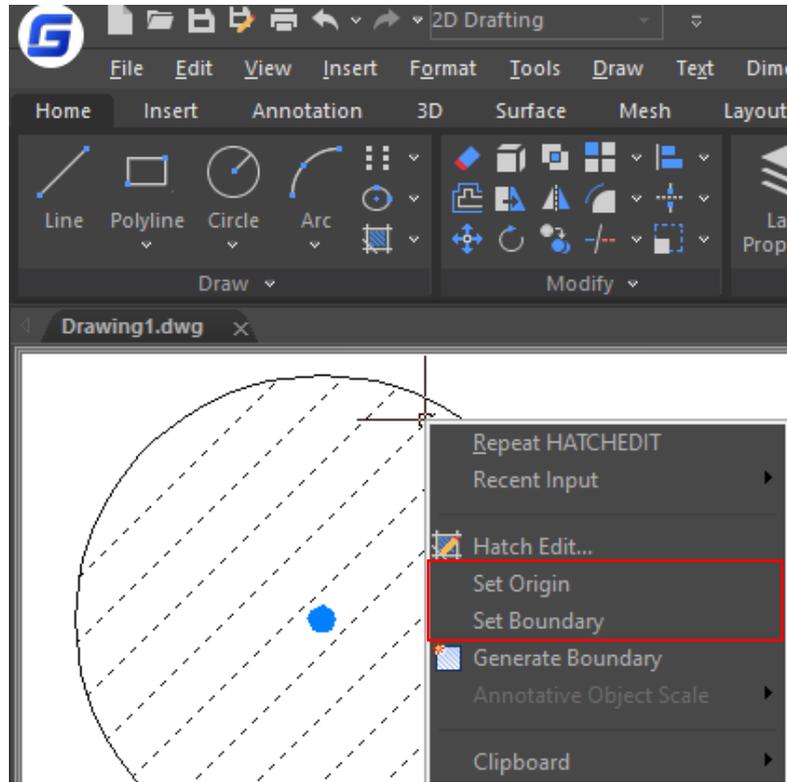


ProgeCAD only provides conventional snap methods. The hierarchy is complex and not intuitive

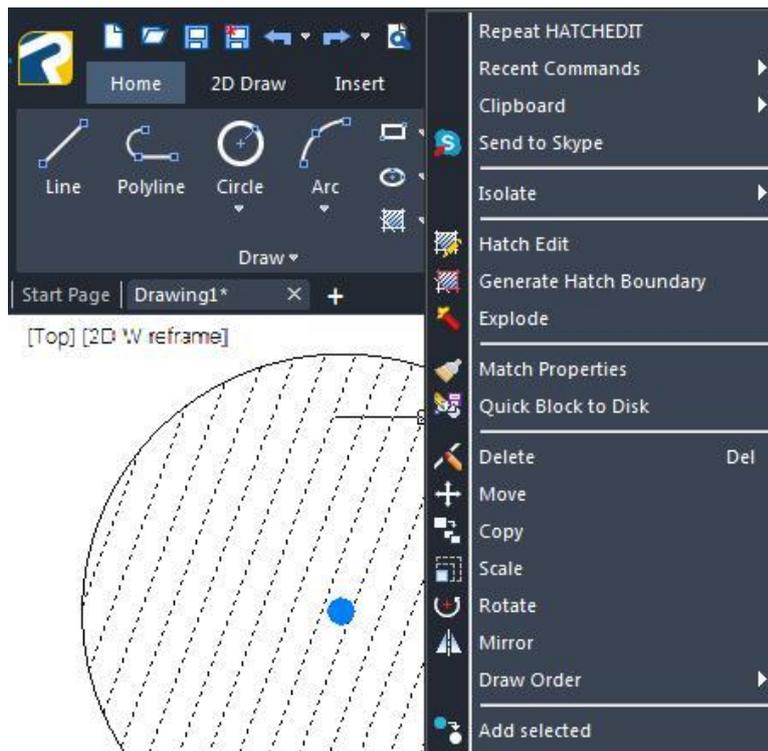


- Hatch edit in context menu

GstarCAD supports Set Origin and Set Boundary for hatch objects. The Set Origin controls the starting location of hatch pattern generation for a selected hatch. Set Boundary redefines a selected hatch to conform to a different closed boundary.

