



GstarCAD 365

User Guide

Gstarsoft



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1. GstarCAD 365 Introduction

1.1. Introduction to GstarCAD 365

GstarCAD 365 is a comprehensive cross-platform CAD cloud application designed for company users. It includes several components: **GstarCAD for Mobile**, **GstarCAD for Web**, **GstarCAD View on PC**, and **Collaboration Module on GstarCAD**. These tools facilitate seamless data and model synchronization across different platforms, offering users a wide range of cross-device and multi-scenario cloud applications and services, such as cloud storage, sharing, annotation, collaboration, and project management. This suite is designed to meet the collaborative needs of CAD users across various industries, departments, and scenarios.

GstarCAD 365 aims to create a robust CAD cloud application ecosystem by offering general cloud components and development interfaces, enabling integration with a broad range of third-party applications. This ecosystem supports the entire lifecycle from design and construction to operation and maintenance, as well as from design and simulation to manufacturing, providing users with comprehensive, end-to-end cloud services.

GstarCAD 365 consists of the following components:

1. **Server Side:** Provides online storage, lightweight conversion, and access control for drawings and models. Users can manage personnel, permissions, and data via the company management portal, facilitating collaboration among project team members.
2. **Mobile Platform:** **GstarCAD for Mobile** app supports iOS and Android, allowing users to view 2D and 3D drawings on the go and includes features for editing CAD drawings.
3. **Desktop Platform:** **GstarCAD View on PC** supports Windows, offering viewing and editing capabilities along with specialized features such as batch printing, measurement, calculation, and format conversion.
4. **Web Platform:** **GstarCAD for Web** allows users to view CAD drawings and 3D models directly in a web browser without installing additional plugins.
5. **Collaboration Module on GstarCAD:** These are plugins installed on the GstarCAD platform, providing cloud-based functionalities such as Cloud Notes and Collaboration.

1.2. Introduction to GstarCAD 365 Company Management Backend

1.2.1 Overview of GstarCAD 365 Company Management Backend

As a company-level application, GstarCAD 365 supports CAD collaboration through several key elements: projects, personnel, drawings, and permissions. The GstarCAD 365 Company Management Backend is a web-based tool designed to help company manage these elements efficiently. Before company users begin using the specific features of GstarCAD 365, they must use the backend to add members, allocate rights, create projects, upload drawings, and set permissions. Throughout the project lifecycle, company administrators can utilize the backend to manage various data assets and monitor employee activities systematically.

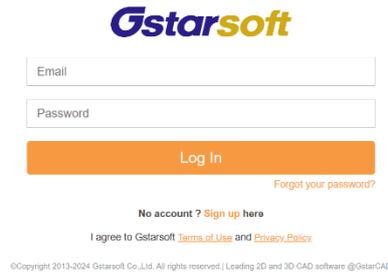
1.2.2 Logging into the GstarCAD 365 Company Management Backend

GstarCAD Management Backend Login Address (Public Cloud):

<https://enweb.gstarcad.net/gstarcad365/>(<https://enweb.gstarcad.net/gstarcad365/>)

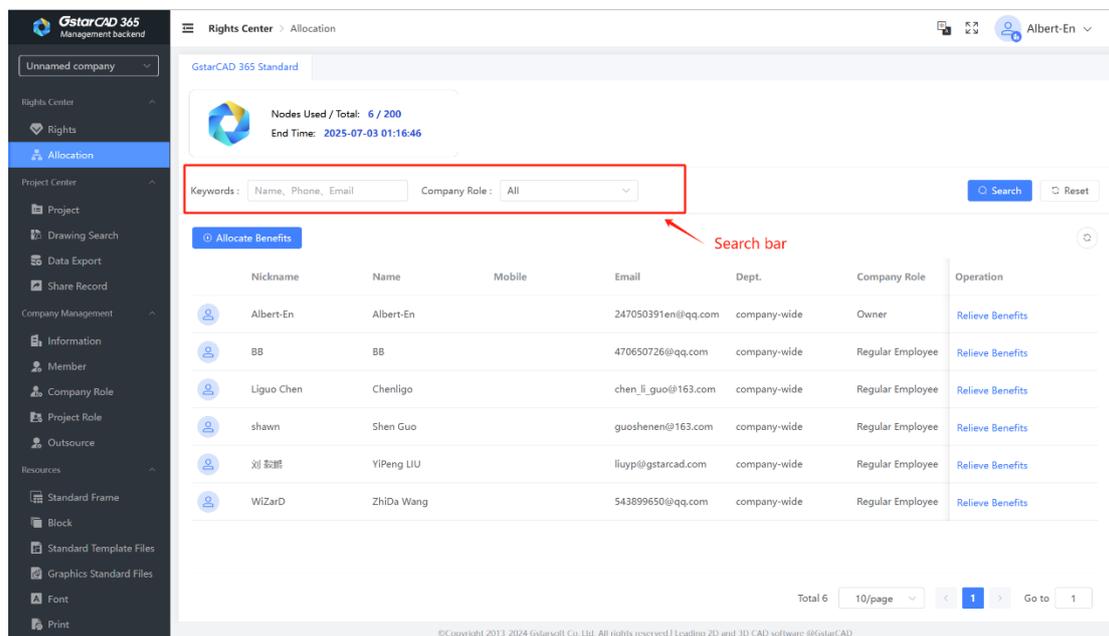
To log in to the GstarCAD 365 Management Backend, click on "Account Login" and enter your account and password. If you do not know your password, you can log in using a verification code or reset your password using the "Forgot your Password" option.

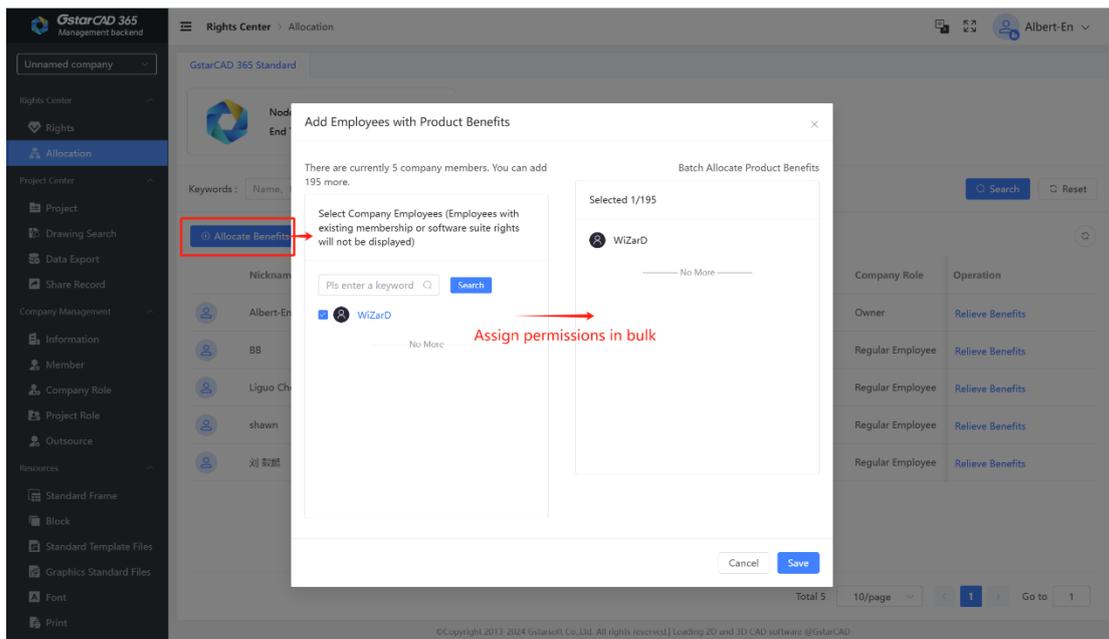
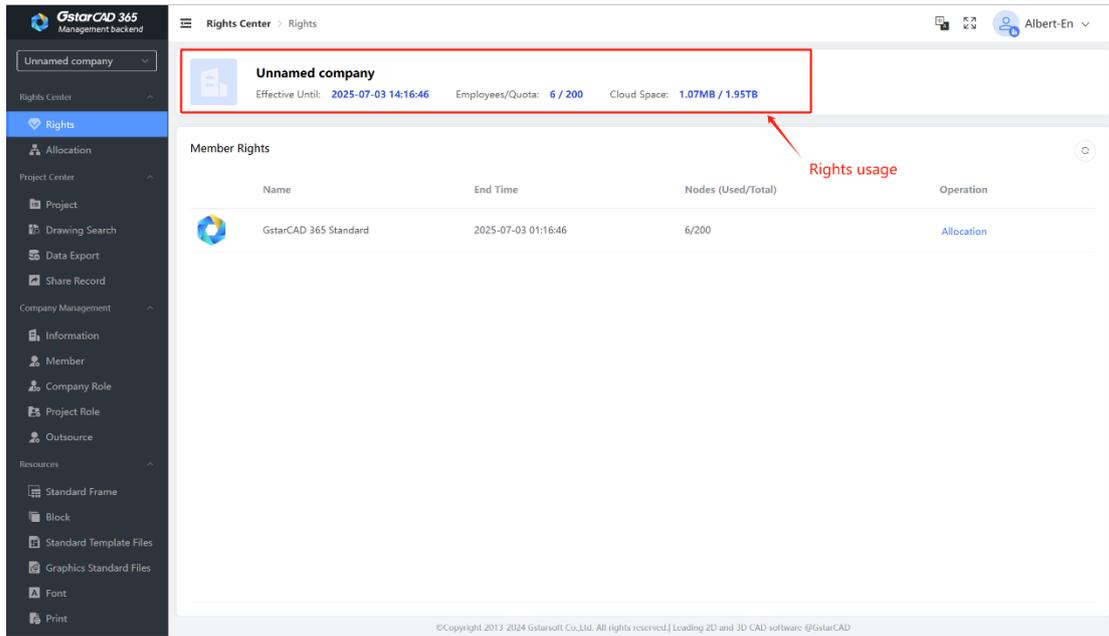
Both administrators and regular employees within the company can log in to the GstarCAD 365 Company Management Backend. However, the available features are determined by the user's company permissions, resulting in different access levels and functionalities.



1.2.3 Rights Center

The Rights Center encompasses rights management and allocation. The rights management interface provides an overview of the validity period of rights, node usage, and cloud space utilization. The rights allocation interface enables the allocation of the GstarCAD 365 rights nodes that the company already possesses to employees, and it also includes query and retrieval features.

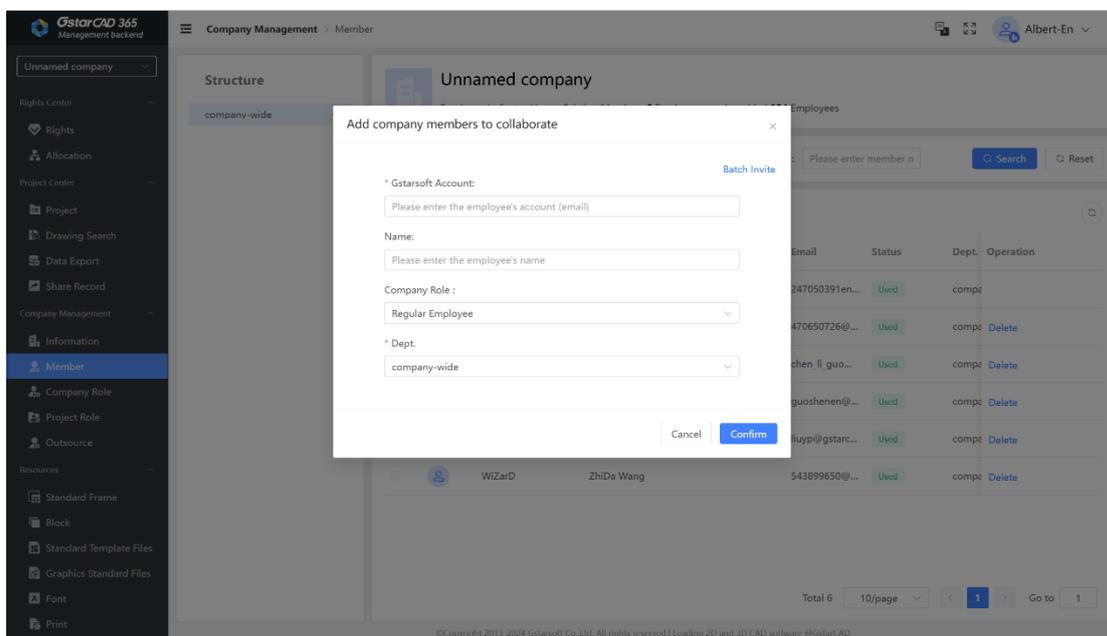
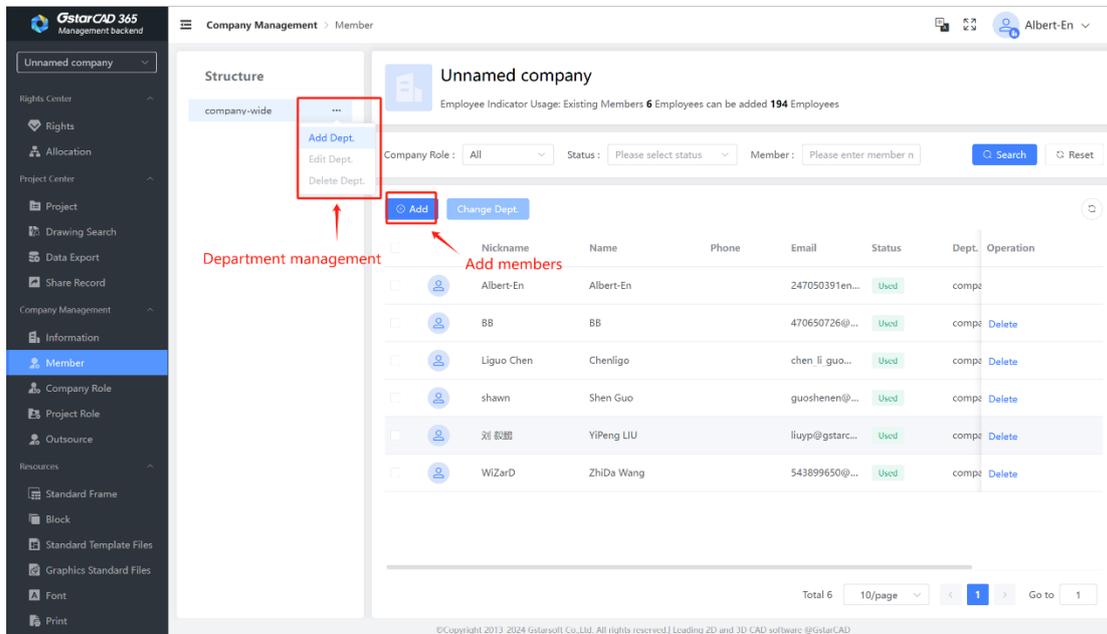




1.2.4 Company Management

1) Add Members

The default homepage for logging into the GstarCAD 365 Company Management Backend is the Member management page. On this page, you can add company members and set up the organizational structure. To add a member, enter the mobile phone number/email address and the member's name. If the mobile phone number/email address has not been registered with a GstarCAD 365 account, the system will automatically register it and send a text message/email notification. For large company, administrators can create and edit the organizational structure using the department management button, then add members to the corresponding department.



