Complete Features Guide

GstarCAD 2019

GstarCAD

# Table of Contents

GstarCAD 2019

Collaborative Design & BIM Support

GstarCAD 2019 optimized edition comes with new and improved features to shorten different tasks efficiently. In this version users can create, modify, and save workspaces at will, check spelling of a current mtext, flexibility for import layouts to a sheet set file, verify the real scale of viewports created on layout space, redefine inserted blocks from design center and more enhancements available.

1. New WORKSPACE Command

The new WORKSPACE command allows to create, modify and save workspaces current. You can customize GstarCAD ribbon or classic workspace to suit interface environment needs much easier.

Workspaces are sets of menus, toolbars, palettes, and ribbon control panels that are grouped and organized so that you can work in a custom, task-oriented drawing environment. When you use a workspace, only the menus, toolbars, and palettes that are relevant to a task are displayed. In addition, a workspace may automatically display the ribbon, a special palette with task-specific control panels. You can easily switch between workspaces. The following task-based workspaces are already defined in GstarCAD: 2D Drafting and GstarCAD Classic.
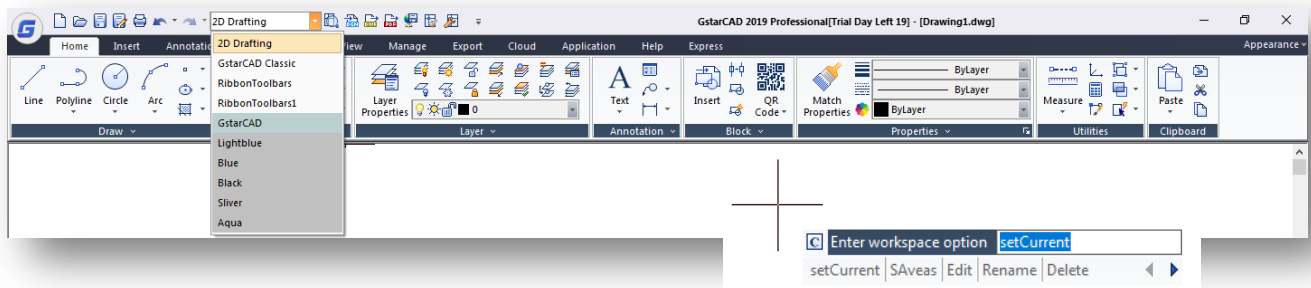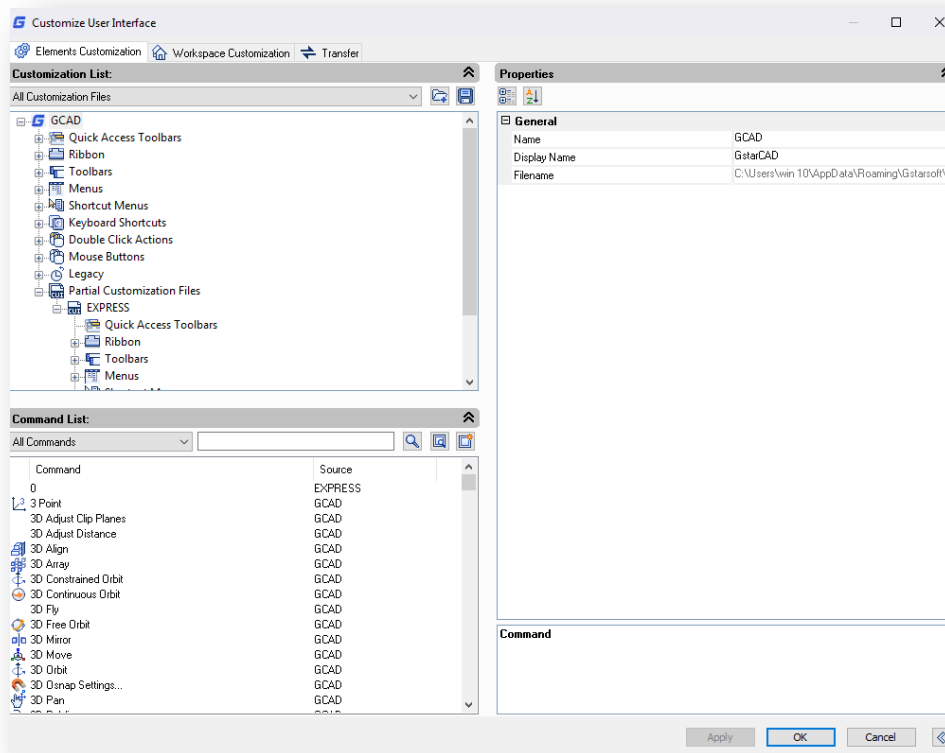

If you execute WORKSPACE command, the following prompts are displayed:

Set Current: Sets a current workspace.
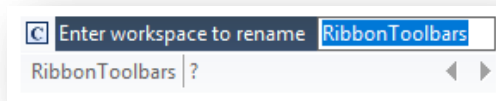**Save As:** Saves a current interface configuration as a workspace.
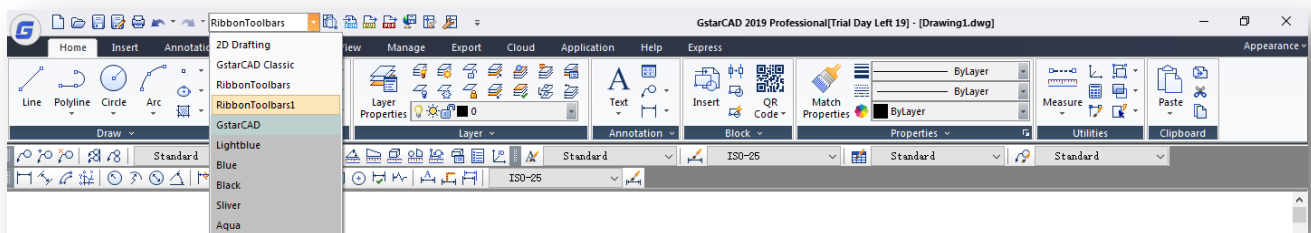
Edit: Opens the Customize User Interface dialog box, customize tab, where you can make modifications to a workspace.
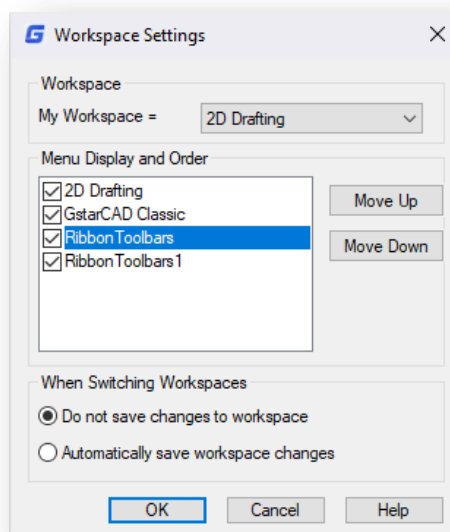

Rename: Renames a workspace.
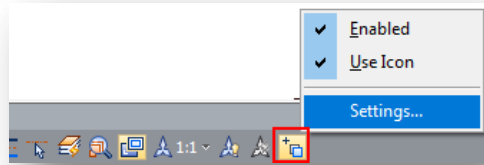**Delete:** Deletes a workspace.

Settings: Opens the Workspace Settings dialog box, which controls the display, menu order, and Save settings of a workspace.
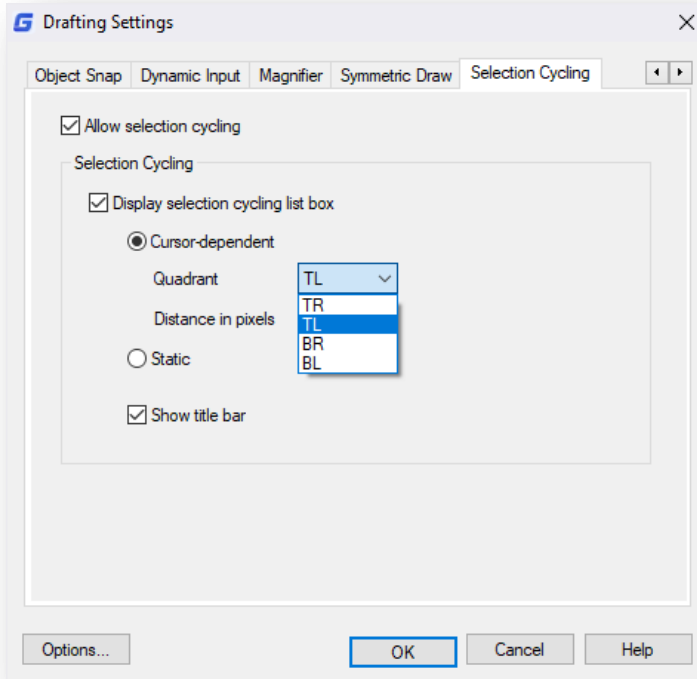
2. New Selection Cycling System Variable

With the new SELECTIONCYCLING system variable you can quickly select overlapped or coincident objects in current drawing as well as set selection cycling options.