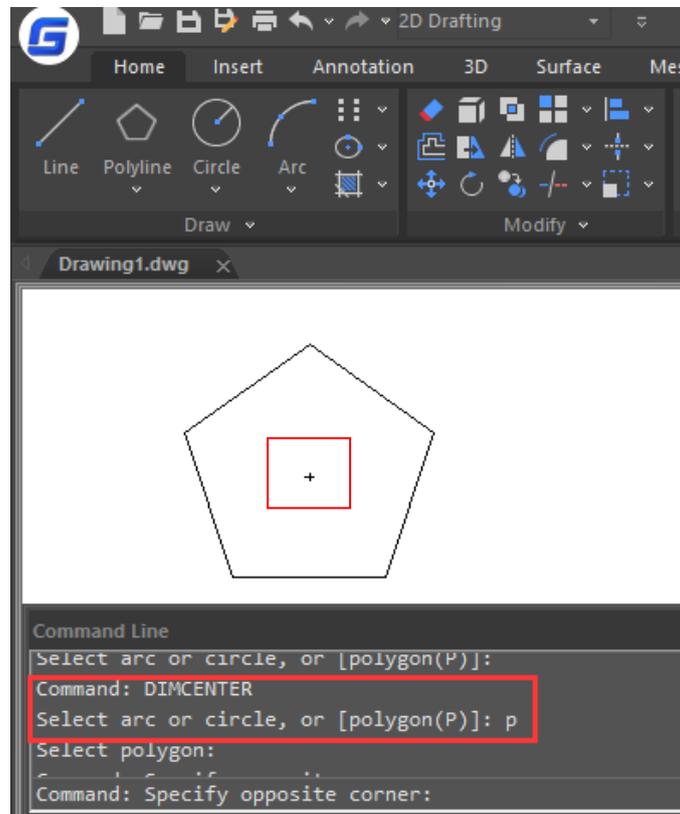


ProgeCAD does not support Set Origin and Set Boundary, etc.

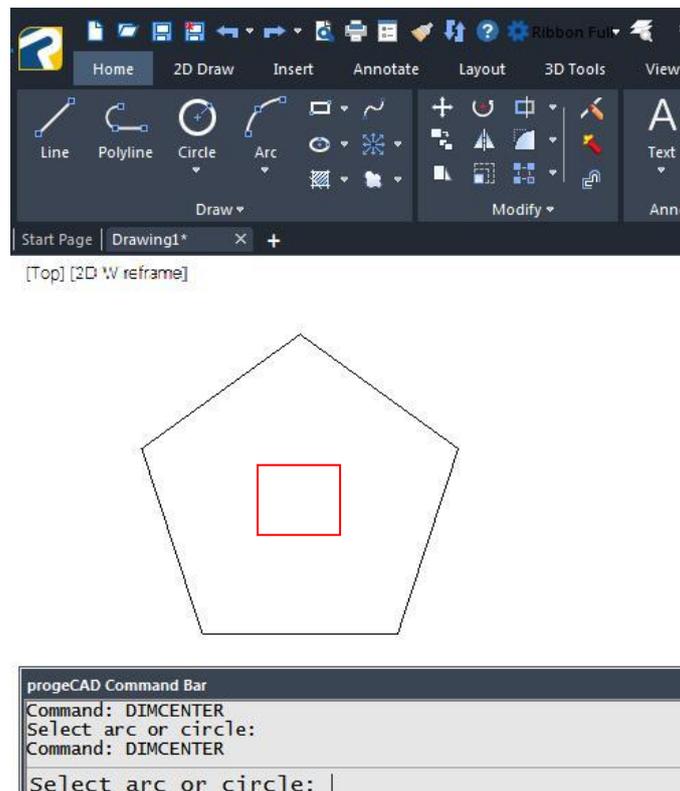


- Dimension Polygon Center

GstarCAD supports the option Polygon (P) in DIMCENTER command to mark the center of polygons.

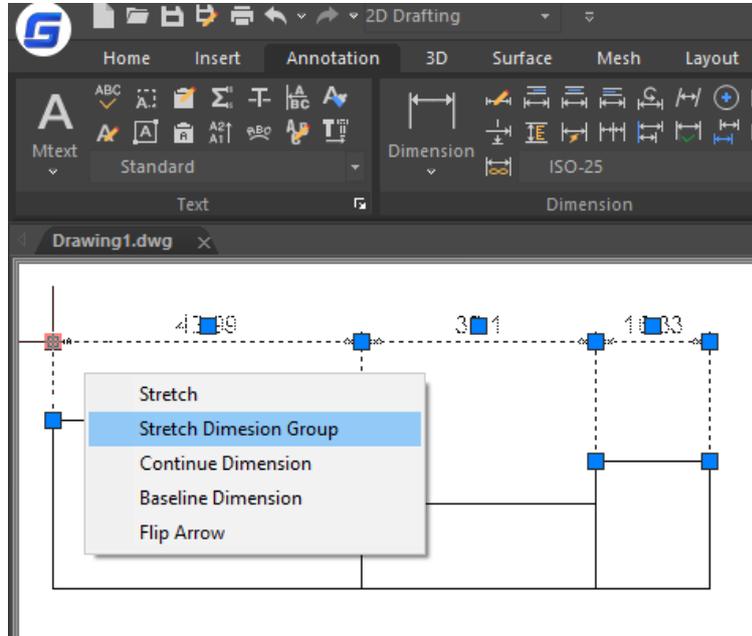


While ProgeCAD only supports dimension center of arc and circle, dimension polygon is not available.