When adding a member, you need to assign a company role to control their operation permissions within the company. The system provides three preset company roles: Owner, Administrator, and Regular employee. Company can also create new roles and configure permissions flexibly.

2) Employee Indicators

The total number of employees that a company can add is limited by the number of employee indicators, which equals the number of GstarCAD 365 rights nodes purchased by the company. Each added employee consumes one "employee indicator." Therefore, employees who no longer use GstarCAD 365 should be deleted promptly. If employee indicators are exhausted, you can increase capacity by purchasing additional GstarCAD 365 rights nodes. When all GstarCAD 365 rights purchased by the company expire, the employee indicators will also return to zero, causing the company to enter an "exceeding the number of employees limit" state, which restricts some features.

3) Delete Employees

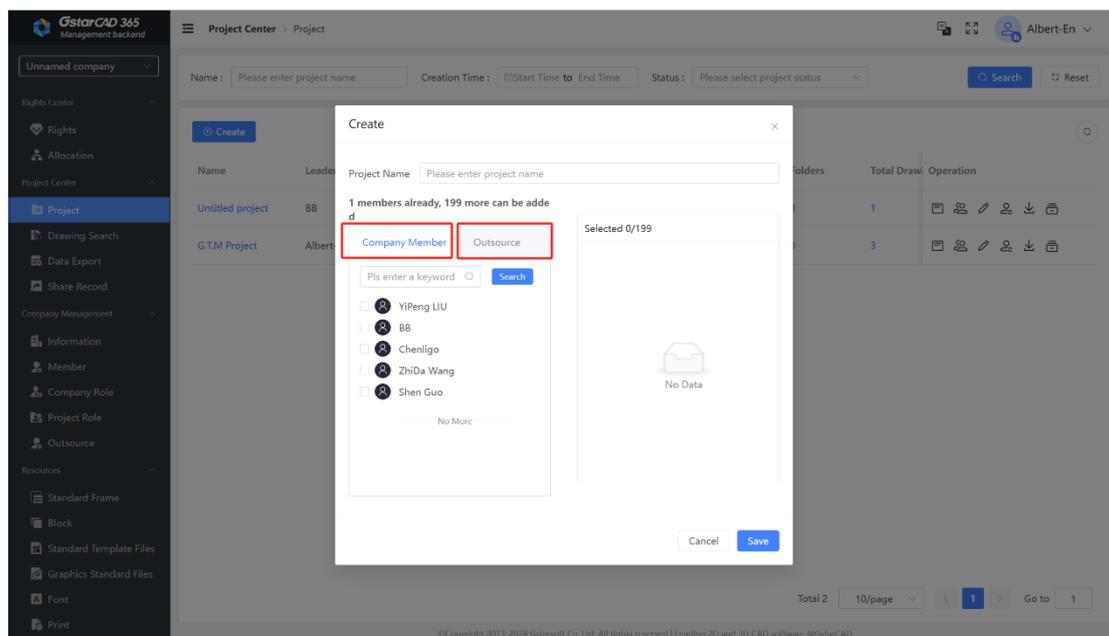
Before deleting an employee, ensure that they have been removed from all company projects. Deleting an employee will not affect project data. Upon successful deletion, the GstarCAD 365 rights node occupied by the employee is automatically released and can be reassigned to another member.

1.2.5 Project Center

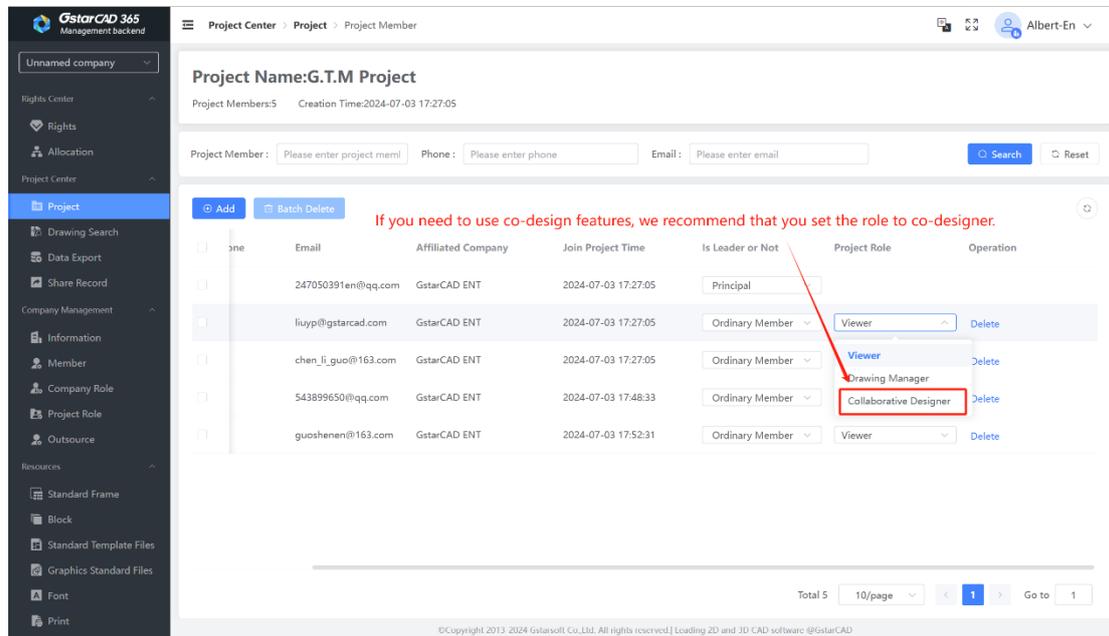
The document management feature of GstarCAD 365 is based on projects. Project Center include project member management, project drawing management, and project resource management.

1) Member Management

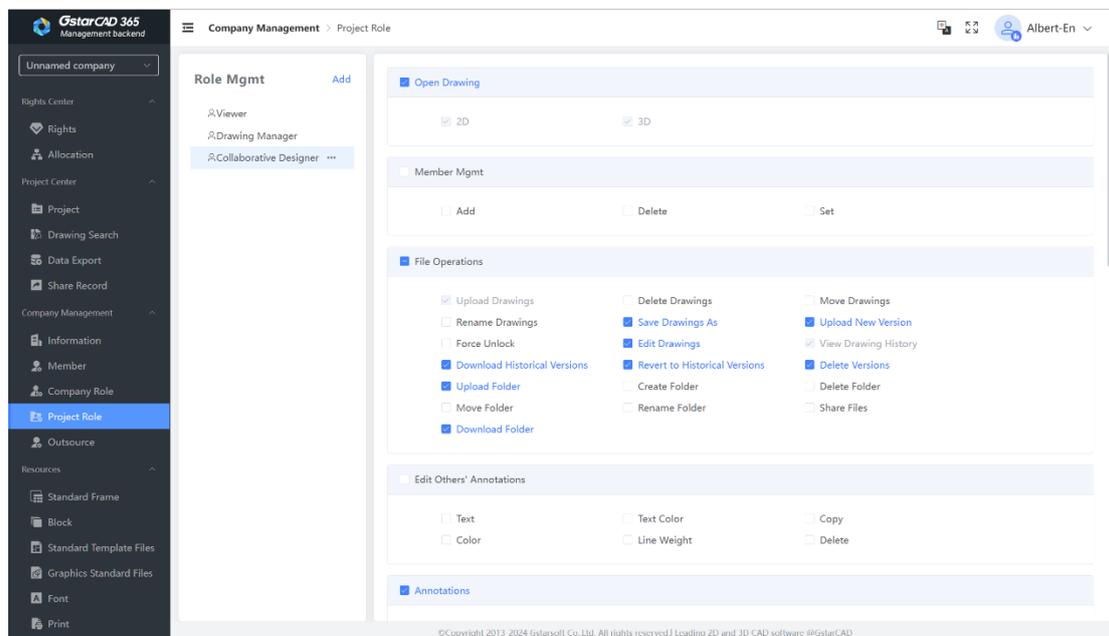
Project members can be company employees or outsourced personnel. When adding project members, you can select from two tabs respectively.



Project member operation permissions are determined by their project role. Company administrators can create various project roles. For details, see [Project Role Management]. Note that the default role for project members is "Viewer," which has limited operation permissions. It is advisable to adjust these roles to fit the specific needs of the project. For access to collaboration features, assign the appropriate permissions or set the role to the system's default: Collaborative Designer.

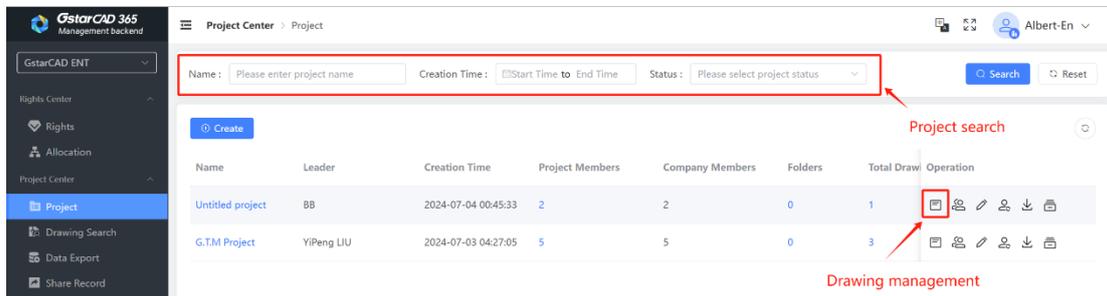


The current preset "Collaborative Designer" role does not have permissions such as "Upload New Version," "Delete Versions," and "Force Unlock." If these features are needed, manually configure permissions on the project role management page. The project leader is unique, and if changed, the previous leader becomes a "Viewer."

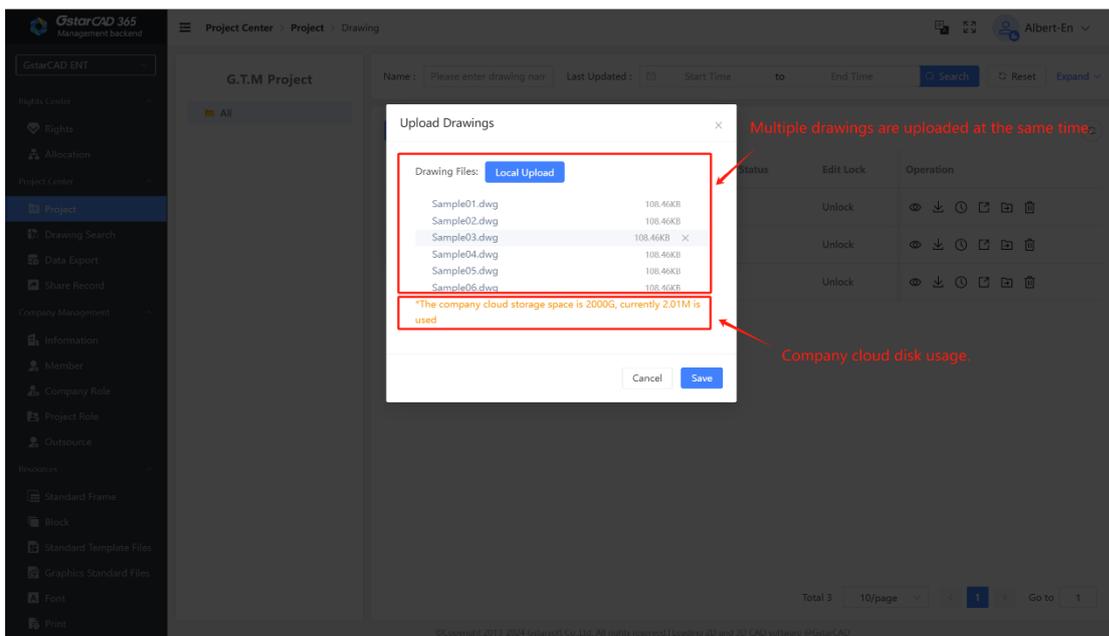


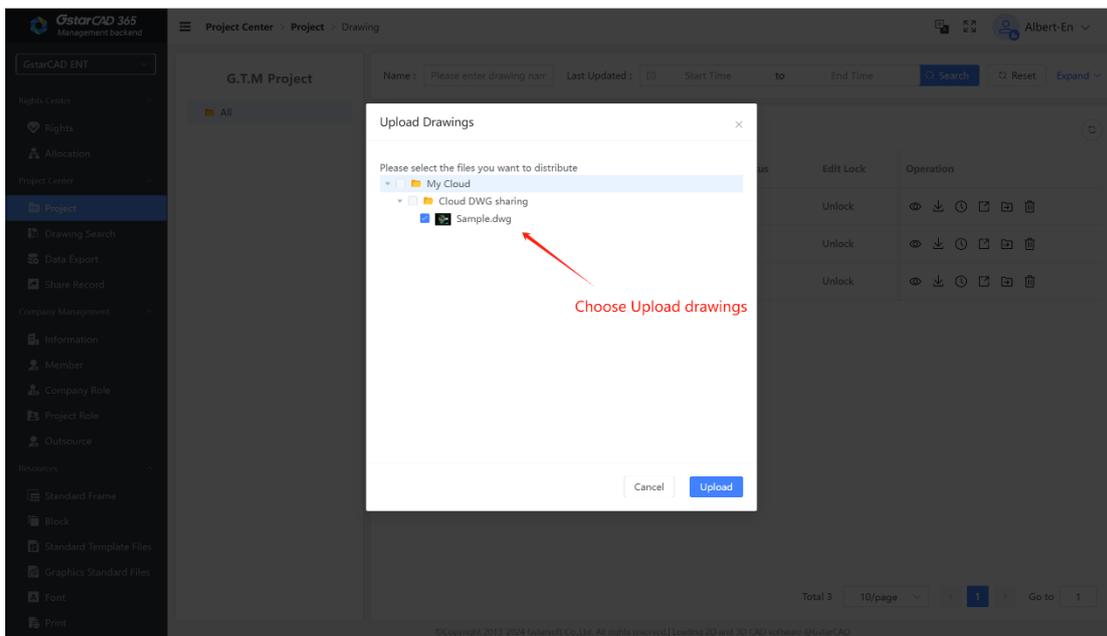
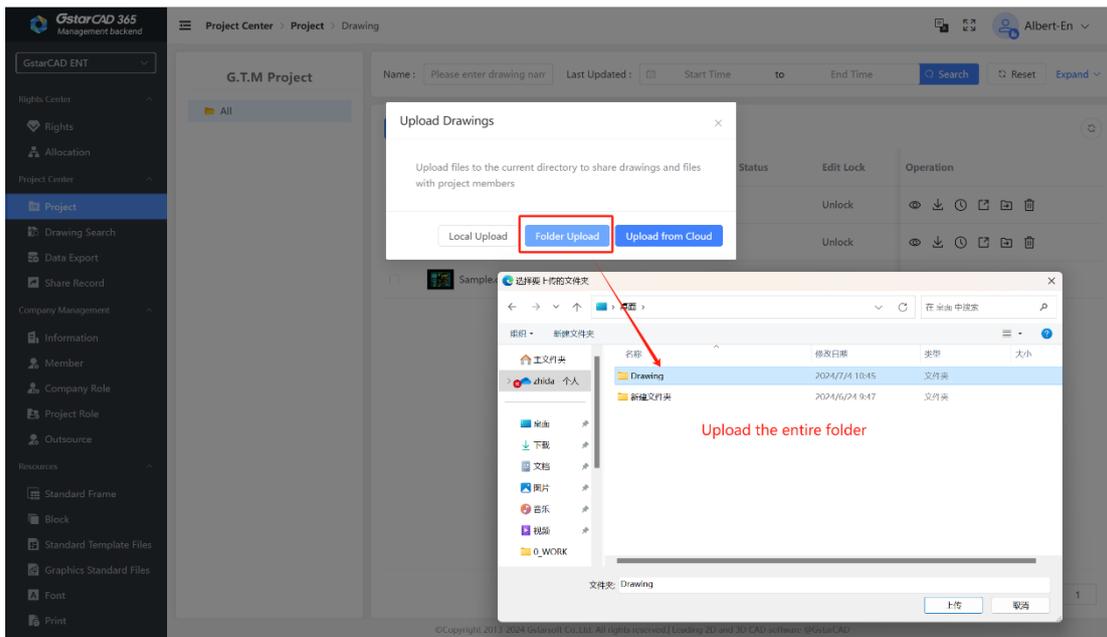
2) Drawing Management

Drawing management is a core feature of the GstarCAD 365 Company Management Backend. Click the project name or the icon in the right operation bar to enter the project Drawing Management page.