The Selection Cycling button is located on status bar. Right-click the button to specify the selection cycling settings. These settings control whether a badge or the Selection dialog box displays when you hover over or select an overlapping object.

Allow selection cycling: Turns on/off the selection cycling functionality. You can also set this option with the SELECTIONCYCLING system variable.

Display selection cycling list box: Displays the Selection Cycling list box.

Cursor-dependent: Moves the list box relative to the cursor position according to quadrant (Top Left, Top Right, Bottom Right, Bottom Left), distance in pixels or just static.

Show title bar: To save screen space, turn the title bar off.

To select overlapping objects, make sure that make sure that Selection Cycling on status bar is turned on. As you roll your cursor over objects, you will see an icon indicating that multiple objects are available for selection. Click to see a list of available objects, and then click in the list to select the object you want.
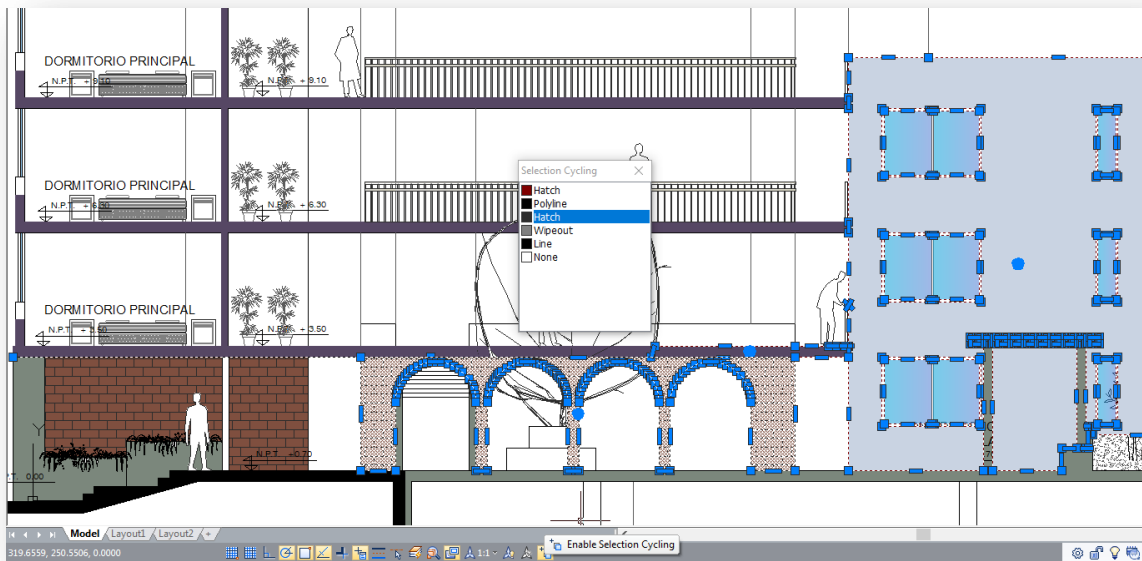
# 3. Enhancement Design Center Block Options

Now design center offers a quick way to update instances of block. Redefining a block allows you to overwrite each block instance without changing the block name, all while keeping the original block's position. Alternatively, if you just copy a newer version of a block into your active drawing, the block will not update – it will instead inherent the active drawing's block definition. By redefining a block, there is no need for deleting, purging, and copying.
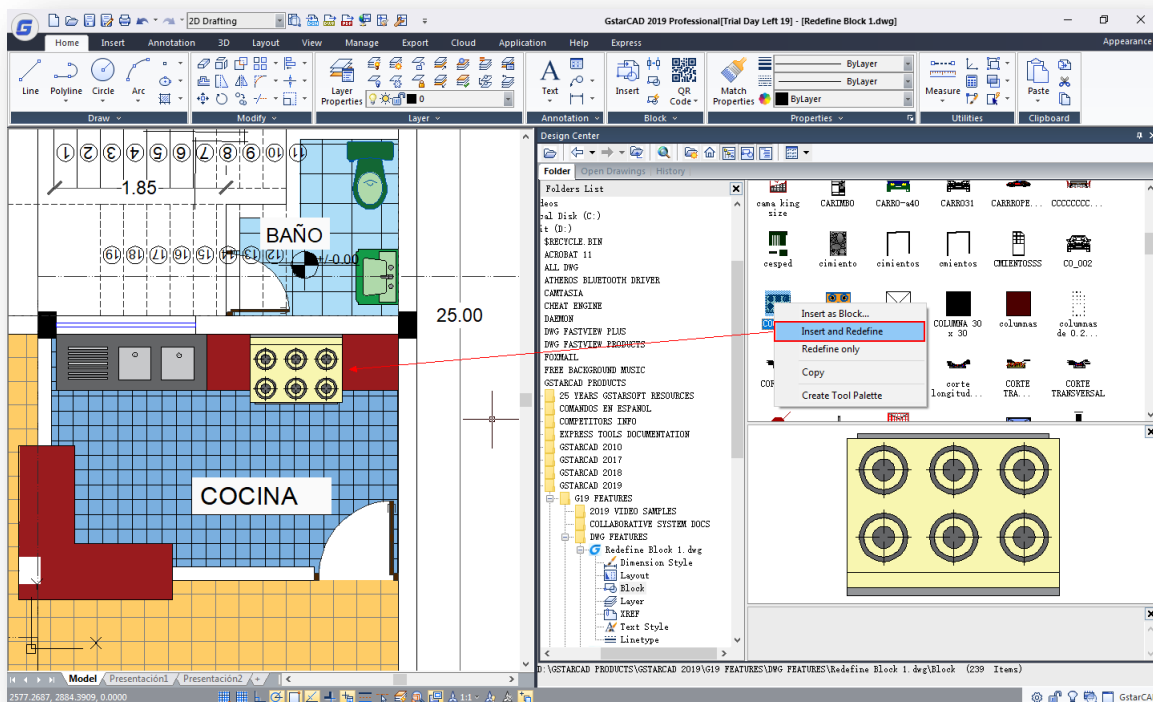
3.1 Redefine Only

1. Quickly execute ADCENTER command or access it from the ribbon; Click View tab ➤ Palettes panel ➤ DesignCenter.

2. From the tree view in the left portion of the DesignCenter window, under Folder, Open Drawings or History tab, find your dwg file to load its content into the content area.