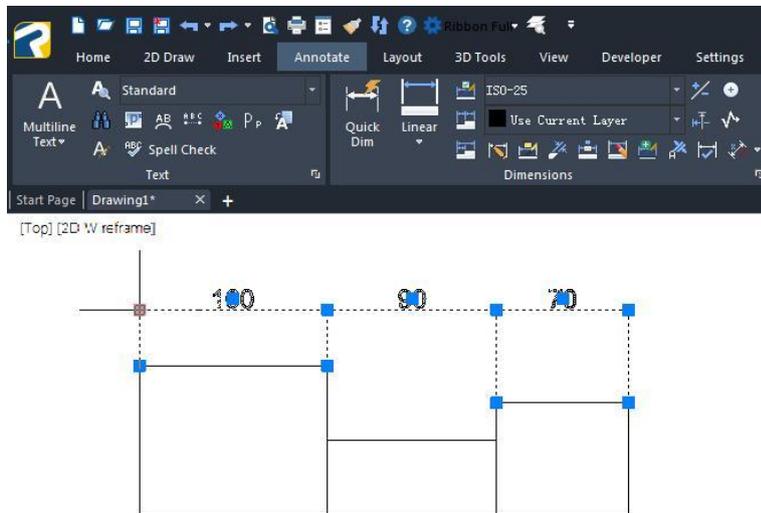


- **Stretch Dimension Group**

GstarCAD supports the “Stretch Dimension Group” option which allows adjusting dimensions that share same grips with each other as a whole.

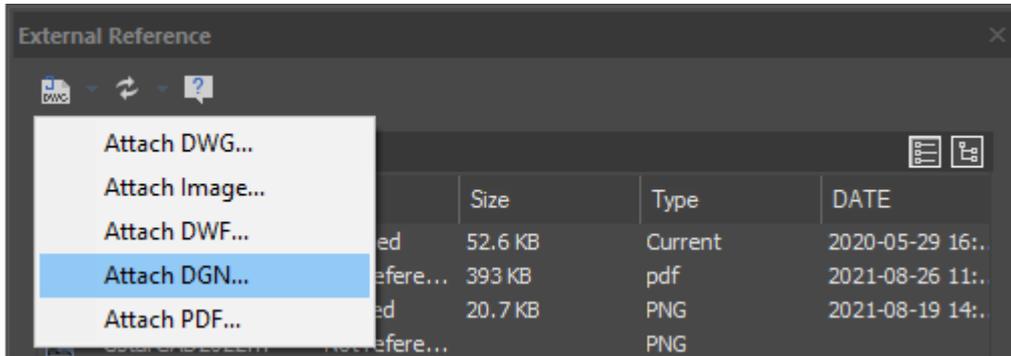


In ProgeCAD 2024, you have to stretch such dimensions one by one, which wastes your design time.