Project drawings support local upload, folder upload, and cloud upload (limited to public cloud). Local upload allows multiple drawings from different paths. Folder upload can upload all drawings in a folder simultaneously, retaining external reference relationships with relative paths after upload. Cloud upload allows uploading of drawings logged into the account, and users can view company cloud storage space usage.



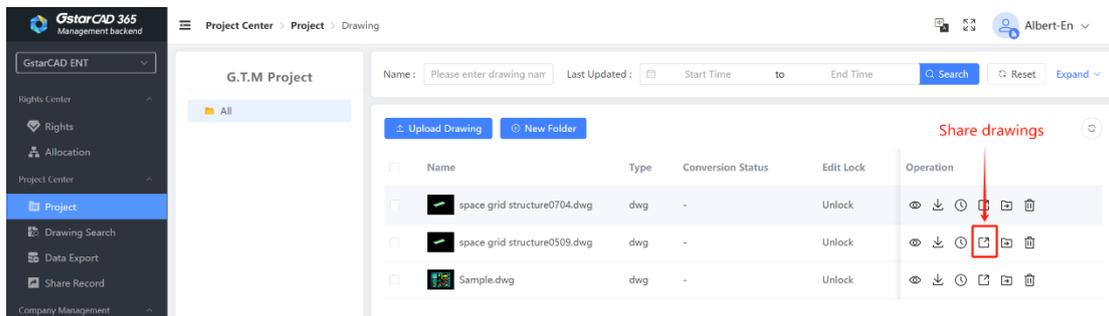


Successfully uploaded drawings or other files are shared among project members. The GstarCAD 365 Company Management Backend provides features such as online preview, download, move, share, delete, and version history. The project leader has all operation permissions by default. Project members' ability to use these features depends on their project role permissions.

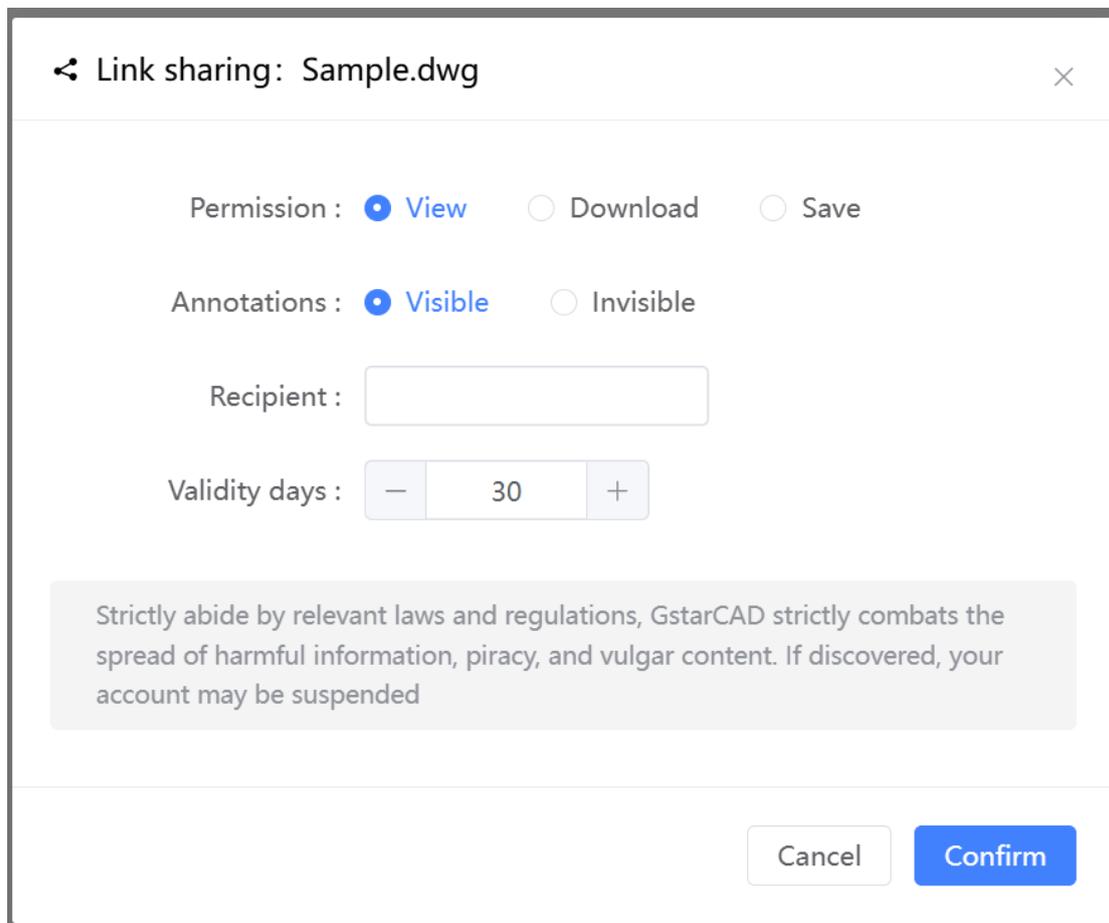
1.2.6 Share Drawings

1) Sharing Drawings and Models

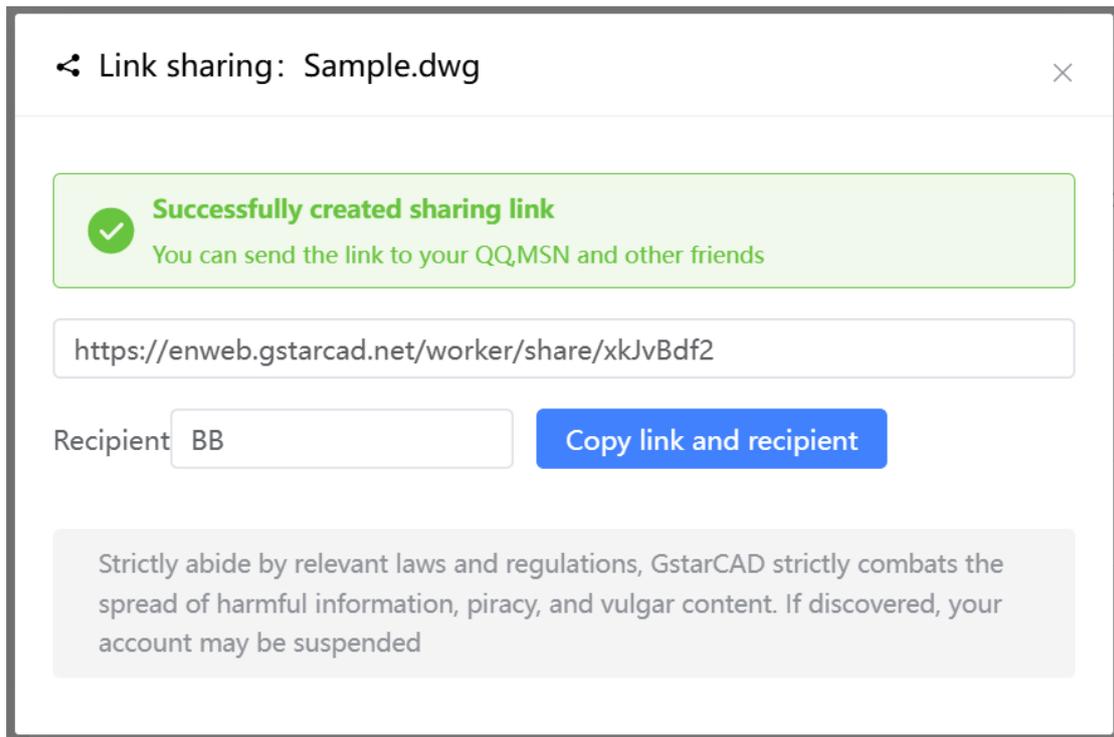
Using the Share drawings feature, drawings can be shared with people outside the company via URL links. The sharing feature's entry is on the drawing management page, in the operation item area on the right side of the drawing list, as shown below:



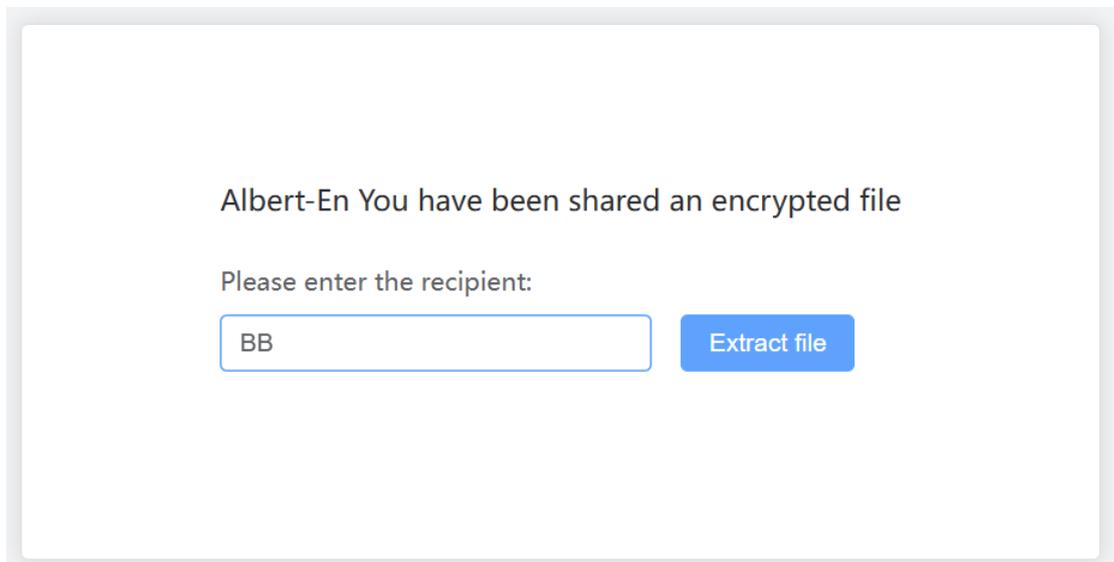
When sharing, you can set parameters such as access rights, annotation rights, recipients, and valid days. For instance, to prevent recipients from downloading or printing your drawings, set access rights to "View" when sharing.



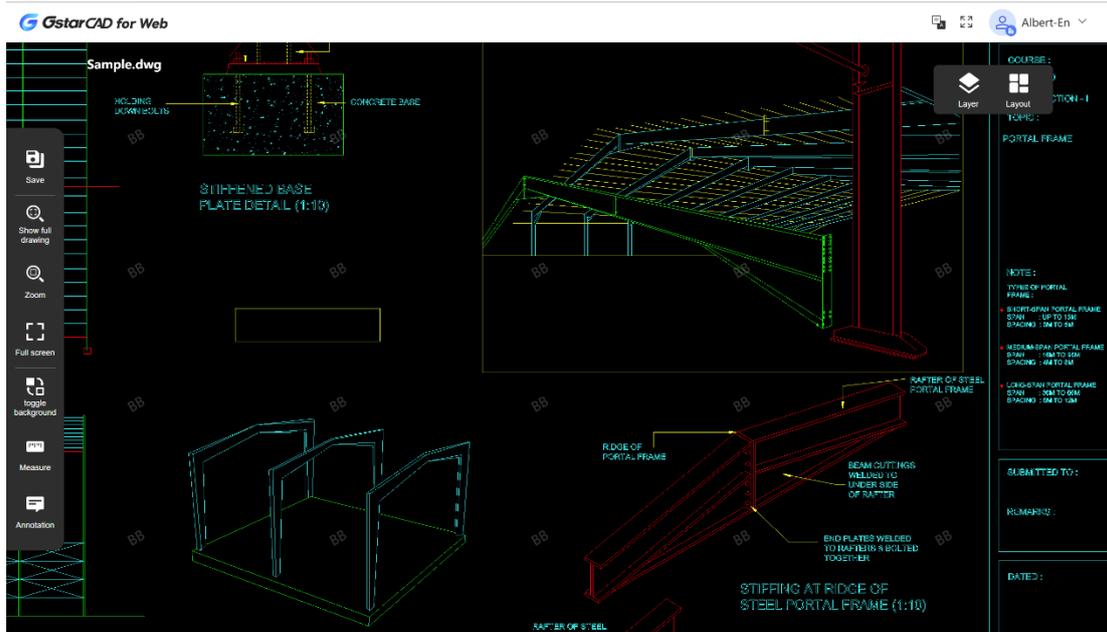
Click OK to generate a sharing link, which can be sent to recipients.



2) Viewing Shared Content

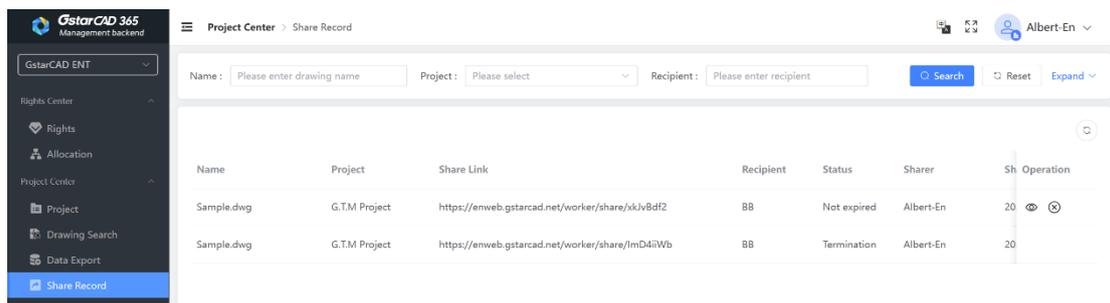


Upon opening the drawing, the recipient's name will be displayed as a watermark. When using the Save As and Print features, it will prompt that there is no operation permission.