3. Double-click the block icon to load its content, then search the block you want to insert into current drawing.
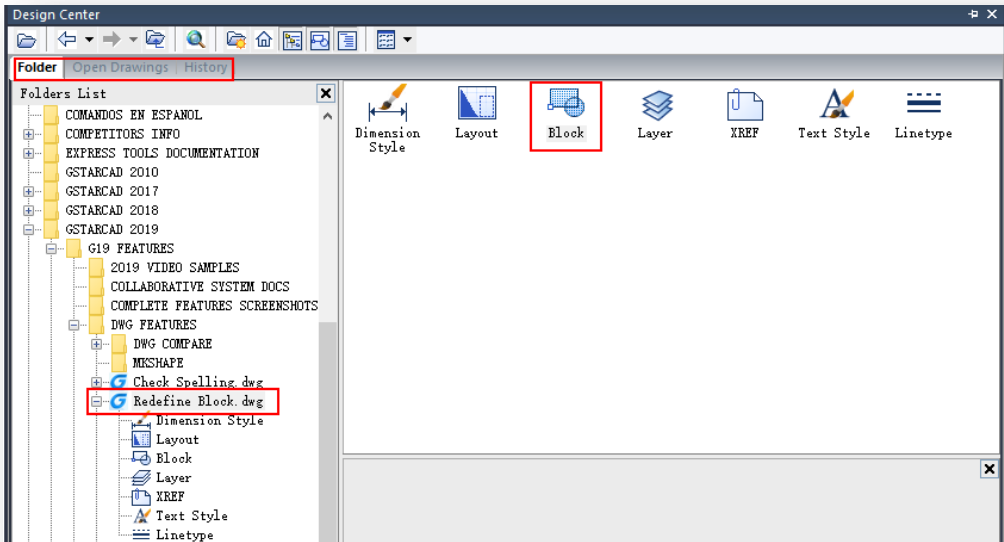
4. You can drag directly the block from the content area or do right-click mouse and select "Insert as Block" option from the menu.
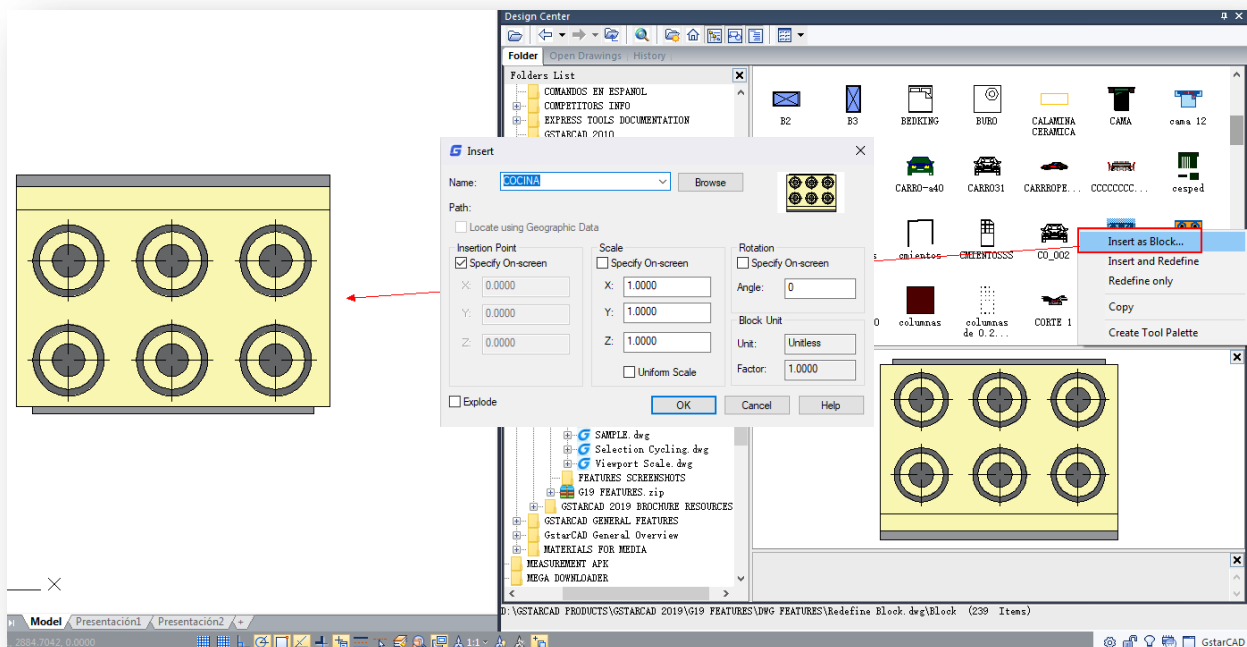
4. Do double-click the block definition to open it in the block editor environment to do modifications. After finished, save the block definition and exit the block editor.
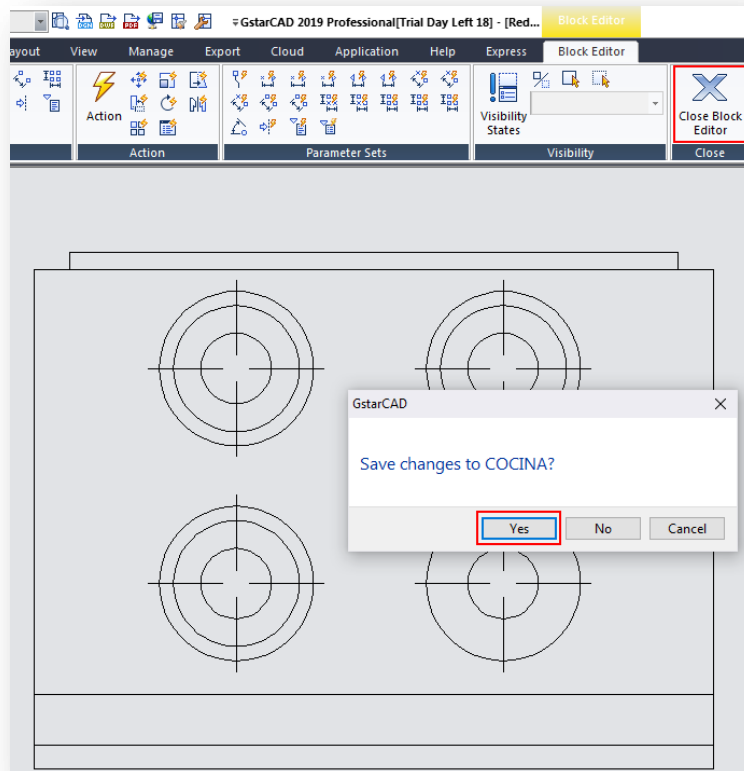
5. Notice the modified block has not been updated into the design center content area (it keeps the original block definition status), so you can right-click the block and select "Redefine Only" option from the context menu.
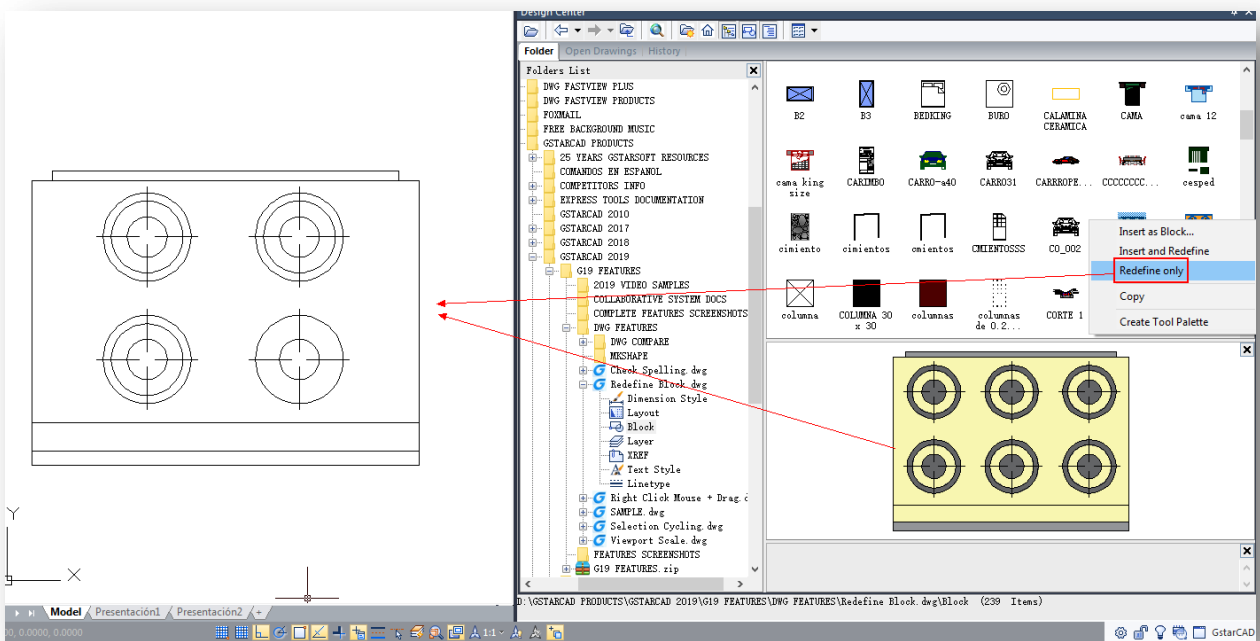
6. The modified block in the drawing area will be updated as is original status as shown in the design center content area. The "Redefine Only" options just updates a modified block definition as its original status from the design center content are.
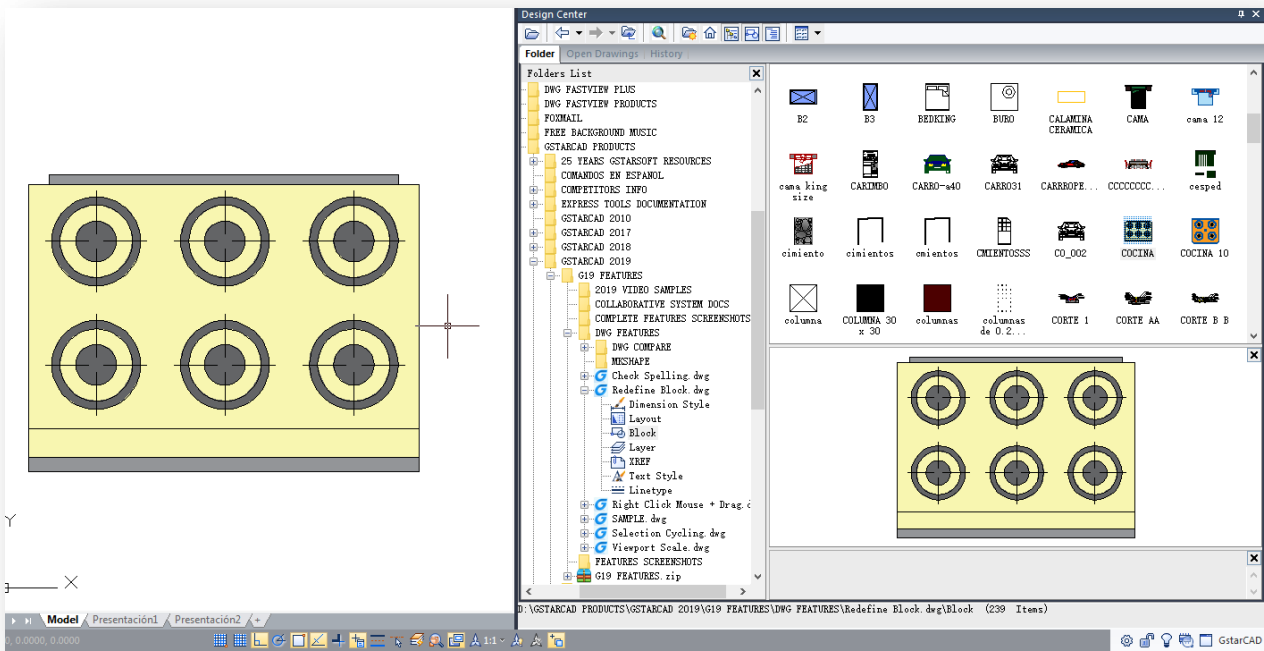
3.2 Insert and Redefine