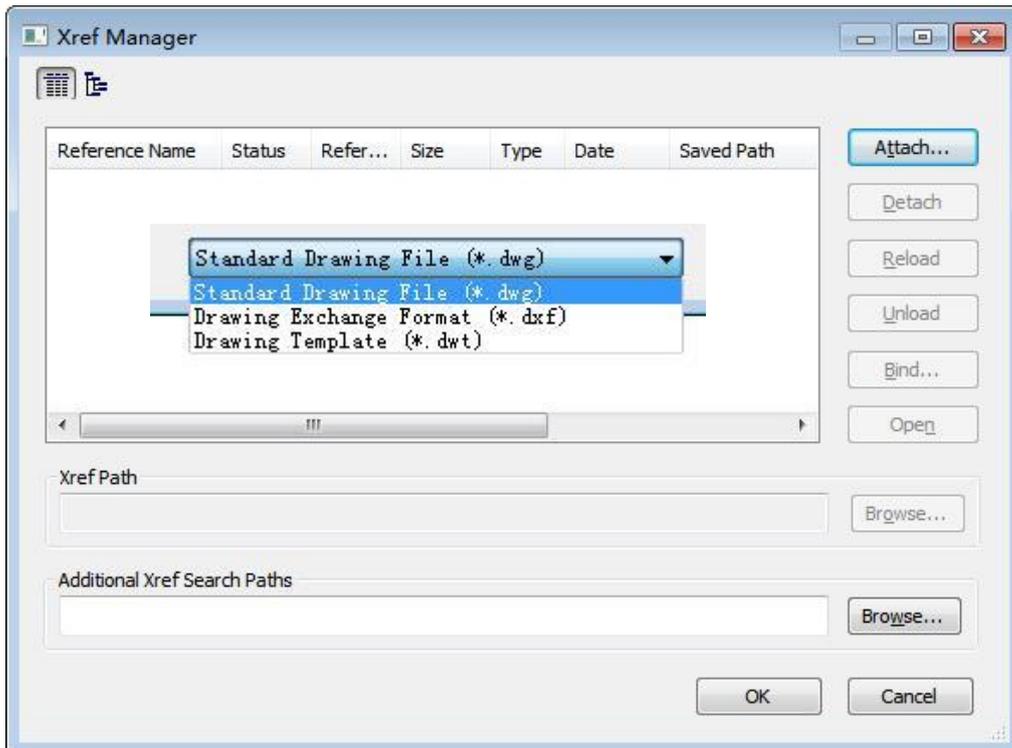
- **DGN Attach in Xref**

GstarCAD supports DGN file attachment. When you attach a DGN file as an underlay, you link that referenced file to the current drawing. Any changes to the referenced file are displayed in the current drawing when it is opened or reloaded. The External Reference palette shows more information in detail.



GstarCAD

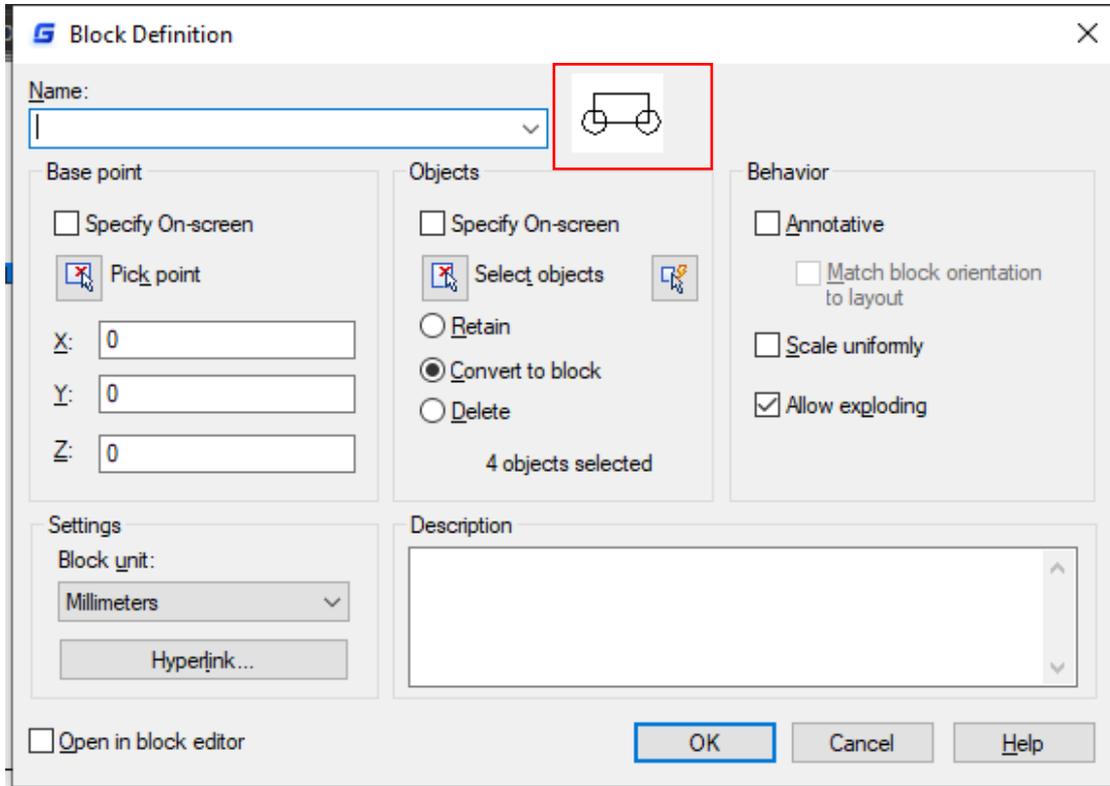
However, ProgeCAD does not support attach DGN, PDF and images.