3) Sharing Management

The GstarCAD 365 Company Management Backend provides a sharing management feature, allowing centralized control of all sharing activities within the company. This feature is located in the Project Center - Share Record:



On this page, administrators can view all sharing activities within the company and terminate sharing early to invalidate links, thus allowing manual intervention in abnormal sharing activities. If the company requires strict drawing management and prohibits any sharing, the sharing feature can be globally disabled under System - WEB Drawing Settings.

1.2.7 Role Management

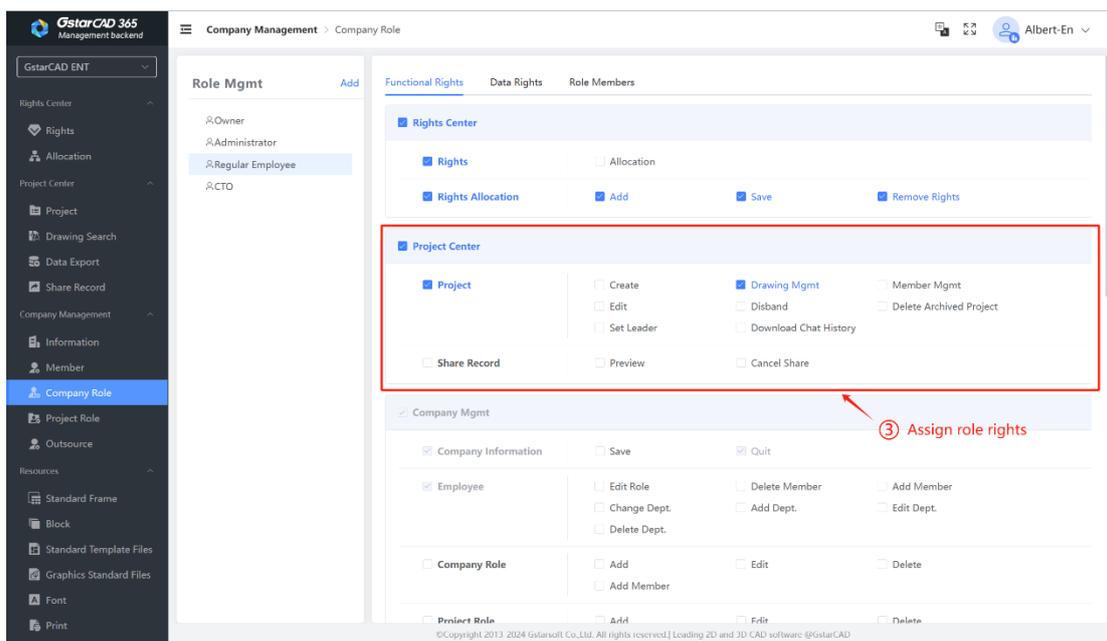
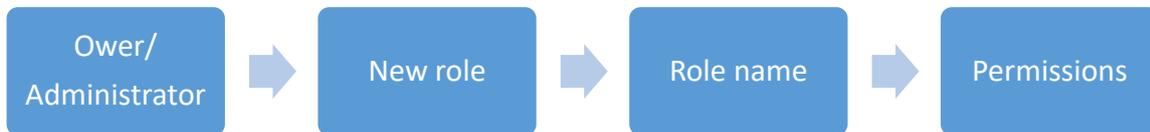
Role management is divided into company roles and project roles. Company roles control employees' operation permissions in the GstarCAD 365 Company Management Backend, with each employee having one company role. Project roles control permissions within a project, and employees can have different roles across projects. Under the company management column, both roles can be managed separately.

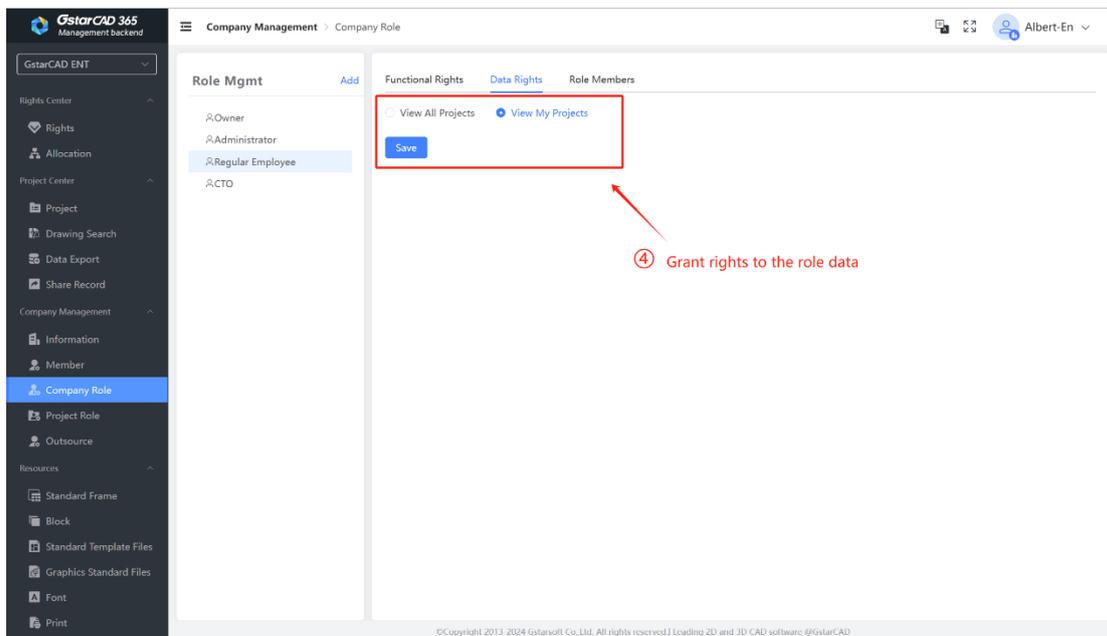
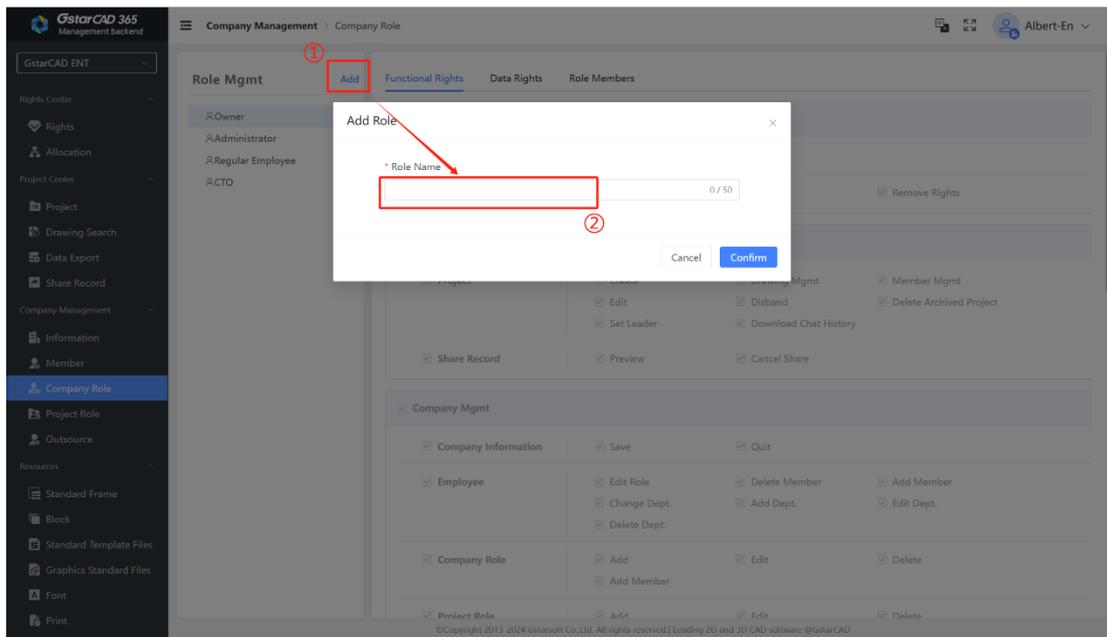
1) Company Role

Company role management includes Functional Rights, Data Rights, Role Members. Each role has different permissions. Default roles include Owner, Administrator, Regular Employee, with descriptions as follows:

- Owner: The company owner, who creates the company and is the super administrator with full management permissions. The owner identity can be transferred.
- Administrator: Has all permissions granted to the administrator role, such as rights distribution and project management.
- Regular Employee: Has all permissions granted to regular employees, such as drawing management and sharing records.

Company can add new roles and assign management permissions based on actual needs. When creating a new role, the owner or administrator can refer to the process and examples provided.

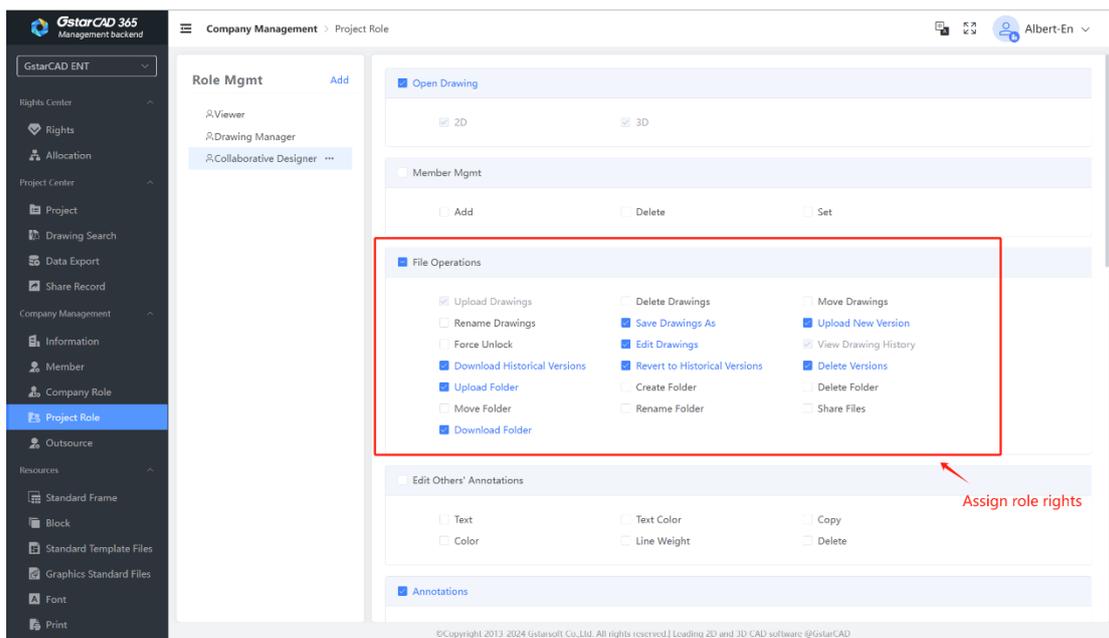
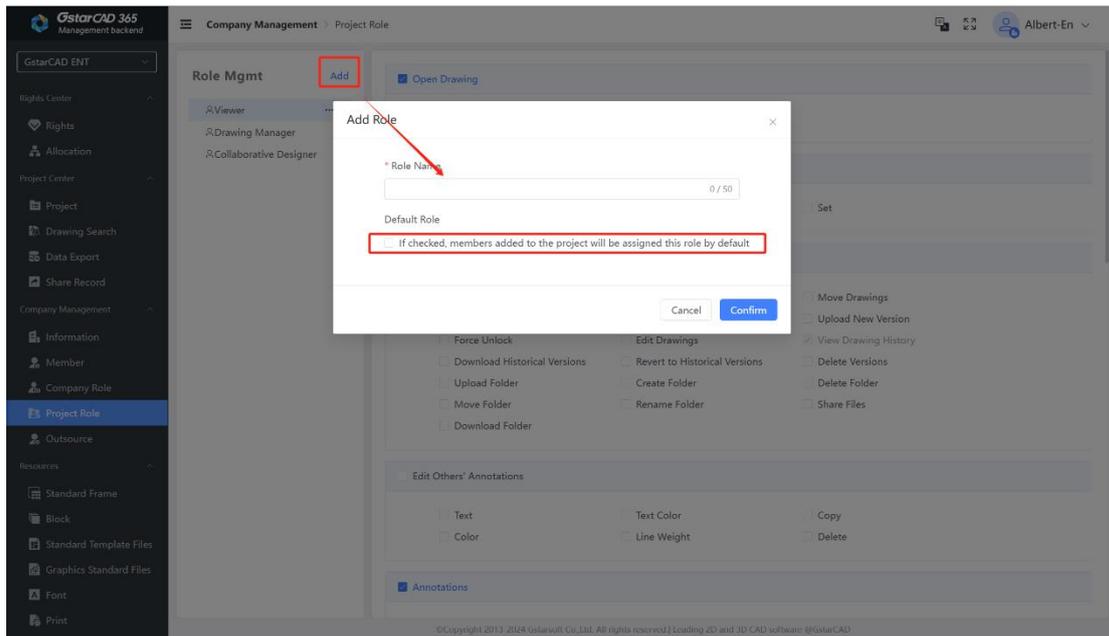




2) Project Role

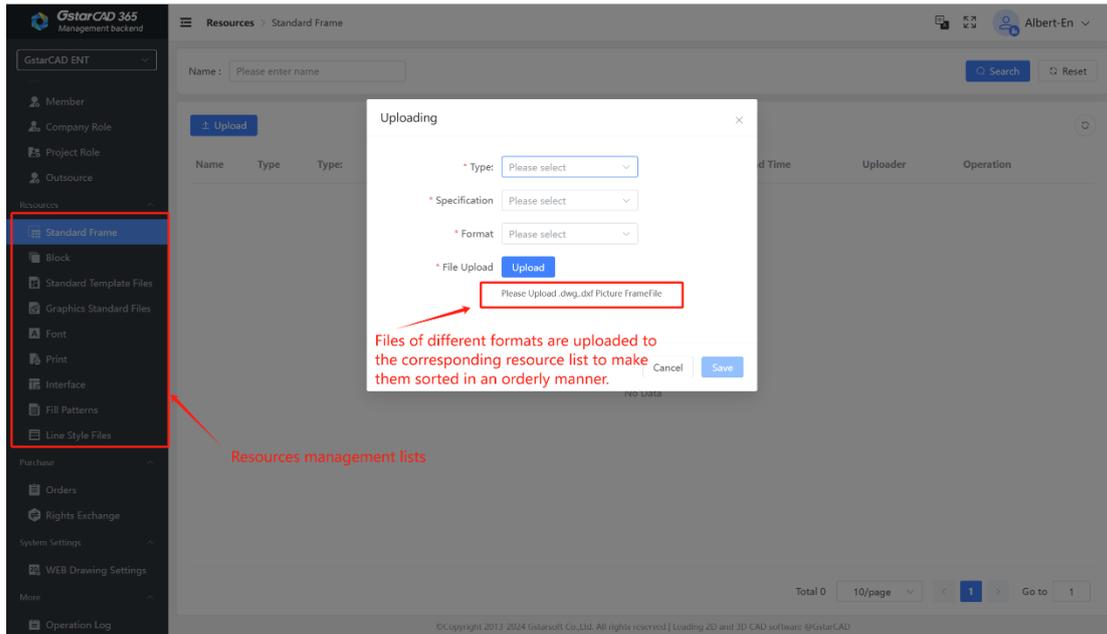
The initial project role is "Viewer," which can be renamed but has limited permissions for system default operations like uploading, viewing, and annotation. Company can add project roles according to project needs and grant necessary permissions, such as drawing management staff with permissions to manage drawings and project leaders with permissions for member management and editing annotations.