You can repeat same operational steps as above but this time you can select "Insert and Redefine" option from the context menu. The difference is that insert and redefine option allows you to insert the block definition at first instance to then update it into the drawing area.
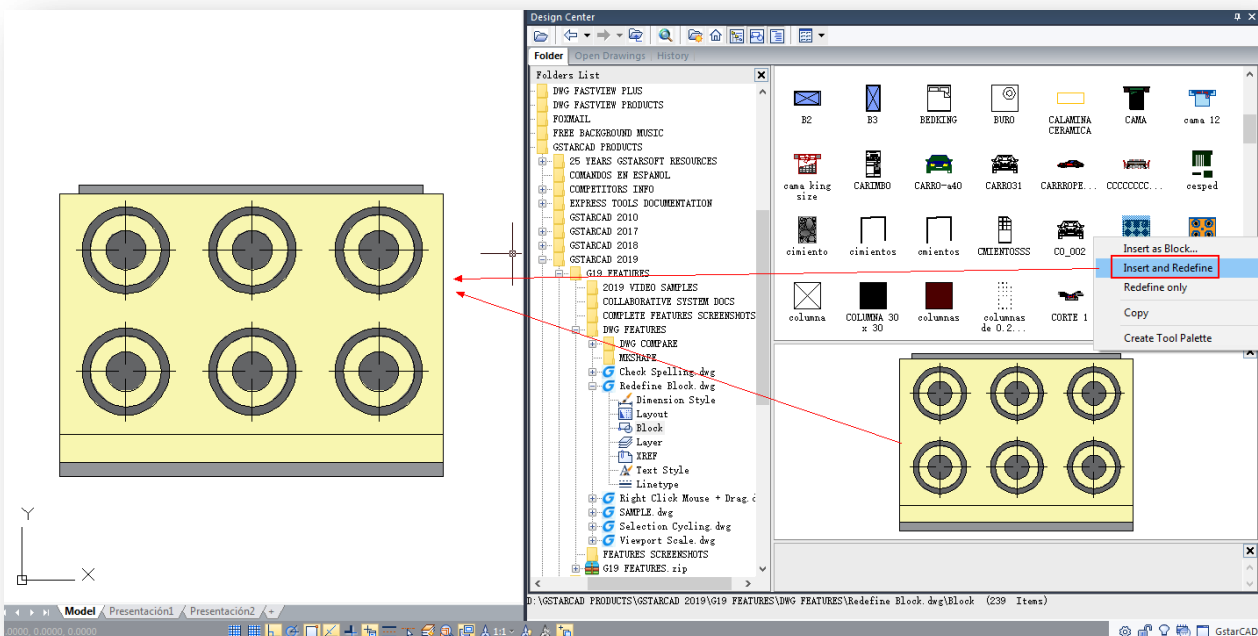
4. Enhancement Mtext Editor Settings Options

Now Mtext supports check spelling that determines whether as you type spell checking is on or off.

4.1 Check Spelling

1. Type MTEXT command to open the "Text Formatting" floating window and try to type a wrong word intentionally.
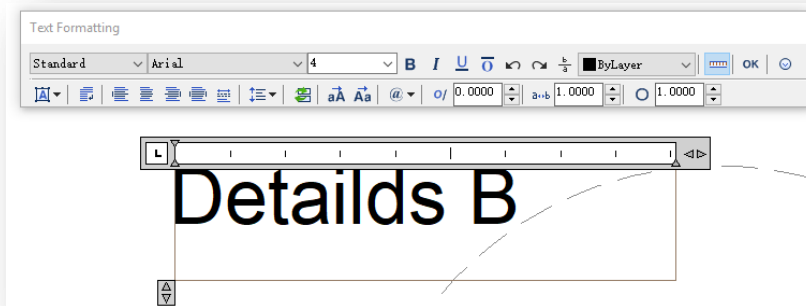
2. Click the "Options" button to deploy a list on which you can select from Editor Settings→Check Spelling option.
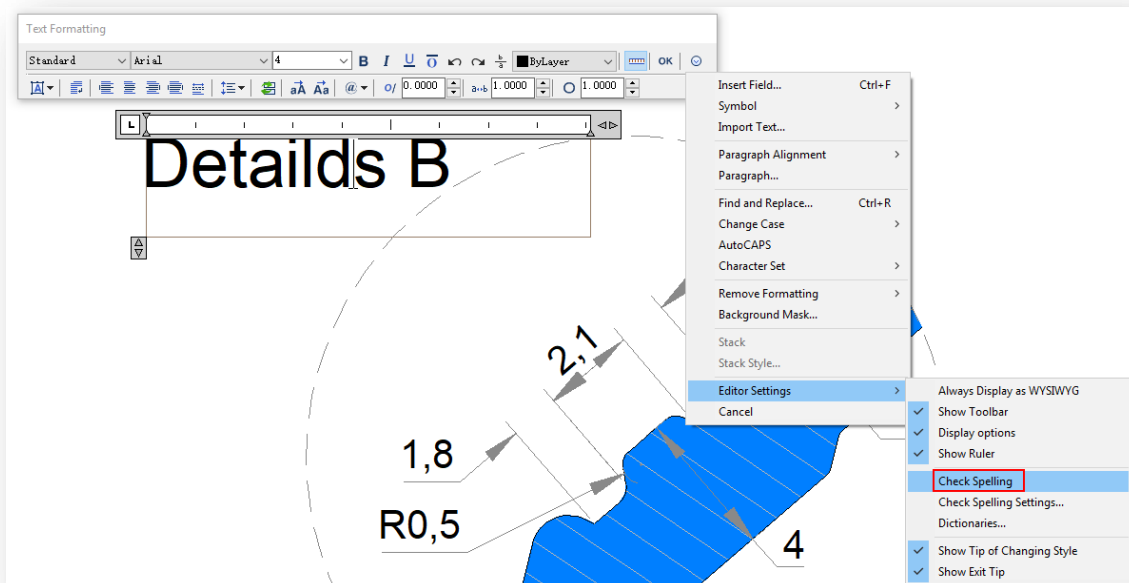
3. You can retype again the same wrong word, it will show a red line under the text because the check spelling option is active by now.
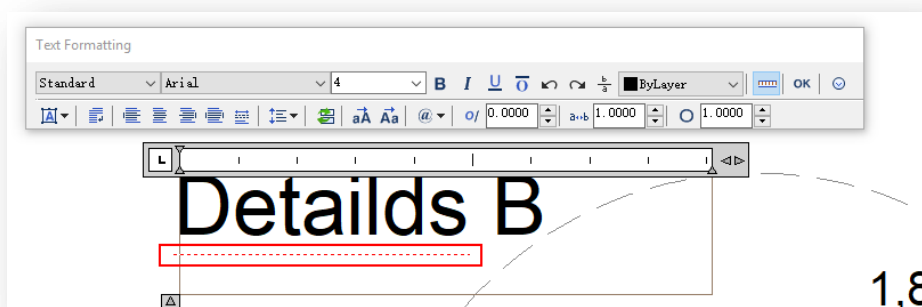
4. In addition, you can correct the same word easily by selecting an alternate word from the Suggestions list or type a word in the Suggestions box.
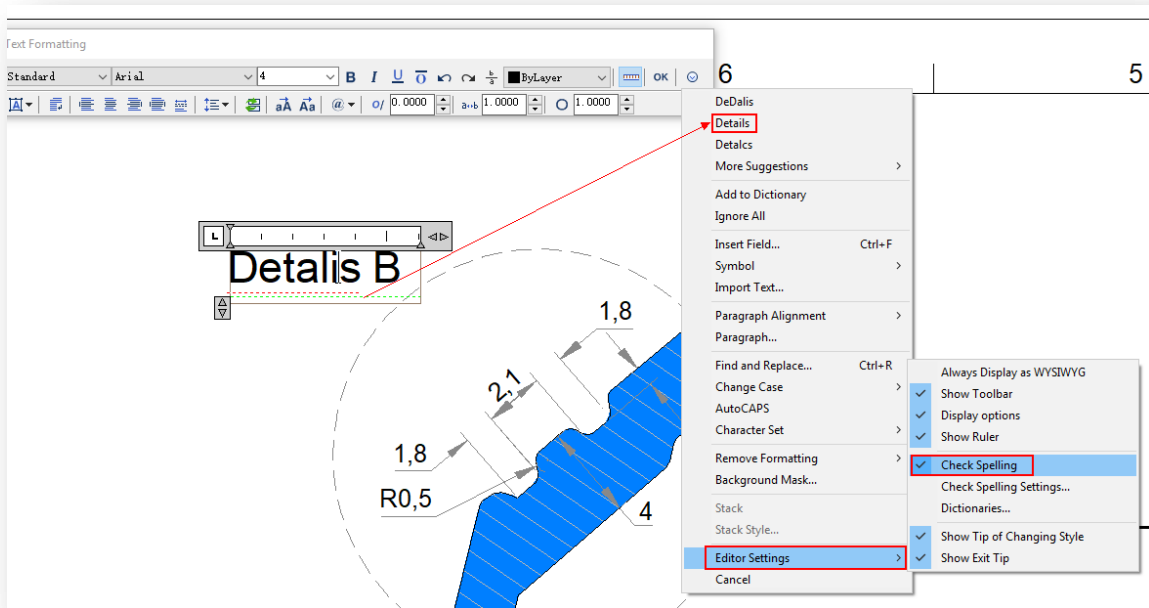
5. Enhancement Hidden Message Settings