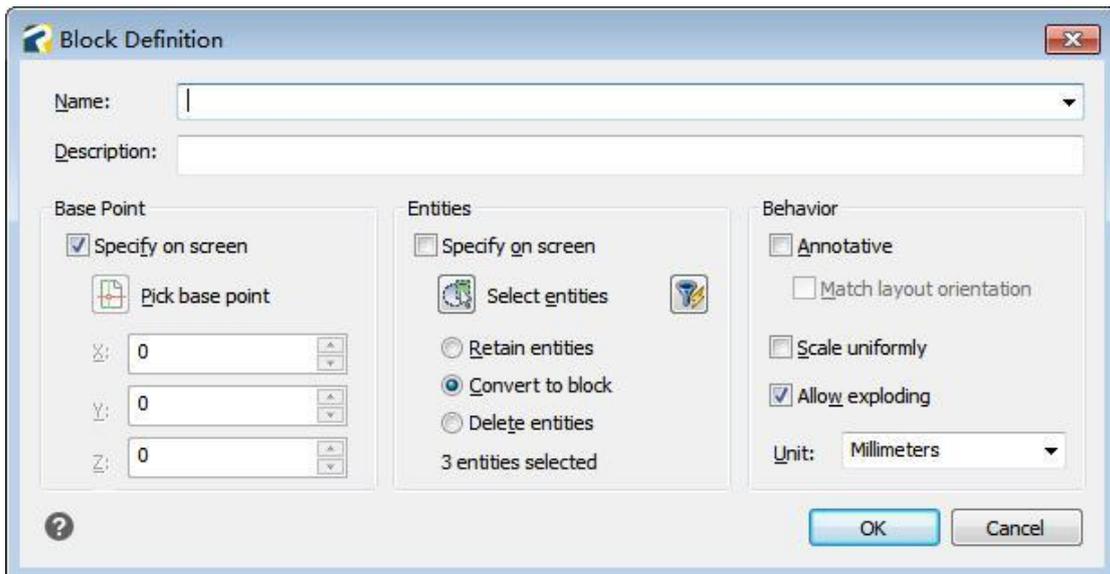
progeCAD

- **Block Definition**

GstarCAD supports the preview of selected objects, which can judge whether the selected objects are correct.



ProgeCAD does not support the preview after selecting the objects.

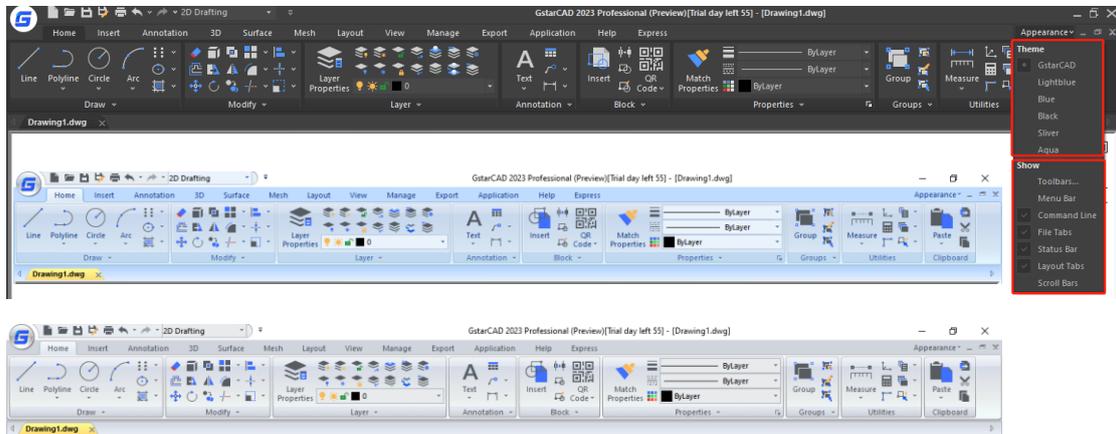


## 5. User Experience

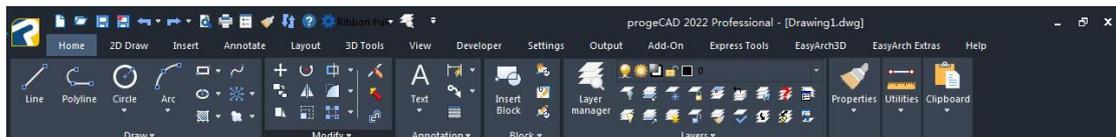
- **Interface**

GstarCAD offers you a concise and familiar interface. It provides 6 appearance color themes in total, and the combination of attractive color themes and icon designs creates a most comfortable work environment for you.

Interface switching in GstarCAD is simple and you can see the effect without closing the software. It's also available to display and rearrange elements like the toolbars, display the command bar, switch between workspaces, change the interface themes, customize your own interface and enable the status bar and menu bar.