Note: New roles can be set as default, with all added project members defaulting to this role.



1.2.8. Resource Management

The primary function of Resource Management is to categorize and store company project resources, facilitating the standardization of project implementation within the company. This ensures a more structured and efficient drafting process.



Below is a detailed explanation of each resource category and its functionalities:

➤ **Standard Frame:**

- Search functionality
- Define frame types (such as standard, index, or revision notice)
- Define frame sizes (such as a0, a1)
- Define layout orientation (landscape or portrait)
- Supports uploads only in DWG and DXF formats

➤ **Block:**

- Search functionality
- Supports uploads only in DWG and DXF formats

➤ **Standard Template Files:**

- Search functionality
- Supports uploads only in DWT format

➤ **Graphics Standard Files:**

- Search functionality
- Supports uploads only in DWS format

➤ **Font:**

- Search functionality
- Supports uploads only in TTF、TTC、SHX formats

➤ **Print:**

- Search functionality

- Supports uploads only in PC3, PCP, PMP, CTB, STB, BP3, DSD, and PSS formats

➤ **Interface:**

- Search functionality
- Supports uploads only in CUI, CUIX, MNU, MNC, MNL, and MNS formats

➤ **Fill Patterns:**

- Search functionality
- Supports uploads only in PAT format

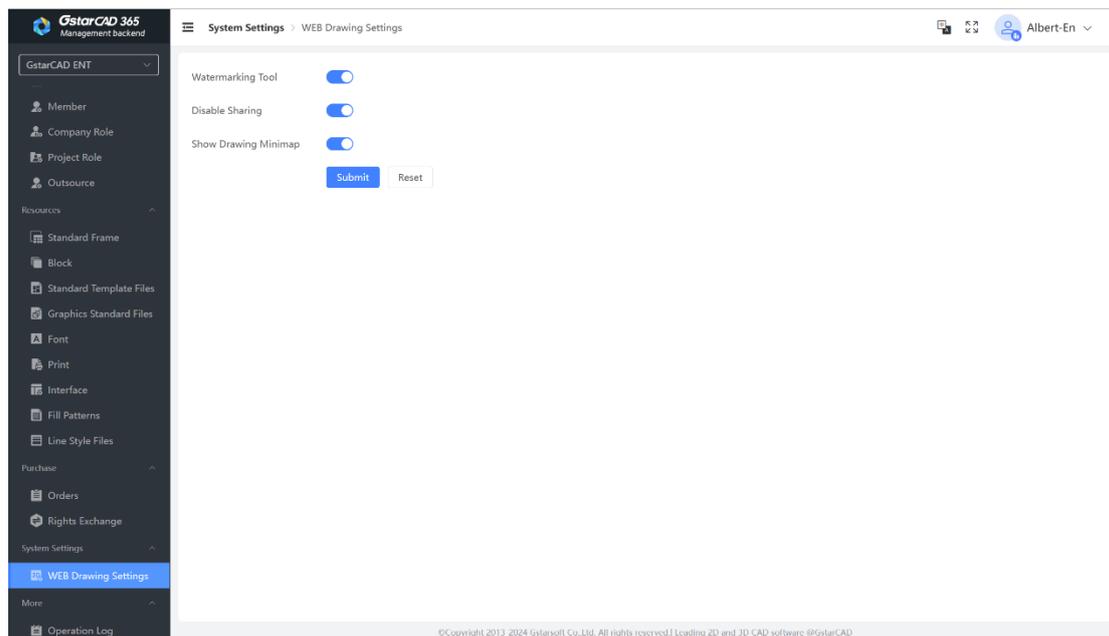
➤ **Line Style Files:**

- Search functionality
- Supports uploads only in LIN format

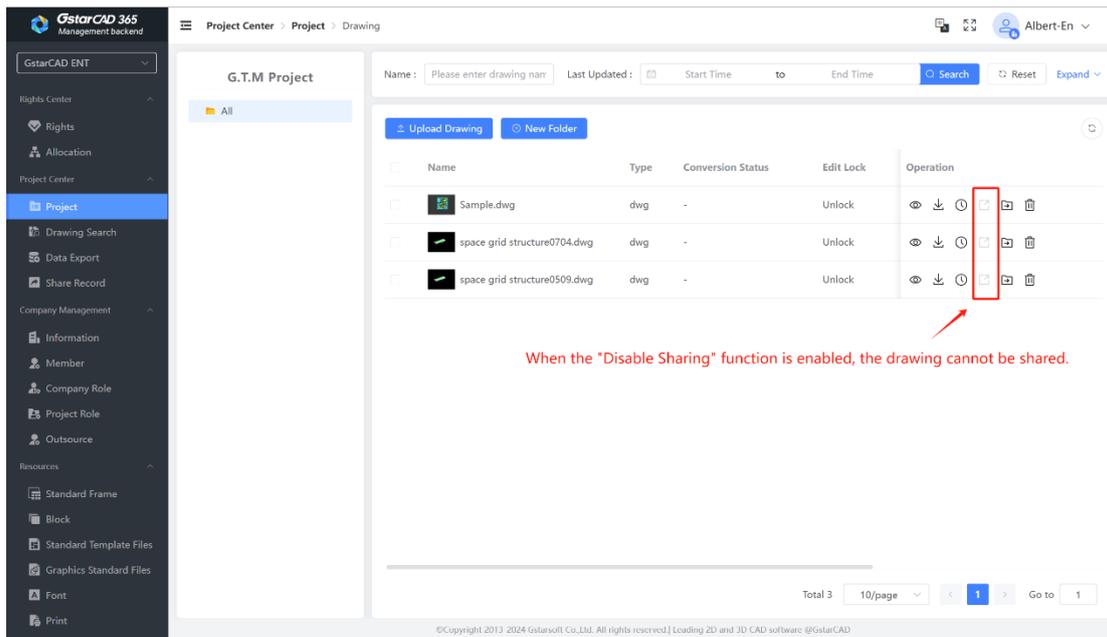
1.2.9. WEB Drawing Settings

The System WEB Drawing Settings section currently includes three main features: Watermarking Tool, Disable Sharing, and Show Drawing Minimap.

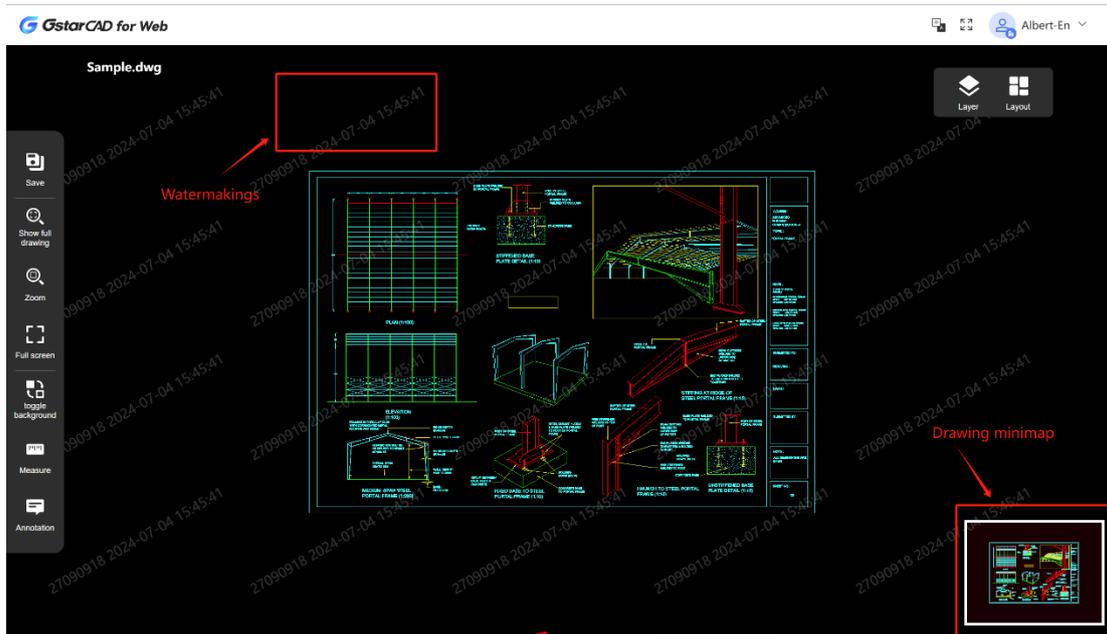
- **Watermarking Tool:** When enabled, the drawing background displays a watermark during online previews.



- **Disable Sharing:** When enabled, this setting disables the drawing sharing functionality in the backend.



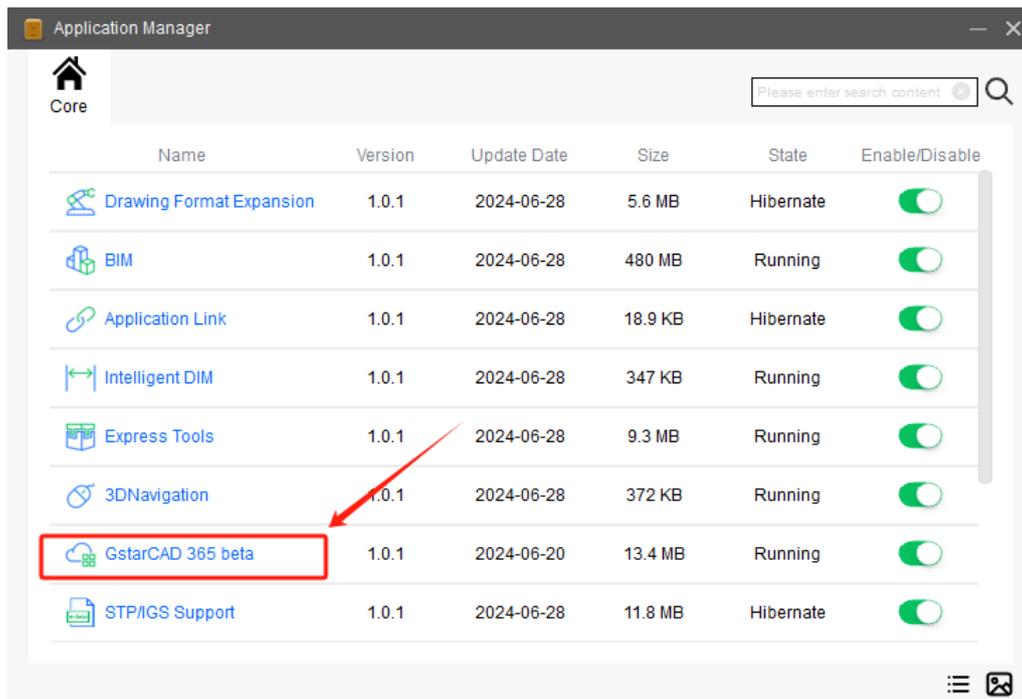
- Show Drawing Minimap: When enabled, a mini-map of the drawing appears in the bottom-right corner of the interface during online previews.



1.3. Collaboration Module on GstarCAD

1.3.1. Functional Overview

The Collaboration Module on GstarCAD platform offers collaboration and cloud note capabilities, which must be used in conjunction with GstarCAD 2025 software. The recommended operating systems for optimal performance are Windows 7 64-bit or Windows 10 64-bit. This module is integrated with the GstarCAD platform and is enabled by default. Users need only log in to their GstarCAD 365 account to access these features. If you need to disable this module, you can do so through Application - Application Manager. This allows you to control whether the module is loaded.

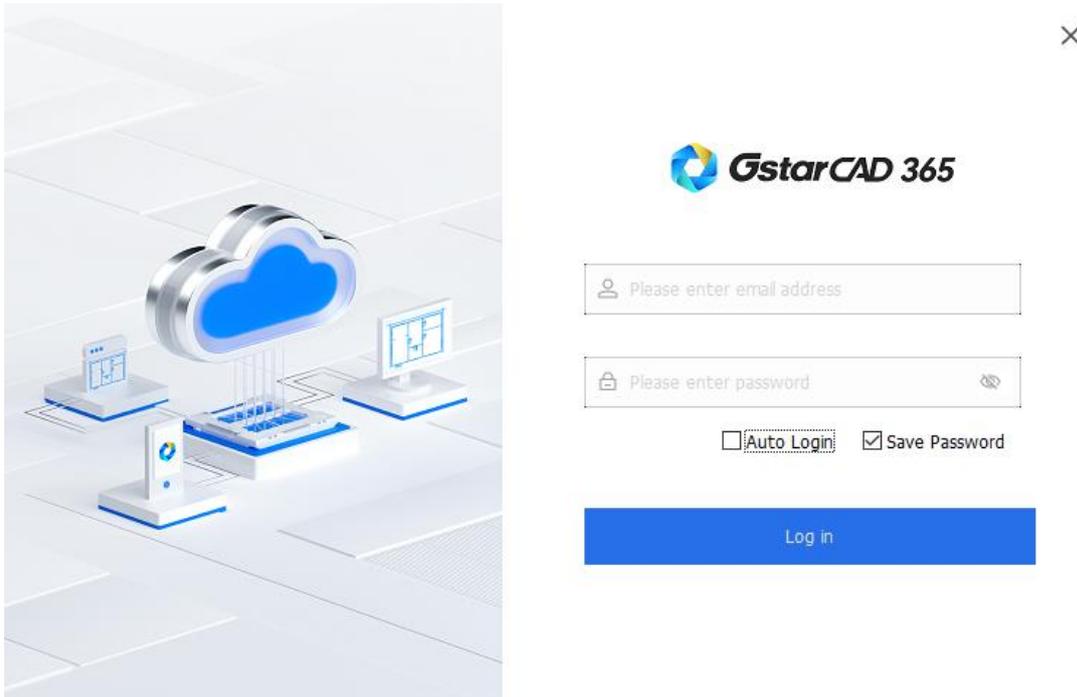


1.3.2. Login

If you are not logged in, clicking "Cloud Note" or "Collaboration " under Application menu of the GstarCAD 2025 or executing the 'GCDPALETTES' command to open the login interface. Users can log in using their GstarCAD account for public cloud access or the account assigned by their company administrator for private cloud access.

Note: Company administrators must allocate "GstarCAD 365 Standard" rights to your account via the "GstarCAD 365 Company Management Backend - Rights Center - Allocation" page. This ensures you have the necessary permissions to log in to the Collaboration Module on GstarCAD 2025 platform. Without these rights, or if only "GstarCAD 365 Basic" rights are allocated, login from the GstarCAD platform will not be possible.