Within the option dialog box, under "Users Preferences" tab, you can find the new "Hidden Message Settings" option that controls the display of previously hidden messages. After a message has been hidden, it can be viewed and re-activated.

For example, if you open a drawing file and GstarCAD prompts a message regarding to drawing reference location, missing SHX files, etc. You can check the option "always ignore…" to store the respective message in the hidden message settings list.
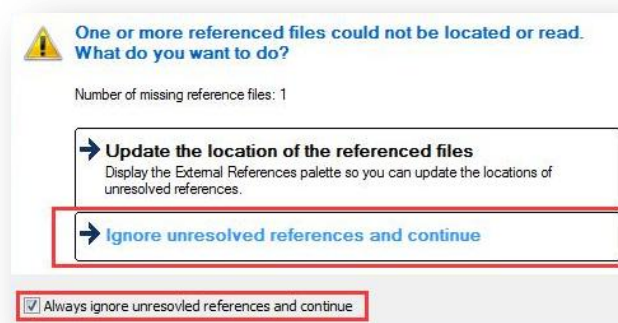
Next time if you load the same drawing file, GstarCAD will turn off the problem message. You can check or uncheck messages to be displayed next time you open the drawing from the "Check messages to show" list.
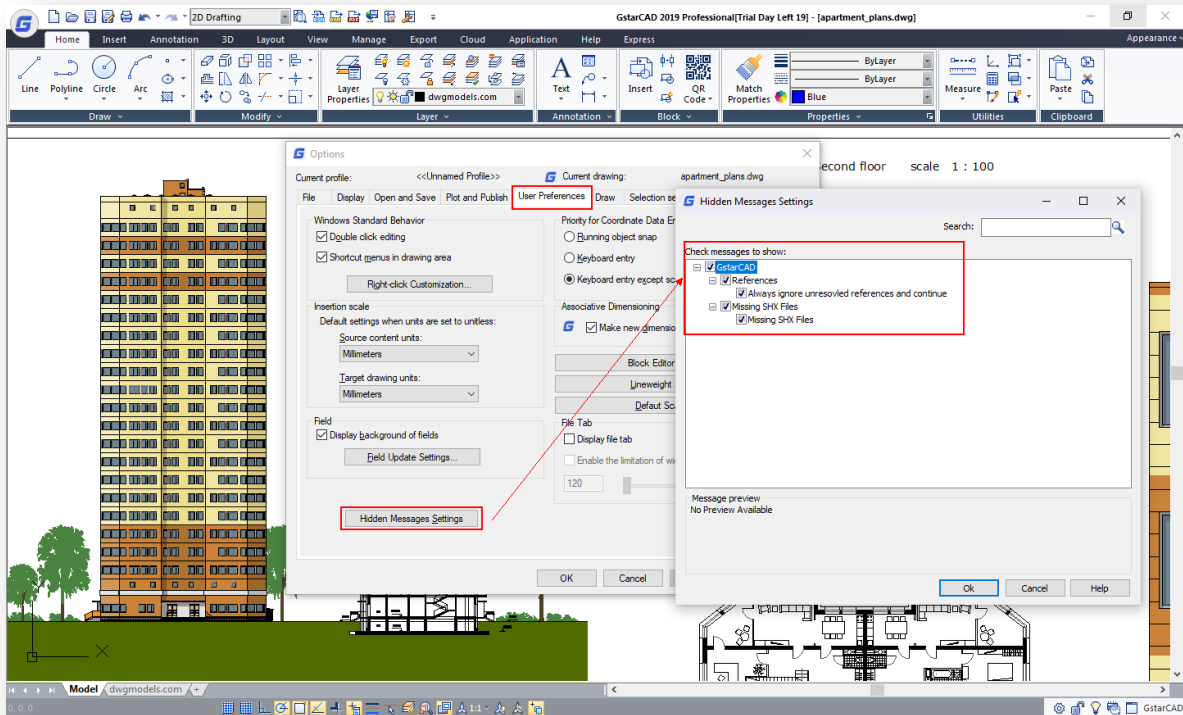
6. New MOVEBAK Command

The new MOVEBAK command changes the destination folder for drawing backup (BAK) files. Once you specify a path, the drawing's BAK files is placed in that path after every save operation. If you enter ".", the MOVEBAK folder name is cleared and new BAK files will be created in the original folder.

Enter new value for MOVEBAK, or . for none <current setting>:
Enter a . (period) for none or type the folder name
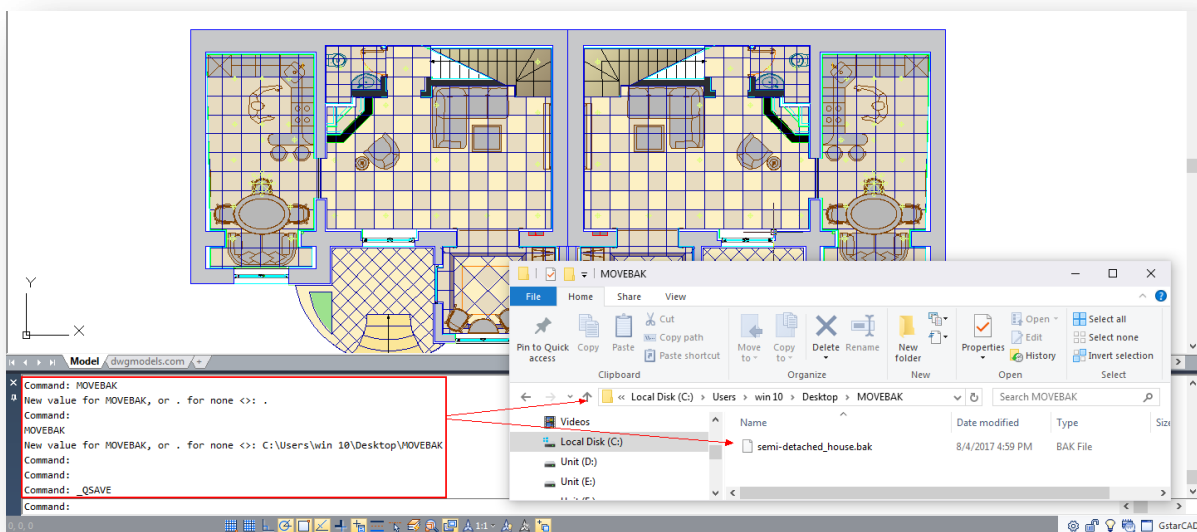
7. Enhancement Import Layout as Sheet

Now you can "import" additional drawing layouts into your sheet set file using the Sheet Set Manager. When import layouts as sheets you are creating a new pointer to an existing drawing.