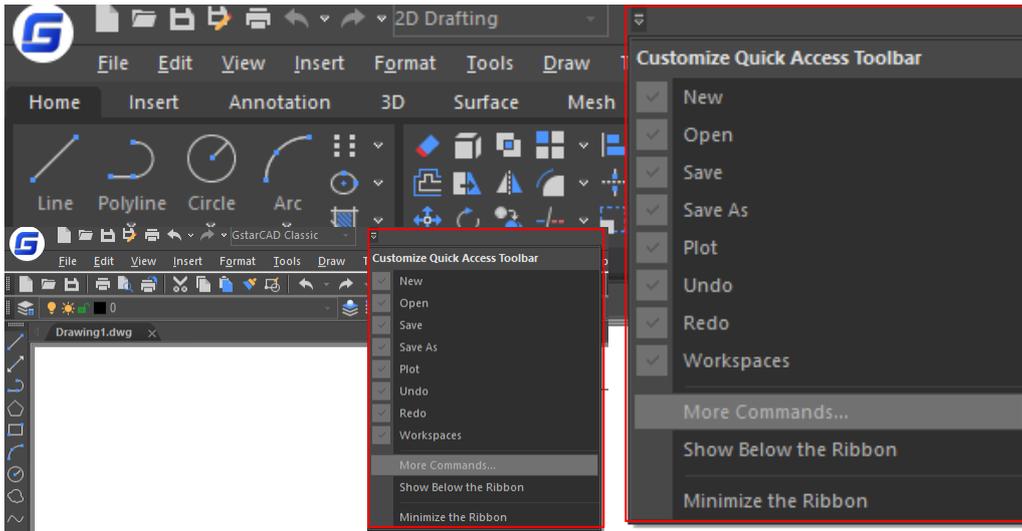


ProgeCAD does not support so many appearance color themes and it only provides the dark one.

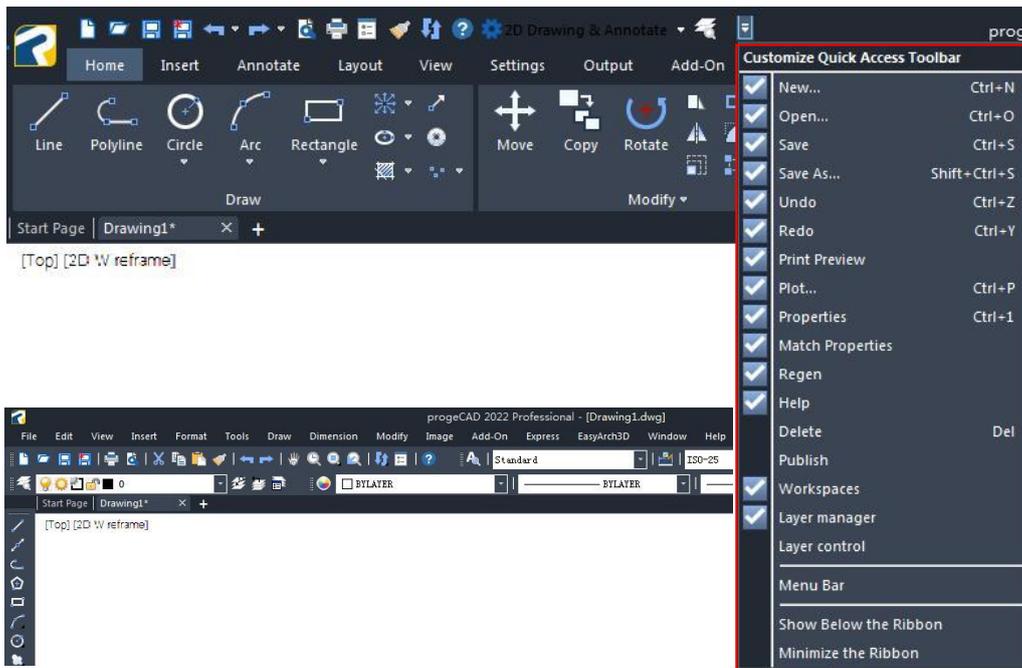


- Quick Access Toolbar

In GstarCAD, the commands displayed in the quick access toolbar can be customized directly in the drop-down menu and more commands can be added, also can be set to display below the ribbon. The quick access toolbar can also be displayed in the traditional classic interface to facilitate switching between workspaces.



The quick access toolbar of ProgeCAD does not provide customization functions, and it is not displayed in the classic interface, which makes it inconvenient to switch between workspaces.