Login Dialog Box:



- Account: Enter the mobile phone number or email address associated with your GstarCAD account.
- Password: Input your password. Use the eye icon to toggle password visibility.
- Auto Login: Select this option to automatically log in to the collaboration system each time the GstarCAD platform starts. Note that manual login is required if automatic login expires, typically after 30 days.
- Save Password: This option retains the last entered password in the password input box, eliminating the need to re-enter it upon each login. Be aware that enabling this option may decrease account security.
- Login: Click the login button to access the collaboration system, which will automatically open the "Collaboration Explorer" panel.
- Log out: Once logged in, your user avatar will appear in the upper right corner of the "Collaboration Explorer" panel. If no custom avatar is set during account registration, the system's default avatar will be displayed. Click the avatar to open a drop-down menu, then select "Exit" to log out of the collaboration system.
- GstarCAD 365 Company Management Backend: Click the avatar in the panel's upper right corner and select "Management Backend" from the drop-down menu. This will open the "GstarCAD 365 Company Management Backend" in your default browser.

1.3.3. Collaborative Design

1.3.3.1. File Right-Click Features

1. Open

Opens '.dwg' and '.ifc' files directly in GstarCAD by double-clicking the file name or selecting "Open" from the right-click menu. Third-party files will open with the user's locally set default application. If no default application is set, a pop-up window will prompt the user to select one.

2. Lock

Locks files to prevent editing from other terminals. Files locked by others can only be opened in read-only mode.

3. Unlock

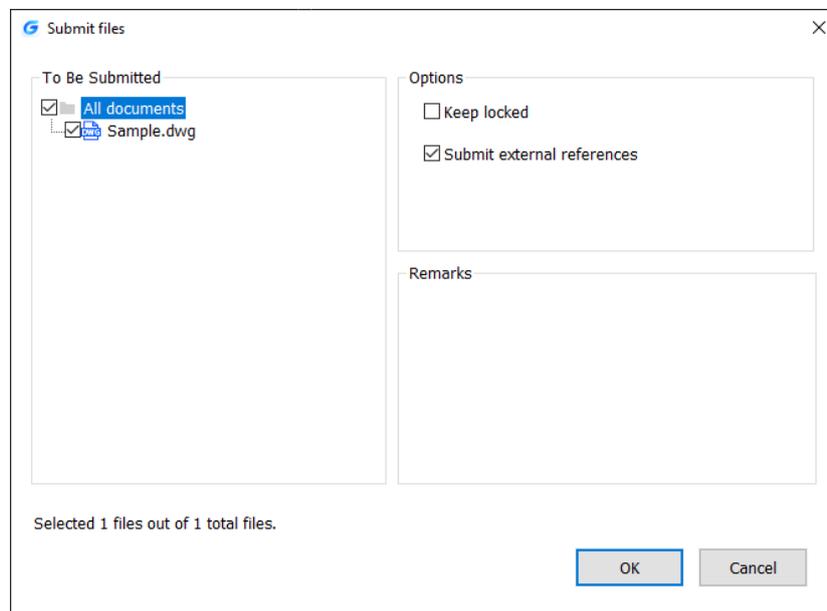
Offers two options: Self-unlock and Force unlock. Files locked by you can be unlocked without additional permissions. To force unlock files locked by others, "Force Unlock" permissions must be configured in the Management Backend.

4. Archive

Saves local changes as collaboration records and upload them to the server, enhancing data security. Once uploaded, these collaboration records can be viewed by other users in the GstarCAD platform.

5. Submit

Uploads the latest locally modified files to the server, it will generate a new version, and the old versions remain accessible in the file's version history.



Submission Steps:

- 1) Click "Submit" in the file's right-click menu. If local modifications exist, the "Submit files" dialog box will appear. If no modifications exist, a prompt will indicate submission is unnecessary.
- 2) The selected file will be automatically checked in the dialog box.
- 3) Configure options to lock the file post-submission and submit external references.
 - Keep locked: When checked, the file remains locked post-submission, preventing others from editing it. If unchecked, the file will be unlocked, allowing edits.
 - Submit external references: When checked, submits external reference files to prevent reference loss when others access the base map.
- 4) Enter relevant submission comments (feature pending implementation) for version record review.
- 5) Click "OK" to submit the file to the server, creating a new version.

6. Get the New Version

Downloads the latest version of a file from the server, it will overwrite the local version. If there are unuploaded modifications locally when obtaining a new version, and there is a conflict with the latest version on the server, the

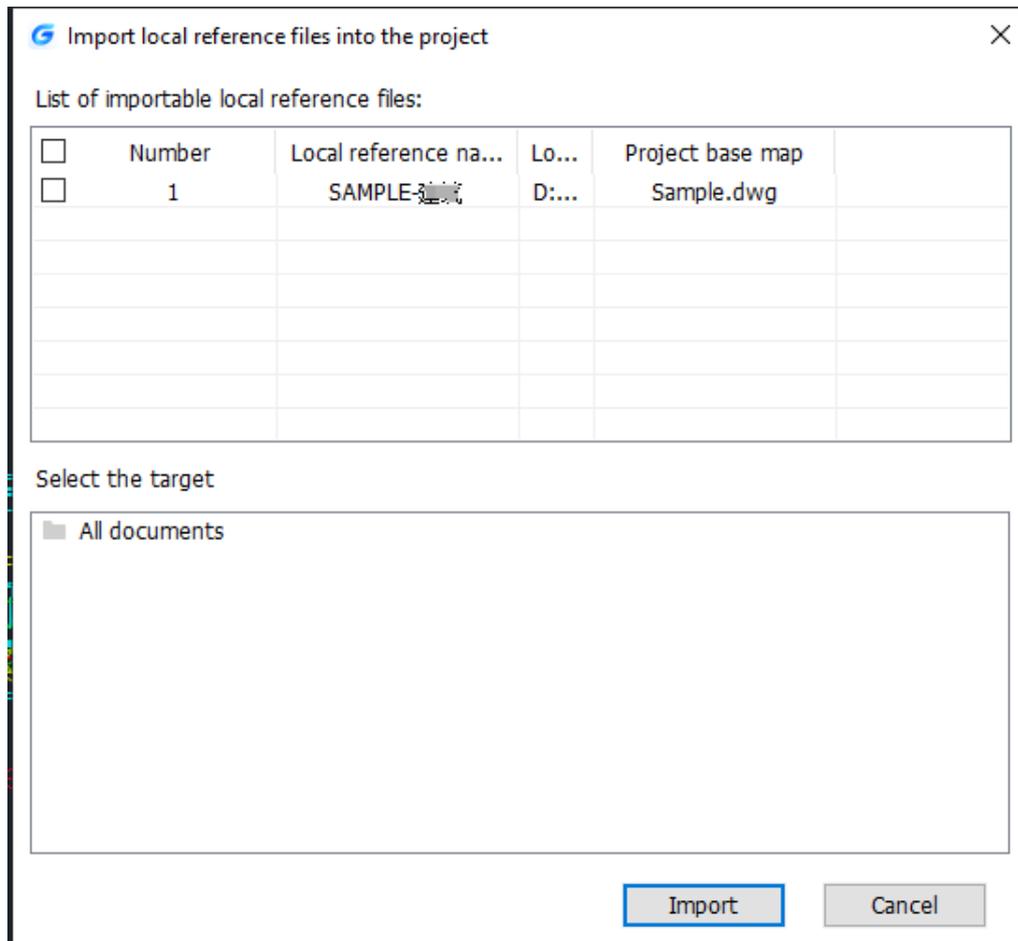
download can be successful, but a conflict will be prompted when the map is opened locally, and the two conflict resolution methods will be used to handle the conflict.

7. Export to Local

Saves the latest file version to a local directory.

8. Import Xref

Imports non-project files referenced by the project file into the project.



Dialog Box Options:

- Checkbox: Detects and selects local reference files not yet uploaded to the project.
- Number: Lists the total number of local reference files to be imported.
- Local Reference Name: Displays file names.
- Local Reference Path: Shows the local paths of reference files.
- Project Base Map: Helps match the base map with the correct local reference file.
- Select the Target: Chooses the project location for importing local references.

9. Synchronize Annotations

Updates the local or server's latest annotation files. Automatic synchronization typically occurs when saving, closing, submitting a new version, or obtaining a new version of a drawing. Use this feature to resolve synchronization failures.

Resolve conflicts	√	√	
Get the new version		√	√
Delete		√	√
Rename		√	√
Move to		√	√
Open			√
Lock			√
Unlock			√
Save			√
Export to local			√
Import Xref		√	√
Synchronize annotations			√
Previous version			√
File properties			√

Note: The Collaboration panel supports selecting multiple files and folders in the directory tree by using the Ctrl or Shift keys. After making multiple selections, the right-click menu provides options such as Submit, Get the New Version, and Delete.

- File Formats Supported by the Archive feature: .dwg
- File Formats Supported by the Lock/Unlock feature: .dwg
- File Formats Supported by the project in the GstarCAD platform: .dwg, .ifc (Note: Editing and saving an .ifc file will prompt the generation of a .dwg file for subsequent collaboration.)
- Unsupported File Formats in the GstarCAD platform: If a user has set a default application for opening certain file formats, the third-party program will be launched automatically. If not, the system will prompt the user to select an application to open the file via a pop-up window.

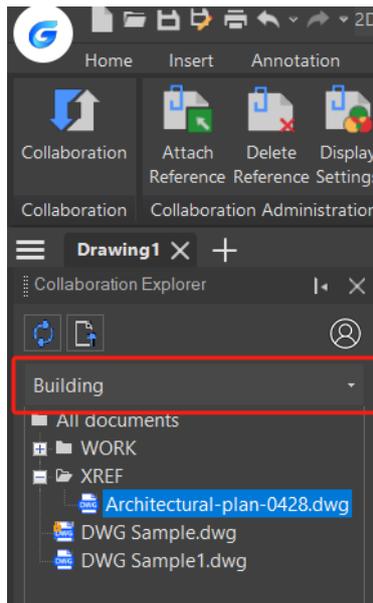
1.3.3.3. General Buttons

There are two general buttons located at the top of the panel:

- Refresh Panel: Use this button to refresh the entire project panel. If the panel fails to refresh automatically, users can manually refresh it. After clicking Refresh, the directory tree structure will synchronize with the server.
- Submit Updates: Use this button to submit all changes made to the project in one click. After clicking this button, the system will automatically detect all files that need to be submitted.

1.3.3.4. Set Work Project

You can select the current work project to switch to using the project switch drop-down menu on the panel.



1.3.3.5. Folder Right-Click Features

1. New Folder

Creates a new folder.

2. New Drawing

A new drawing file will be created through the template (the default location of the GstarCAD template path). After the file is created, it will not be automatically submitted to the server and needs to be submitted manually.

3. Import Files

Imports selected local files into the project. After importing, these files will not be automatically submitted to the server and require manual submission.

4. Import Local References

Imports all non-project files referenced in the folder into the project.

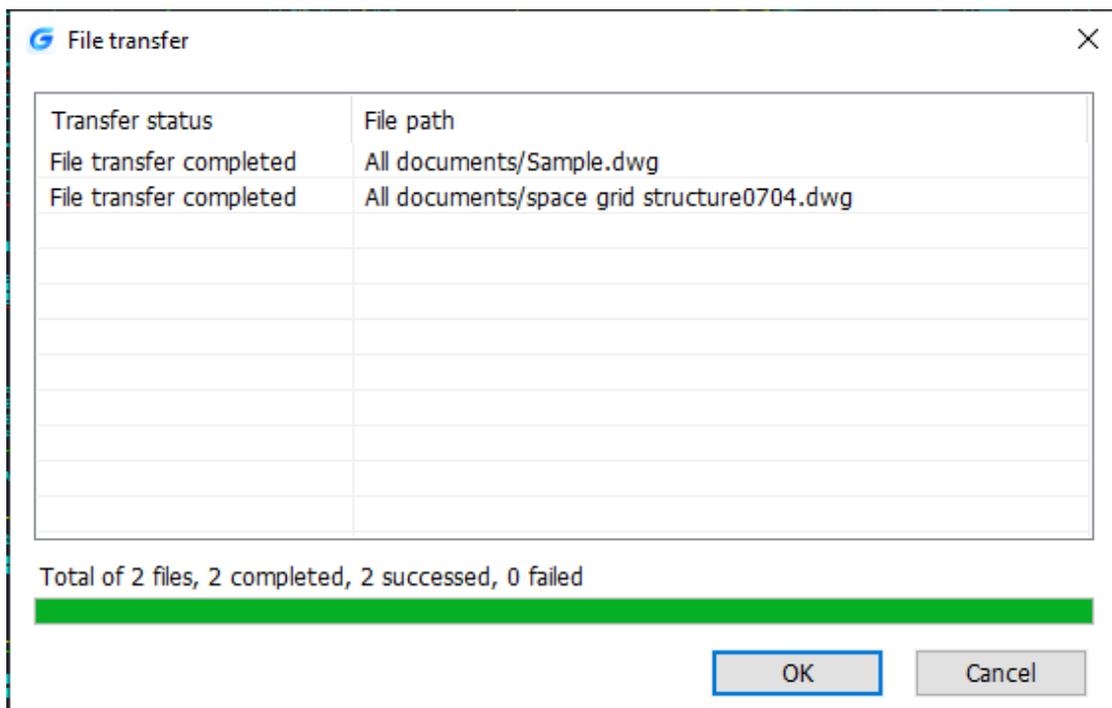
5. Submit

Uploads all files to be submitted under the selected folder node to the server and generate a new version. The old version will not be deleted and can be accessed in the file history.

Submission Steps:

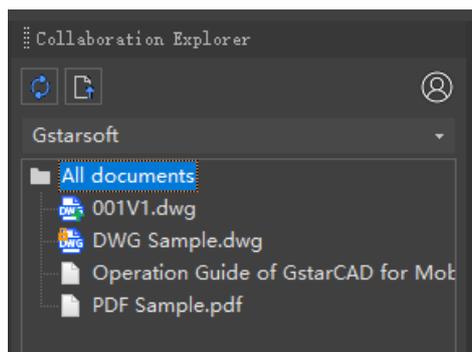
- 1) Click Submit in the right-click menu of a folder in the directory tree. If there are files to be submitted, the File Submission dialog box will pop up.

- 2) Check the files to be submitted by selecting the appropriate checkboxes.
- 3) Options on the right allow you to lock files after submission and submit external references. This setting applies to all selected files and doesn't need to be set individually for each file:
 - Lock Files After Submission: If this option is checked, the file will remain locked after submission, preventing others from editing it. If unchecked, the file will be unlocked after submission.
 - Submit External References: Check this option to submit external reference files in the project to the server, preventing reference loss or version discrepancies after others use the base map.
- 4) Enter relevant comments for submission to facilitate future version record reviews (feature not yet supported, planned for future versions).
- 5) Click OK, and the File Transfer dialog box will pop up to show submission progress. The dialog box provides detailed transfer status for each file:



- 6) The dialog box can display the transfer status of each file in detail:
 - File transfer successful: Indicates files have been successfully submitted to the server, generating new versions.
 - Transfer failed: Displays specific reasons for failure, such as a conflict between local and server file versions, prompting the user to resolve the conflict before uploading.

Distinguishing Between File and Folder Icon Status in the Directory Tree:



- Green "+" in the lower right corner of the file icon: Indicates that the file has never been uploaded to the server and only exists locally.
- Green "↑" in the lower right corner of the file icon: Indicates a local version can be submitted to the server.
- Yellow lock icon in the upper left corner of the file icon: Indicates that the file is locked.
- Red "↑" in the lower right corner of the folder/file icon: Indicates that there are archived collaboration records under the folder.
- Two-way arrow (red and green) in the lower right corner of the file (folder) icon: Indicates that the file or folder has a conflict that requires manual resolution.