1. Execute SHEETSET command or access it from the ribbon; Click View tab ➤ Palettes panel ➤ Sheet Set Manager.

2. In the Sheet Set Manager palette, select "Open" option from drop-down list to load our sheet set file.
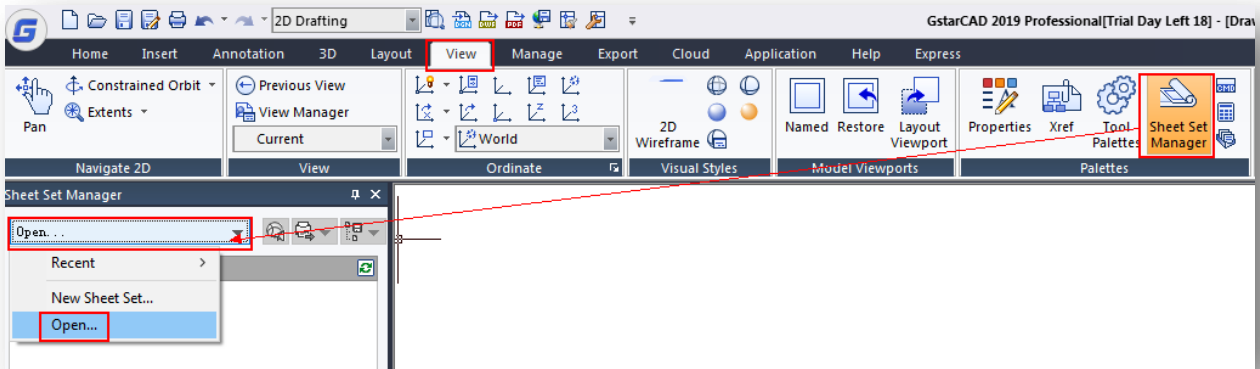
3. Once loaded, right-click a drawing from the sheet list in where you are going to add a new layout. Then choose "Import Layout as Sheet…" option.
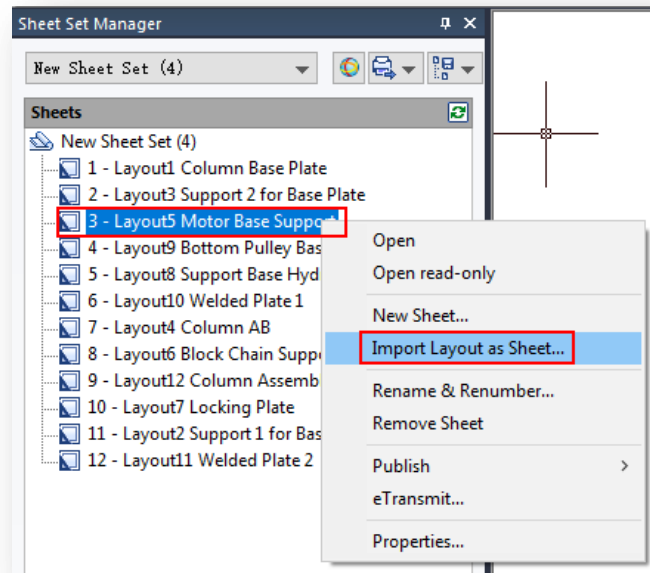
4. Within Import Layouts as Sheets dialog box, click "Browse for Drawings…" button. Select all the files you need to be inserted as layout in the sheet set. The drawing files list will be shown, you can check or uncheck the files according your need. If you check the "Prefix sheet title with file name" option, it automatically adds the drawing file name to the beginning of the sheet title. Finally, press "Import Checked" button to import only checked drawings.
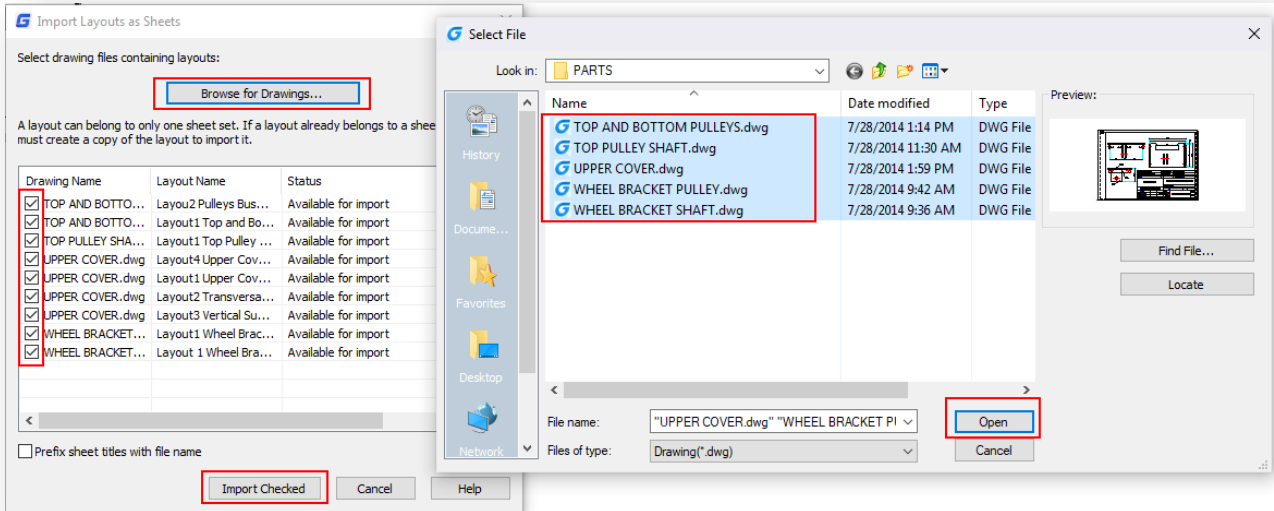
5. Notice the imported layouts are positioned under the main layout number 3, exactly where you wanted.
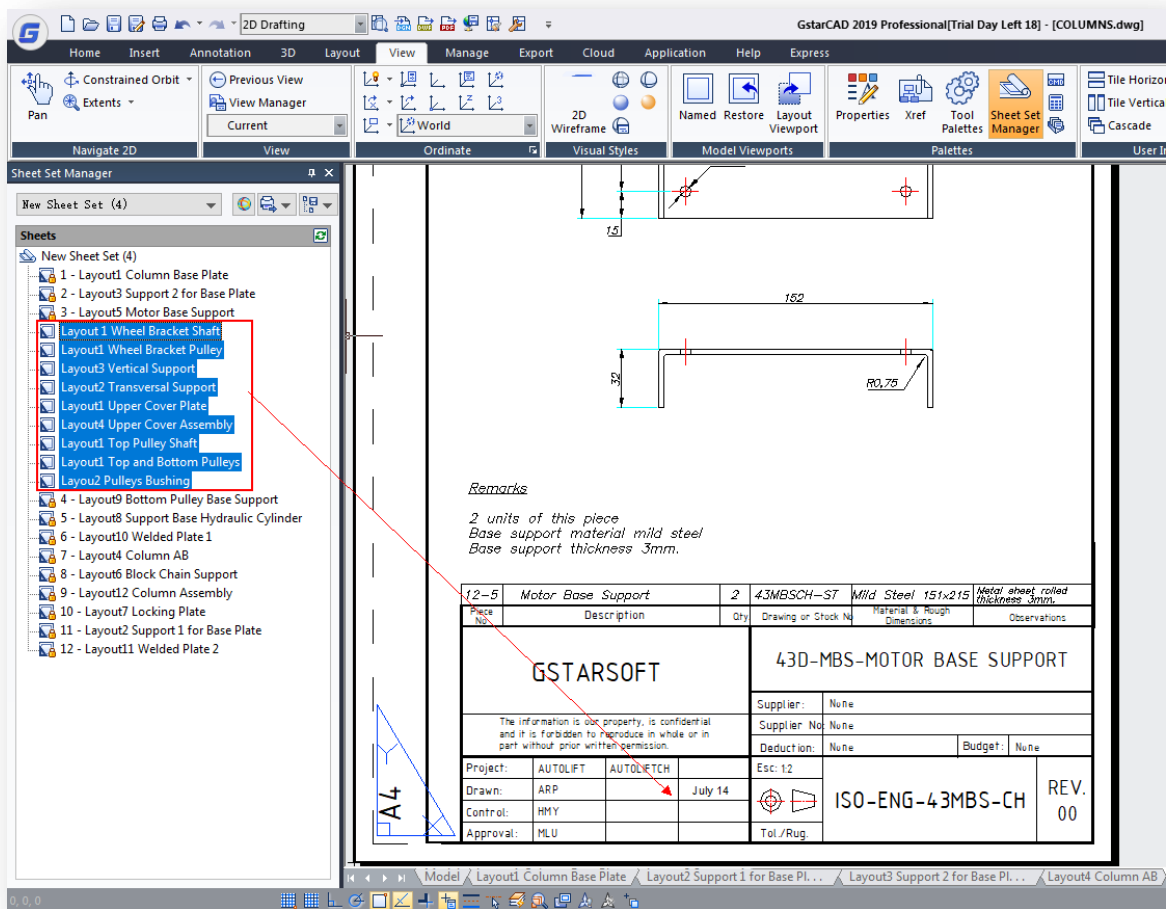
8. Enhancement Drawing Compare Path Input

For old and experienced CAD users, now on the command line, after executing the drawing compare command (-CMP), you can input the old, new, and compared drawing file path conveniently.
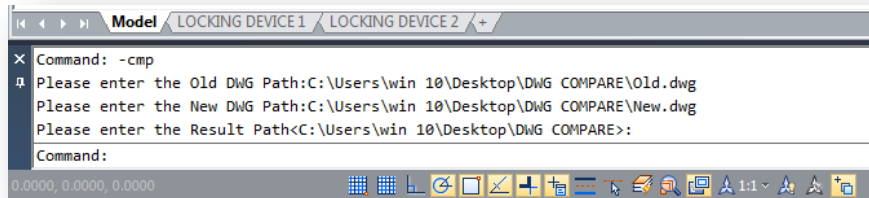
9. New VPSCALE Command

The new VPSCALE (viewport scale) command reports the real scale of the current viewport of a selected layout viewport.