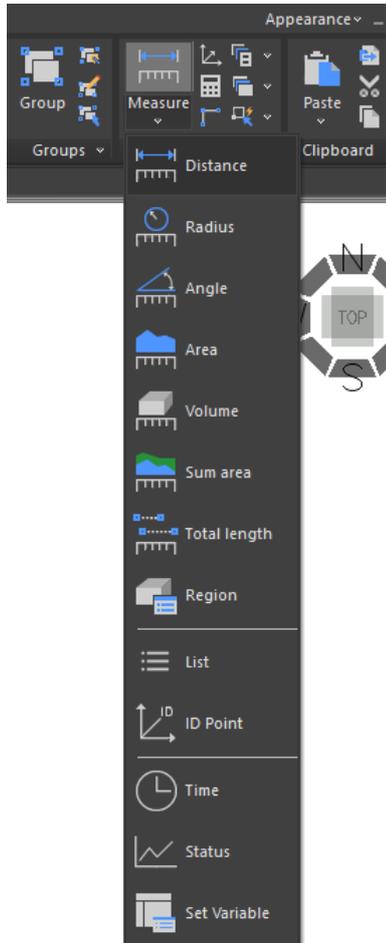




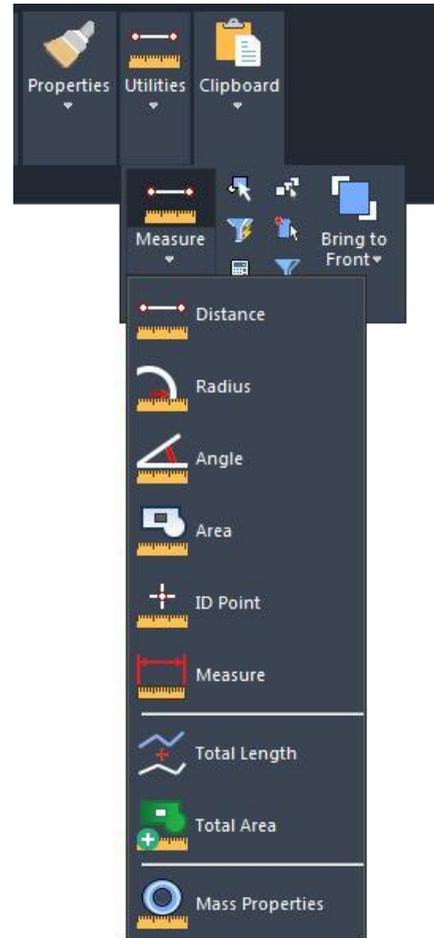
- **Clear hierarchy**

GstarCAD arranges the same category features with clear hierarchy which saves your precious time with less press.

ProgeCAD has complex hierarchy and lacks many important measure tools.



GstarCAD

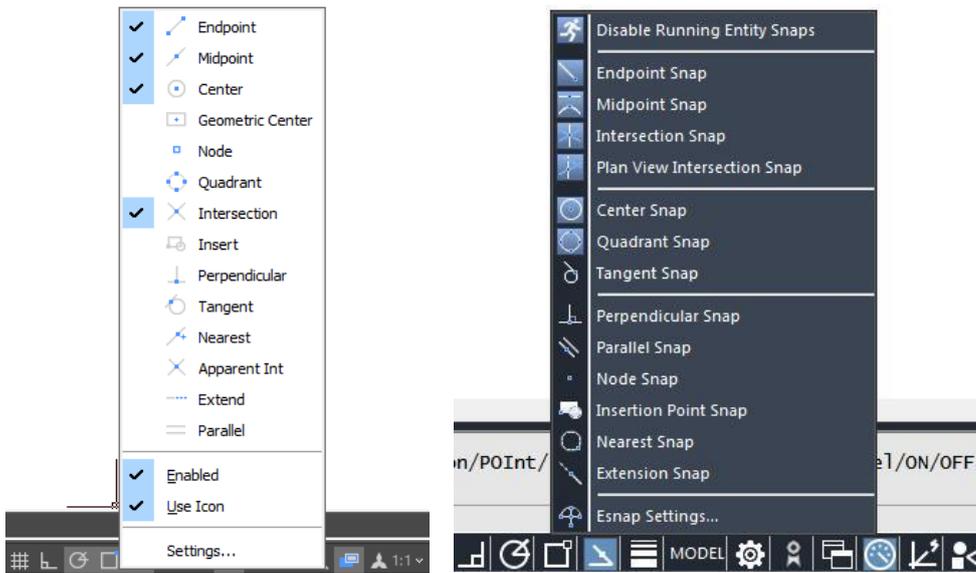


progeCAD

- **Select Multiple Object Snapping Options at a time**

The snapping options are listed in the right-click menu of the object snap button in GstarCAD. You can adjust the snapping options without opening the draft settings dialog box. GstarCAD allows you to choose several snapping objects at a time.

Though ProgeCAD supports the snapping options in right-click menu, it doesn't support to choose multiple snaps at a time, after one snapping object checked, the context menu will automatically exit. You have to reopen the context menu to choose another one.

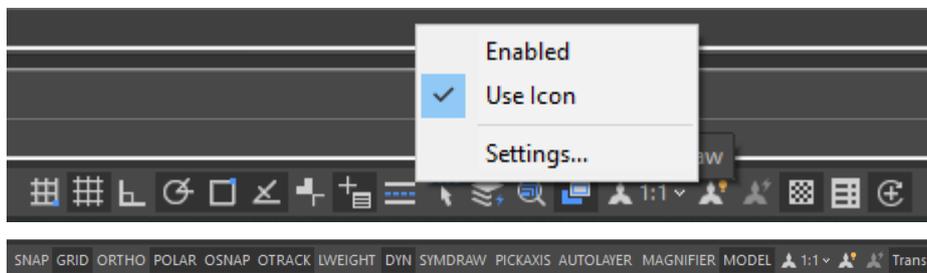


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- **Status Bar Display Mode**

GstarCAD not only supports the icons display on status bar, but also supports displaying function name, depends on your preference.