Note: Only manual submission of files is supported; automatic submission is not available.

6. Get the New Version

Downloads the latest version of all files under the selected folder node from the server to the local computer. After obtaining the latest version, the original local files will be overwritten.

Double-click on the tree node to open the drawing or right-click to open the drawing, and the latest server version will be automatically updated to the local computer before opening.

7. Delete

Deletes the selected folder and its contained files. The folder will also be deleted synchronously on the server.

8. Rename

Edits the name of the selected folder in place.

9. Move To

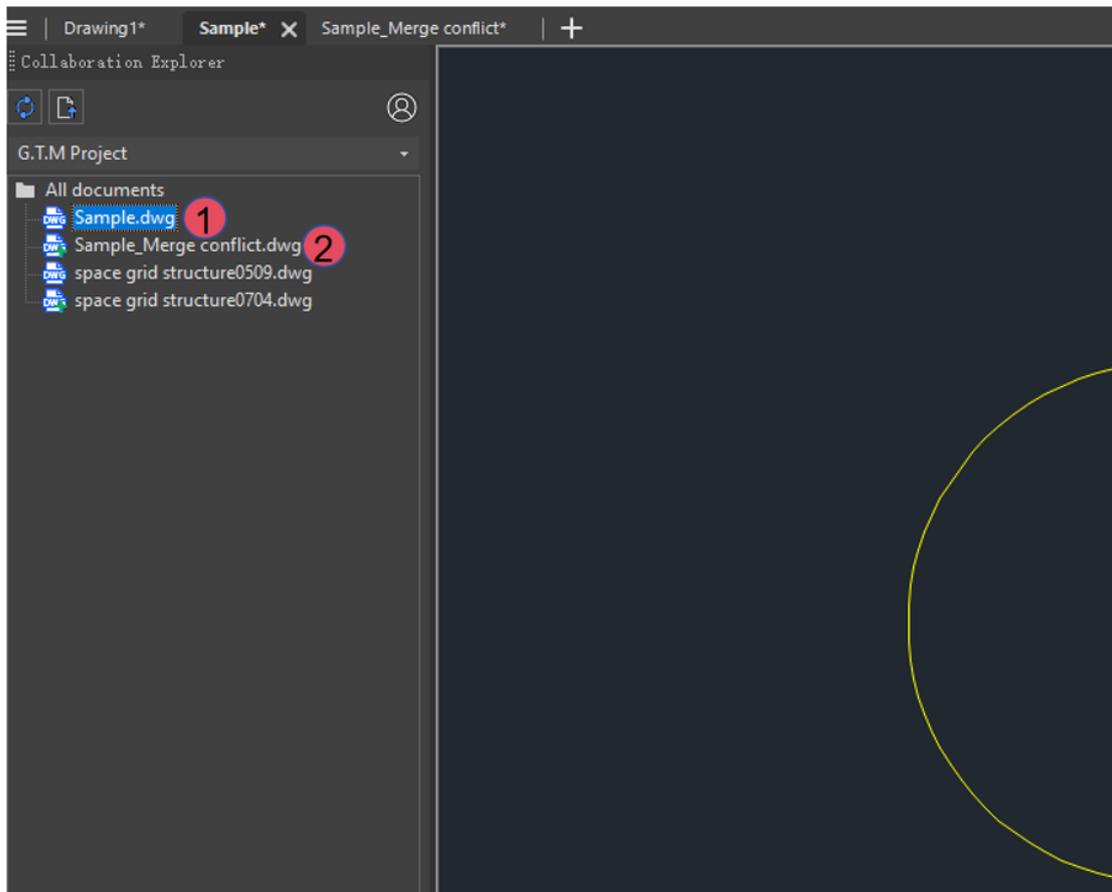
Opens a dialog box for selecting a path. The selected folder can be moved to the target folder.

10. Resolve Conflicts

When there is a conflict between the local version of the file to be submitted and the server version, a reminder will be displayed. You can view and manually resolve conflicts using the Resolve Conflicts feature. Click the Details button to view detailed conflict information, including conflict path, file name, conflict type, and other details.

The dialog box for viewing and resolving conflicts:

- Local changes: First, download the latest version from the server (Figure ① below) and create another file with locally saved changes. The new file name follows the format "XXX_Merge conflict" (Figure ② below). Import the generated merge conflict file into the project (not directly submitted to the server).



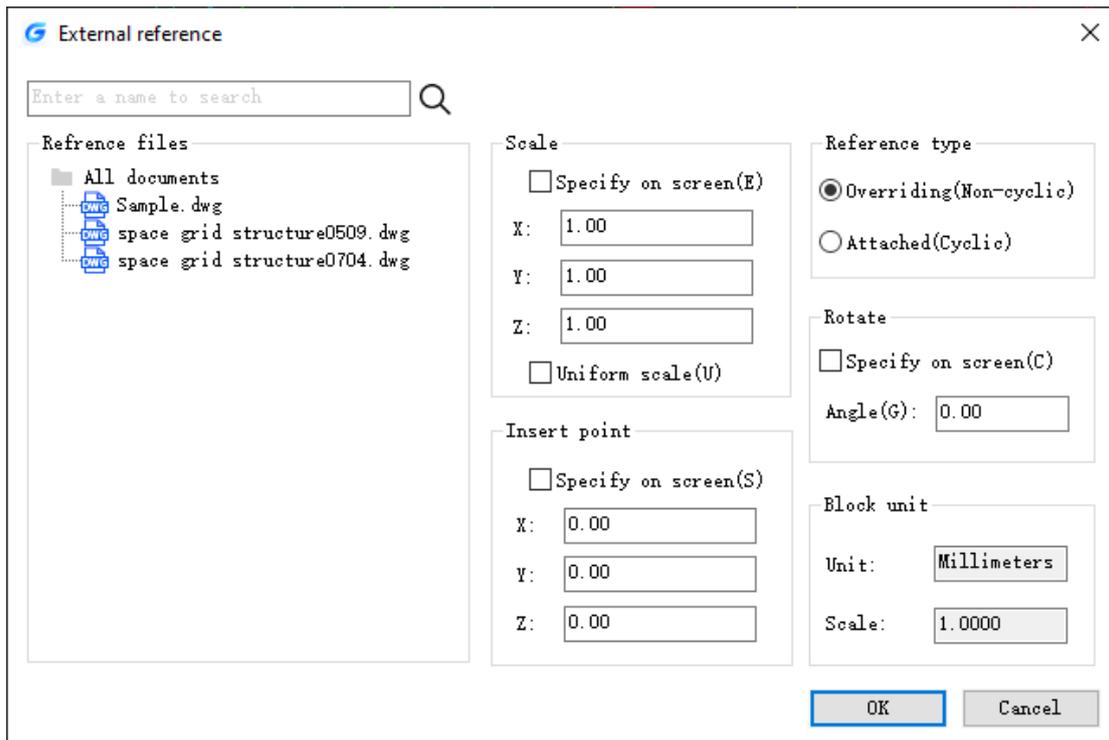
1.3.3.6 External Reference Features

1. Reference External Files

Attaches external DWG format drawings from the project directory tree to the current drawing.

Attach Reference Steps:

- 1) Open the drawing within the project and click the Attach Reference feature in the Ribbon. A dialog box, as shown below, will appear:



Dialog Box Options:

- Search Box: Enter the document name to search. Press the Enter key to execute the search, and the results will appear in the reference file list below.
- Reference Files: This mirrors the directory tree in the Collaboration Explorer panel. You can select DWG format files in the project, excluding the base map, as reference files. Currently, files in other formats are not supported as reference files.
- Settings Panel: Specify settings such as Scale, Insertion point, Reference type, Rotate, and Block unit.

2) After specifying the relevant properties, click OK to display the referenced file in the current drawing.

2. Delete Reference

Deletes an external reference that is attached to the current drawing.

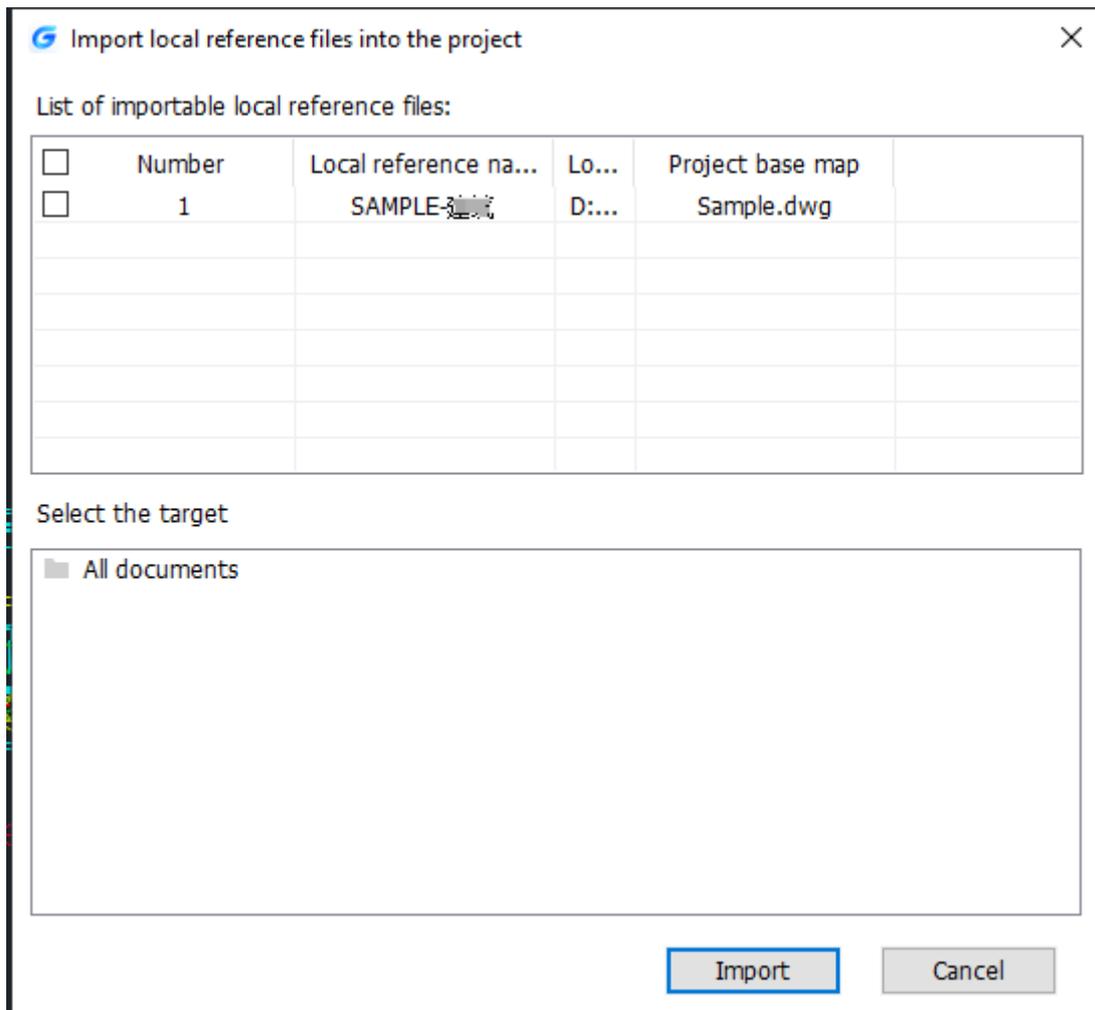
3. Import Local References

Imports local drawings referenced by the base map into the project. This ensures all necessary files are included for seamless collaboration.

Import Steps:

- 1) Right-click on a DWG file in the project directory tree and select Import Xref. This option is not available for files in other formats. The system will automatically check if there are local reference files that have not yet been imported into the project.
 - If there are no local reference files, a prompt box will inform you.

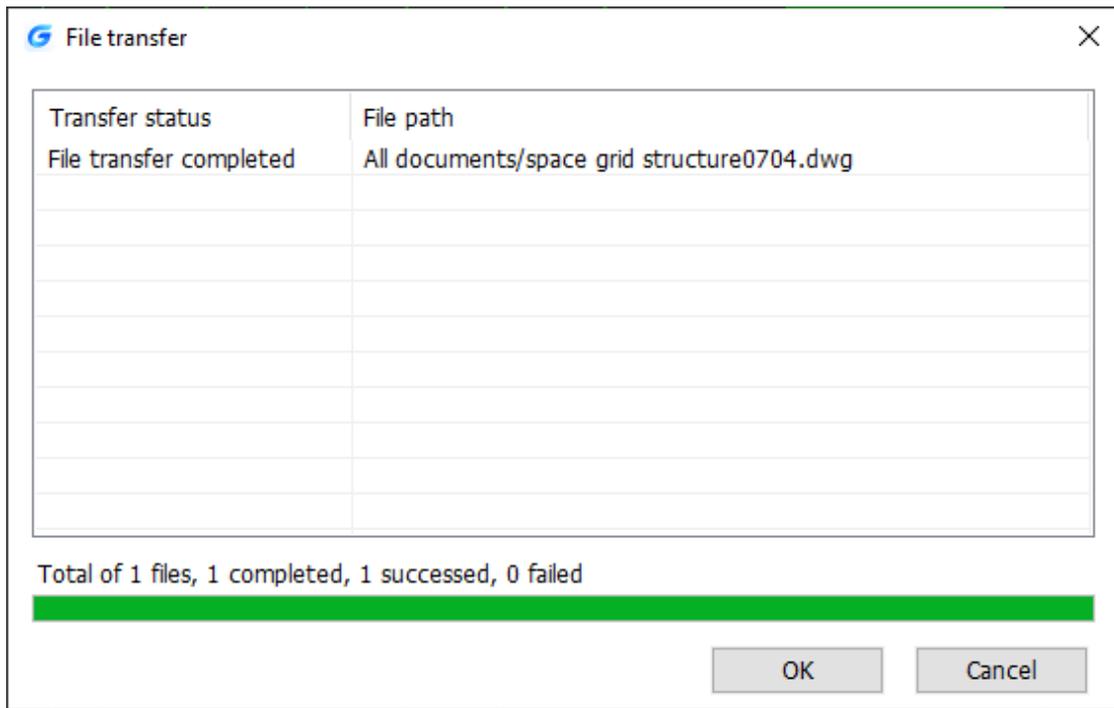
- If there are local reference files not yet uploaded, a dialog box, as shown below, will appear:



Dialog Box Options:

- Check Box: After selecting a file or folder, the system detects any local reference files not uploaded to the project. Use the check box to select local reference files for import.
- Number: Displays the total number of local reference files to be imported. A vertical scroll bar will appear if the list exceeds the display area.
- Local Reference Name: Displays the file name, truncated at the end if it exceeds the display area.
- Local Reference Path: Shows the local path of the reference file if it exists. Files without a local path are not shown.
- Project Base Map: Helps correlate between the base map in the project and the local reference files when multiple files involve local reference imports.
- Select the Target: Chooses the path within the project where the local reference should be imported.