1. You can open a recent drawing with layouts or create a new viewport on layout space with a desire scale according to paper format.
2. Type VPSCALE command on the command line, then select the edge of the viewport.
3. The command line will show the correct viewport scale according to unit measure you are working with.
4. Notice the status bar shows the right scale of the selected viewport only at layout space.
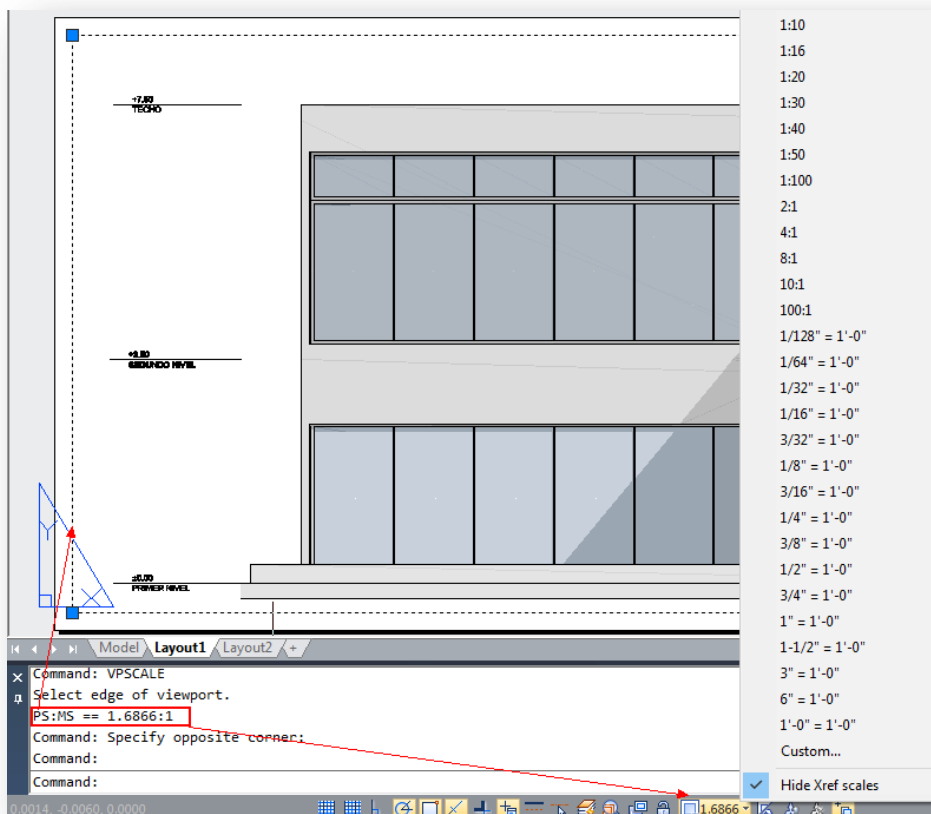
10. New MKSHAPE Command

The new MKSHAPE command creates a shape definition based on selected objects. You can create custom linetypes easily. If you create a shape that exceeds 2200 bytes of data, MKSHAPE creates complex geometry shapes to form a single shape.

1. Create a polyline object like a line, rectangle, circle or a closed object.
2. Type MKSHAPE command to save a .shp file with a proper name for your shape.
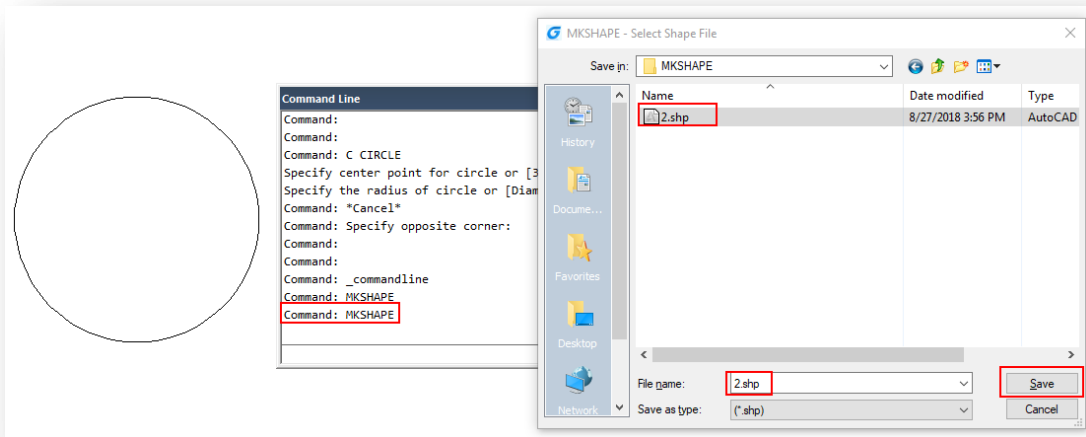
3. Enter the name of the shape and input a resolution value (lower value input equals polyline shape degraded, higher value input equals similar shape as original polyline selected).

4. Specify an insertion point in drawing area, select the polyline created and press Enter.

5. If you want to insert the created new shape, execute SHAPE command and input its name.

6. Specify an insertion point, scale and rotation.

15
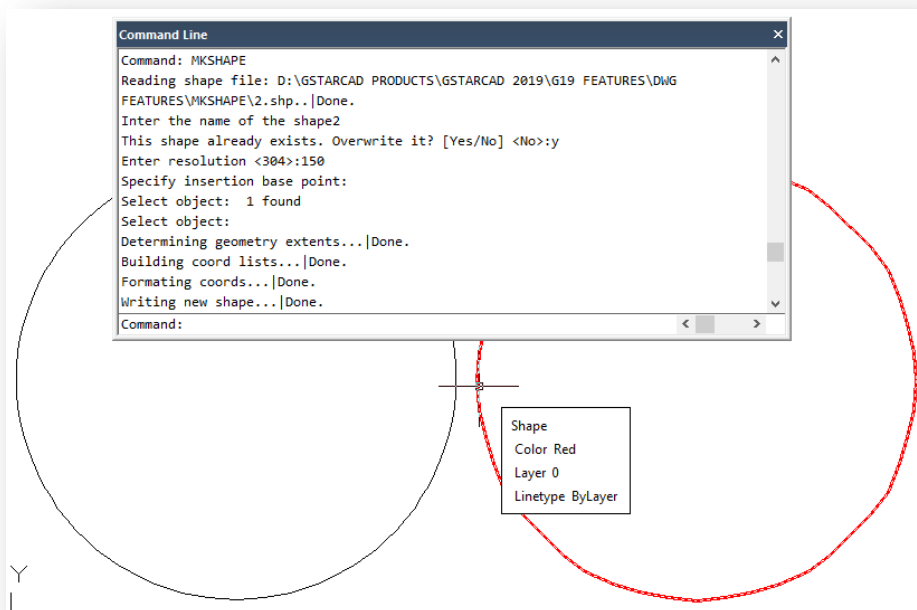
11. Enhancement Right-Click + Drag Method