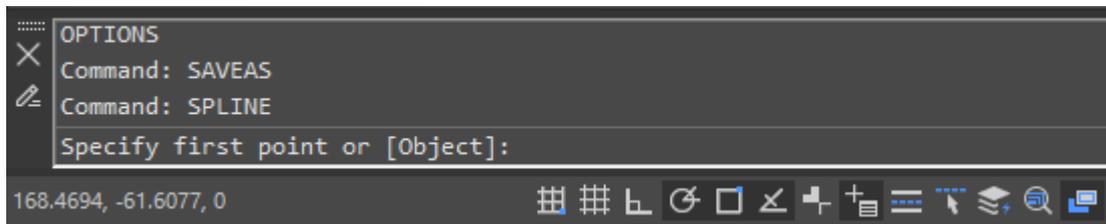


ProgeCAD does not support function names display on the status bar.



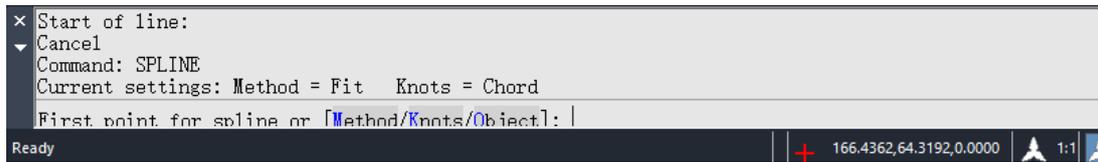
- **Command Line Resolution**

GstarCAD provides you more clear resolution and better screen adaption.



GstarCAD

The command line of ProgeCAD couldn't show completely and it is partially covered by the status bar.



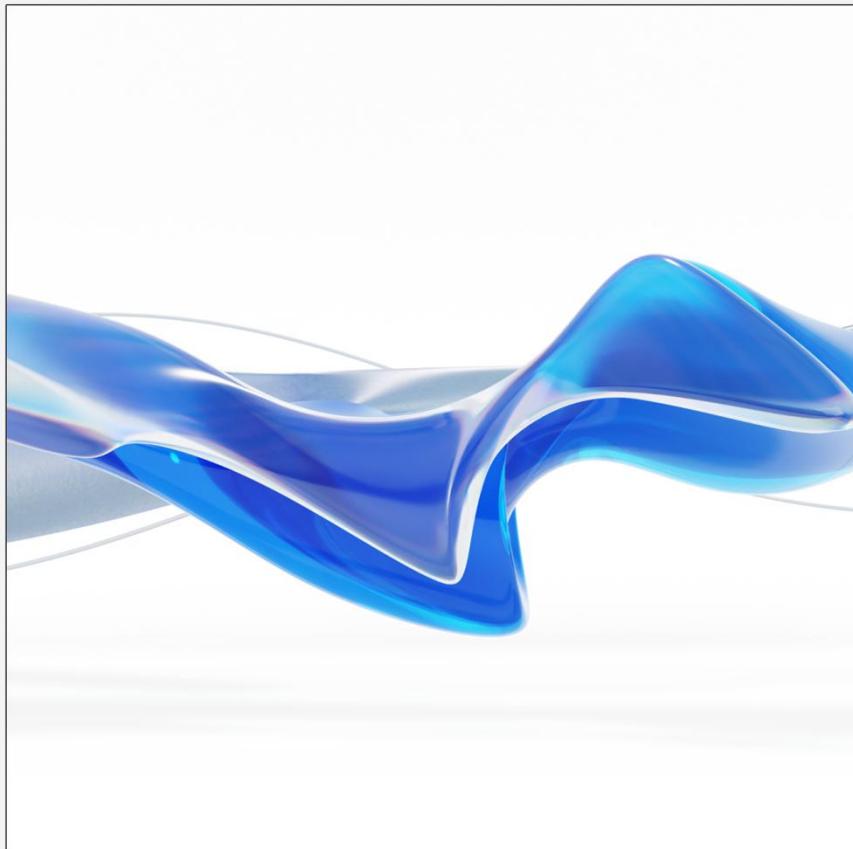
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## 6. Conclusion

Through the above comparison, we can make the following conclusions: GstarCAD 2024 is far advantageous in terms of compatibility, functionality, user experience and so on. Compared with ProgeCAD 2024, GstarCAD is a better choice.



**GstarCAD 2024**



■ <https://www.gstarcad.net/>