If you select an object and then drag it, it moves. This is without initiating the MOVE command and without picking any grips.   Now in GstarCAD you can use the right-click + drag method, you can select an object, then hold down the right mouse button and move to a different location, then release the right button and select from the popup context menu different options like Move, Copy, Paste as Block.
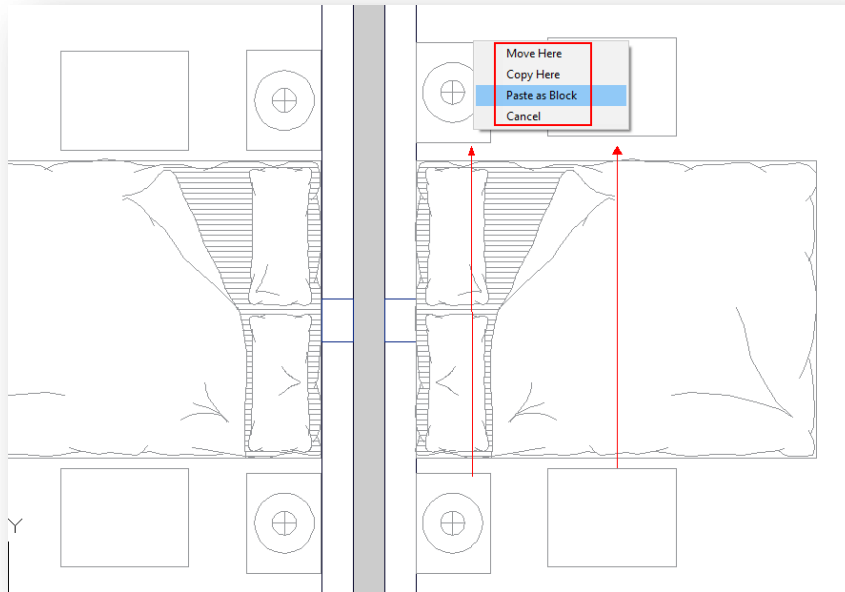
12. Enhancement Hatch Related System Variables

Some hatch related system variables have been implemented:

HPANNOTATIVE: Controls whether a new hatch pattern is annotative.

HPISLANDDETECTION: Controls how islands within the hatch boundary are treated.

Type: Integer

Saved in: Not-saved

Initial value: 1

Value	Description
0	Normal. Hatches islands within islands.
1	Outer. Hatches only areas outside of islands.
2	Ignore. Hatches everything within the boundaries.

An island is an enclosed area within the area to be hatched.

HPMAXAREAS: Sets the maximum number of enclosed areas that a single hatch object can have and still automatically switch between solid and pattern hatches during zoom operations.

Type: Integer

Saved in: Registry

Initial value: 100

Remark
Valid values are from 0 to 10,000,000. Starting in the 2012 release, hatches that are too sparse are changed to solid fills. To restore the legacy behavior, which leaves sparse hatches blank, set HPMAXAREAS to 0.

HPORIGINSTOREASDEFAULT
HPRELATIVEPS

HPQUICKPREVTIMEOUT: Sets the maximum time for a hatch preview to generate before the preview is automatically cancelled.

Type: Integer

Saved in: Registry

Initial value: 2

Remark
If the specified duration is reached, and the preview is not complete, the preview is cancelled, but the command remains active. The duration is measured in seconds. Valid values range from 1 to 300.

Note: The HPQUICKPREVIEW system variable controls whether a preview is generated when using the HATCH command.

HPLASTPATTERN: Contains the name of the last hatch pattern used.

HPLAYER: Specifies a default layer for new hatches and fills.

Type: String

Saved in: Drawing

Initial value: use current

Remark
Values other than the "." (use current) value override the current layer (CLAYER Command). You can specify a currently nonexistent layer as the default layer for new hatches and fills.

HPLINETYPE: Controls how non-continuous linetypes are displayed in hatch patterns.

Type: Switch

Saved in: Registry

Initial value: OFF

Value	Description
OFF	Displays continuous linetypes in predefined and custom hatch patterns, regardless of the assigned linetype.
ON	Displays non-continuous linetypes in hatch patterns (legacy behavior).

Note: Use the REGEN command to update the linetype display of existing hatch patterns.

HPPICKMODE: Indicates whether the default method for identifying hatch areas is clicking enclosed locations or selecting boundary objects.

Type: Integer

Saved in: Registry

Initial value: 0

Value	Description
0	Click locations within enclosed areas
1	Select boundary objects

Note: After you start the HATCH command, the default method is set on the Hatch contextual tab, Boundaries panel on the ribbon where you choose either the Pick Points option or the Select option.

13. New BIM Support (.IFC File Format Import)

GstarCAD 2019 supports .IFC file format import. IFC (Industry Foundation Classes) is a popular format used in building and construction industry that provides interoperability between different software applications. In GstarCAD 2019 you will have two import options as "Block Definition" with high fidelity data and import as "AEC Object" that will be supported soon.
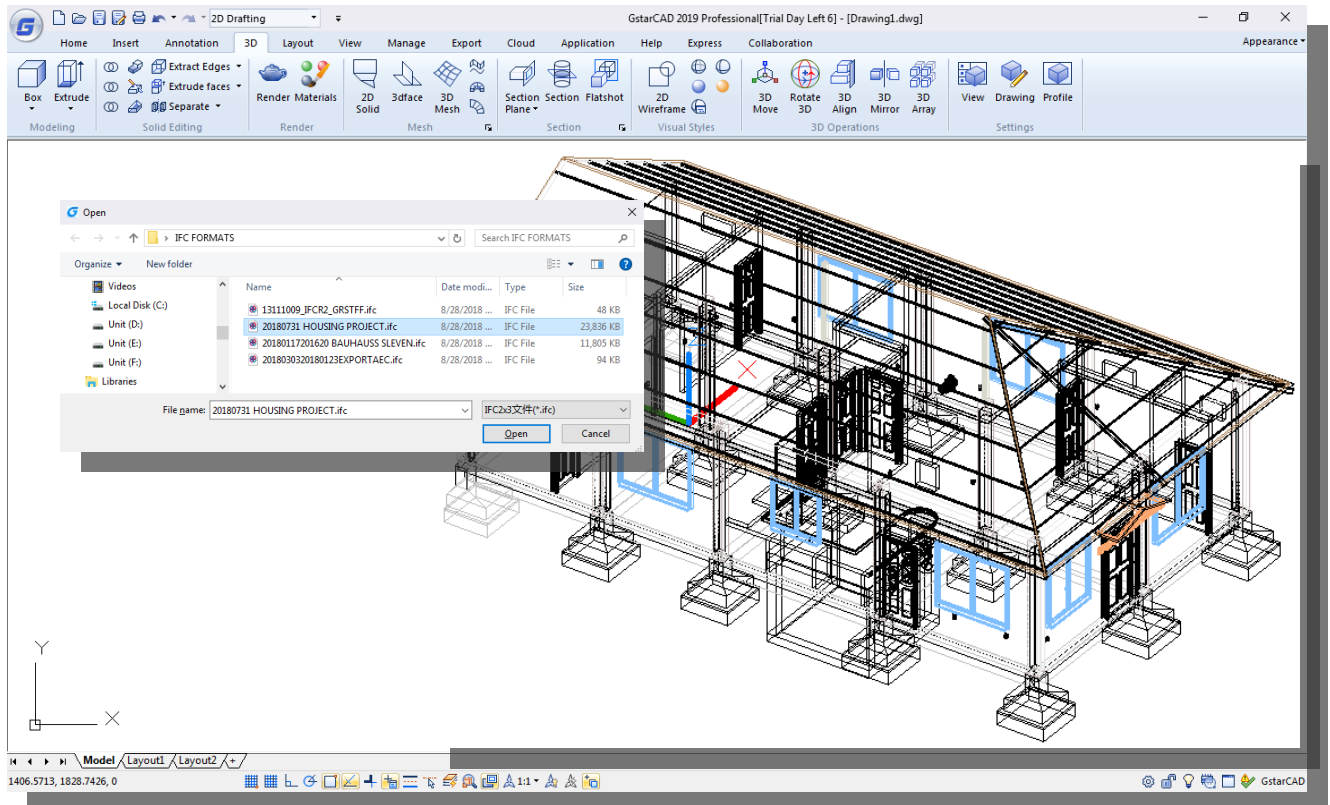
14. Brief Overview GstarCAD Collaboration Tool

Do you work with large or complex drawings? Is it important for your team to work together on one single referenced drawing file at same time? You can do it now with GstarCAD Collaboration Tool.

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.

What are the general benefits of implementing GstarCAD Collaboration Tool?

- ✓ Accelerates delivery of project blueprints schedule according to client or partner's needs.
- ✓ Decision making, collaboration and review are streamline shortening the design cycle.
- ✓ Protection and privacy of drawing data through own user company's network server reliability.
- ✓ Improve project management life cycle keeping high organization level and data resources.
- ✓ Keep a project structure safety by limiting access, permissions and assigning drawing rules for work team.
- ✓ Effectiveness when tracking changes, modifications or revisions of the latest drawing file version submitted.
- ✓ Better control and visualization of modifications and changes of relevant drawing data at any time.
- ✓ Timely handle project's conflicts and collisions to reduce design errors between work groups.
- ✓ System flexibility to work offline and online status.