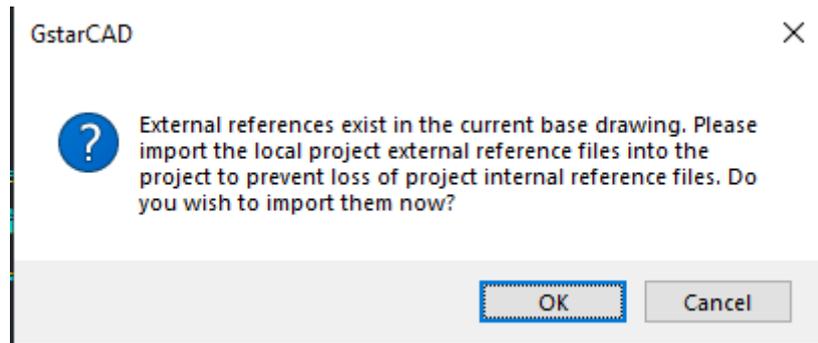
- 2) After clicking Import, a dialog box, as shown below, will pop up, and the previous dialog box will disappear:



Dialog Box Options:

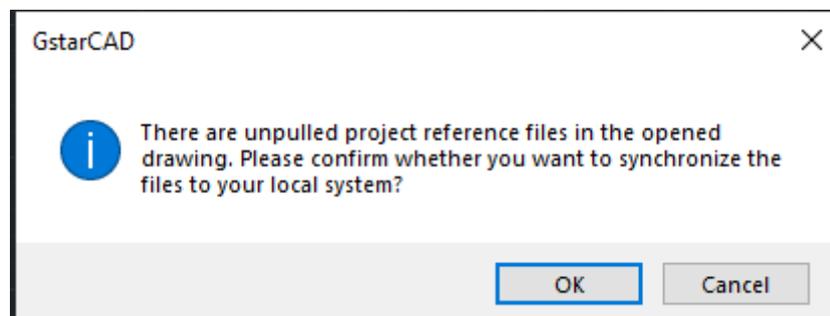
- The selected files will be displayed in a list. Initially, the transfer status is empty, and the file address shows the target path selected earlier.
- Transfer Status:
 - Empty: Displayed during the file import process.
 - File Transfer Completed: Files are processed in order from the list, one at a time. Successful transfers update the status to "File transfer completed."
 - File Transfer Failed: Files that cannot be imported will display a status of "File transfer failed."
- File Address: Shows the address where files are imported within the project.
- Total XX files, XX completed, XX successful, XX failed:
 - Total number of files: Refers to the total number of local reference files selected in the previous step to be imported into the project.
 - Completed number of files: Refreshed according to the file transfer status, after all tasks are processed, the completed and total numbers are equal.
 - Successful and failed number of files: Refreshed according to the transfer results of each file, after all tasks are completed, the number of successful and failed equals the total number of files.
- "OK" Button: This button is inactive during file transfer. Once all tasks are completed, clicking OK closes the File Transfer dialog box.
- "Cancel" Button: Clicking Cancel returns you to the previous dialog box, allowing re-selection of files or target paths. Local reference files imported before cancellation remain in effect.
- "Close" Button: Functions the same as the Cancel button.

Note: To prevent users from forgetting to upload local reference files, which may hinder access by other users, a reminder will pop up when saving drawings. If the drawing references a local file not uploaded, a warning dialog, as shown below, will appear.



4. Obtain Reference Files

This function ensures that all external reference files associated with a drawing are available locally. When you submit a local external reference file to the server and later access the base map file from another client or user, the GstarCAD platform checks if the external reference file is present locally before opening the drawing. If it is not, a dialog box prompts the user to download it.



- **OK Button:** Clicking OK opens the transfer list dialog box. This allows you to download the reference files locally. Once confirmed, the drawing opens, displaying all reference files correctly.
- **Cancel/Close Button:** Clicking Cancel or the close button in the dialog's upper right corner opens the drawing without downloading the reference files, resulting in missing references.

5. Xref Display Settings

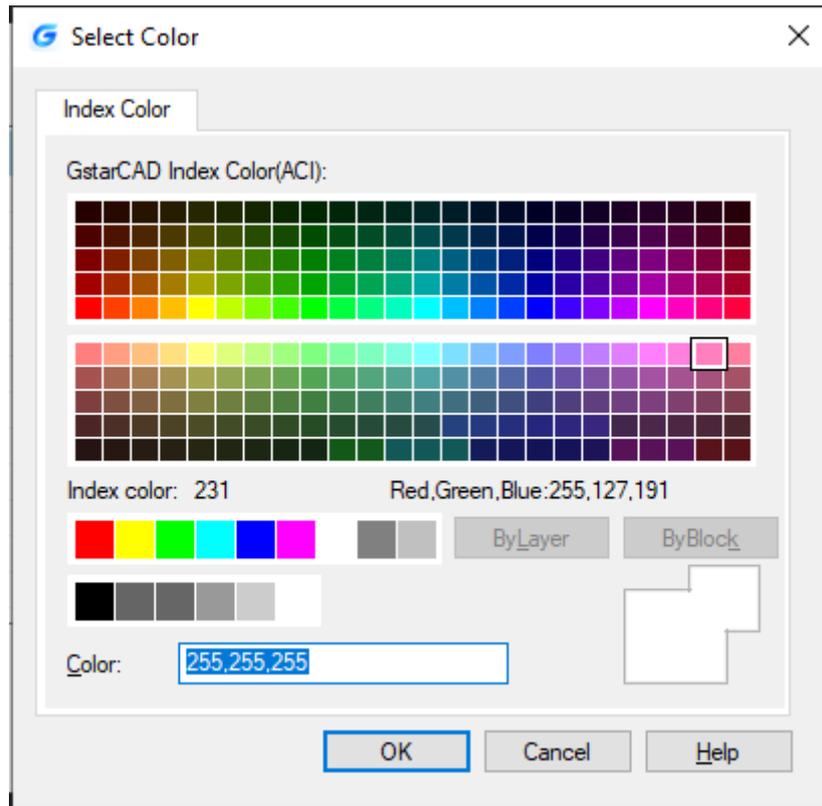
Adjusts the display color of reference files in your drawing. Options include maintaining the original colors or choosing alternative colors to differentiate between current and reference content.

Steps for Xref Display Settings:

- 1) **Access Display Settings:** Click Reference Management > Display Settings on the ribbon panel. First, determine if the current drawing contains external references:
 - **No External References:** A dialog box, as shown below, will appear:

Select	Xref name	Xref display settings	Color
<input checked="" type="checkbox"/>	SAMPLE...	Keep original color ▾ Keep original color Other colors	

- Choose Other Colors to open a color selection dialog box



- Choose a color from the dialog box and click OK to return to the Xref Display Settings dialog. A small color block appears next to each reference file, indicating the selected color. To change the reference file color later, click the small color block or select Other Colors from the dropdown menu to reopen the Select Color dialog.

Select	Xref name	Xref display settings	Color
<input checked="" type="checkbox"/>	SAMPLE...	Other colors ▾	

- Uniform Settings: Unified settings offer two options: Keep Original Color and Other Colors.
 - Apply "Other Colors": Choose Other Colors from the dropdown menu. The process matches the steps for setting a single reference file's display color.
 - Individual Priority: If a reference file's display color is set individually after unified settings, the individual setting takes precedence.

➤ Special Rules:

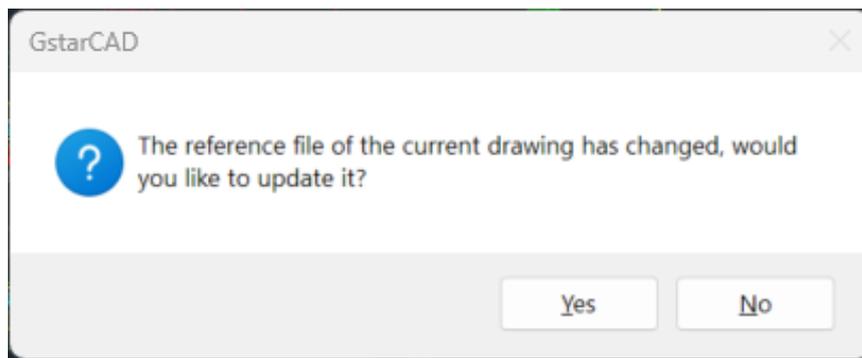
- Xref Display Settings is to make unified settings for all layer colors of the reference file (including layer 0), but layer 0 of the reference file and layer 0 of the base map file will be merged into the same layer. To avoid the color of layer 0 of the base map being modified, only the reference layer colors other than layer 0 are set.
- Display color and fade-in are effective at the same time.

3) After the display color adjustment is completed, click the "OK" button in the "Xref Display Settings" dialog box, and the modified reference display color will take effect. Click the "Cancel" button, and the reference display color just modified will not take effect.

6. External Reference Update

When the server-side reference file has a version update, there are two scenarios for local prompts (assuming A is the base map and B is the reference file):

- If document A is being edited locally (i.e., A is active), and the server-side reference file B has a version update, a dialog box will appear with the following options:



- Yes: Obtain the latest reference file from the server and display it.
 - No: Do not update the reference file immediately; instead, update it the next time document A is opened.
- If document A is closed and the server-side reference file B has a version update, the latest version of the reference file cannot be updated automatically the next time document A is opened. Instead, you need to manually obtain the latest version of reference file B first.

7. Designer Traceability

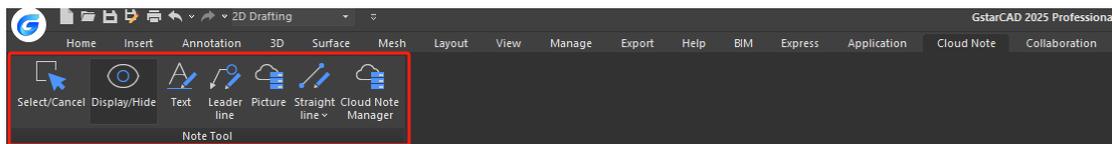
This feature supports viewing the modifiers of entity objects through "Properties Panel > Edit Records > Last Editor." It facilitates problem-solving and improves communication efficiency.

Geometry	
Start X	-603410.7642
Start Y	63311.1278
Start Z	0.0000
End X	-504729.0229
End Y	53614.0781
End Z	0.0000
Delta X	98681.7413
Delta Y	-9697.0497
Delta Z	0.0000
Length	99157.0413
Angle	354.39

Edit records	
Last editor	Shen Guo

1.3.4. Note Tool

Supports annotations on drawings and storage in the cloud, so annotations can be viewed on multiple devices.



1.3.4.1. Select/Cancel

1. To edit or select notes, click this feature to switch to the note selection mode.
2. When you no longer need to edit or select notes, click this feature again to switch back to the release note mode.

1.3.4.2. Display/Hide

1. Click "Hide" to conceal the contents of all notes.
2. Click again to display all note contents.

1.3.4.3. Text

1. Select the "Text" feature.
2. Modify the properties of the text note (such as text color and transparency), or use the default values to create a text note.

3. Click the left mouse button at the location where you want to insert the text note.
4. Enter the text (supports multiple lines of text).
5. Click the left mouse button in any area outside the Text Format toolbar to confirm the note, or click "OK" in the Text Format toolbar to finalize the note.

1.3.4.4. Leader Line

1. Select the Leader Line feature.
2. You can modify the properties of the leader line (text color, lead color, line width, transparency), or use the default values to create the leader line.
3. Click the left mouse button where you need to annotate and insert the starting point of the leader line.
4. Drag the mouse to the end point of the lead and confirm with the left mouse button.
5. Enter text (the Text Format editor is displayed).
6. Click the left mouse button in any area outside the Text Format toolbar to confirm or click OK on the Text Format toolbar to confirm.

1.3.4.5. Picture

1. Select the Picture feature.
2. Specify the image insertion point.
3. Select the image to be inserted in the "Open" dialog box of the system.
4. After selecting the image, click "Open" to display the "Picture Annotation Viewer." You can browse the images selected in the previous step in the viewer (up to 10 images can be added at a time, and each image cannot exceed 10MB). You can also delete and add images.
5. In the Select mode, double-click the image icon to pop up the viewer to browse the added image annotations.

1.3.4.6. Straight Line

1. Select the Straight Line feature.
2. You can modify the properties of the straight-line annotation (line type, line color, line width, transparency), or you can directly create a straight-line annotation using the default values.
3. Click the place where you need to annotate with the left mouse button to insert the starting point of the straight-line annotation.
4. Drag the mouse to the end point of the line and confirm with the left mouse button.

1.3.4.7. Rectangular

1. Select the Rectangular feature.
2. You can modify the properties of the rectangular annotation (line type selection, line type color, line width, transparency), or you can use the default values to create a rectangular annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the rectangular annotation.
4. Drag the mouse to the end point of the rectangle and confirm with the left mouse button.

1.3.4.8. Arrow

1. Select the Arrow feature.
2. You can modify the properties of the arrow annotation (line type selection, color, line width, transparency), or you can use the default values to create an arrow annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the arrow annotation.
4. Drag the mouse to the end point of the arrow and confirm with the left mouse button.

1.3.4.9. Ellipse

1. Select the Ellipse feature.
2. You can modify the properties of the ellipse annotation (line type selection, color, line width, transparency), or use the default value to create an ellipse annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the ellipse annotation.
4. Drag the mouse to the end point of the ellipse and confirm with the left mouse button.

1.3.4.10. Sketch Line

1. Select the Sketch Line feature.
2. You can modify the properties of the sketch line annotation (line type selection, color, line width, transparency), or use the default value to create a sketch line annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the sketch line annotation.
4. Press and hold the mouse to drag to the end point of the sketch line, and release the mouse to complete the sketch line.

1.3.4.11. Revcloud

1. Select the Revcloud feature.
2. You can modify the properties of the revision cloud lines (line type selection, color, line width, transparency), or use the default values to create a revision cloud.
3. Click the left mouse button where you need to annotate and insert the starting point of the revision cloud.
4. Press and hold the mouse to drag to the end point of the revision cloud, and release the mouse to complete the revision cloud drawing (it can be a closed cloud).

1.3.4.12. Properties

1. If you want to modify the related properties of the annotation after it is created, first select the Select/Cancel command in the Ribbon.
2. Click the annotation to be modified with the left mouse button.
3. Move the annotation, modify the annotation properties, delete the annotation (click delete on the keyboard), etc.
4. After modifying the annotation properties, press the ESC key, and the annotation properties will be modified successfully.
5. Click the Select/Cancel command again to exit the Select mode.

Note: After the cloud note is created, modifying the DWG drawing name or moving the drawing position will cause the annotation file content to be lost in the drawing. To prevent data loss, please upload the drawing and annotation file to the server as soon as possible.

1.3.4.13. Cloud Note Manager

1. If you want to view the relevant properties of the note (creator, creation time, updater, update time, etc.) or delete cloud notes in batches after the note is created, first execute the Cloud Note Manager command (NOTEEDIT).
2. You can select one or more cloud note objects to be deleted.
3. After selecting the objects, click the Delete All button.
4. The Confirm Delete dialog box will be displayed.
5. Click OK to delete the selected notes, and click Cancel to cancel the deletion operation and return to the Cloud Note Manager interface.

1.4. GstarCAD for Mobile

1. Product Positioning

GstarCAD for Mobile is a lightweight drawing viewing tool designed for enterprises to facilitate project management. It enables enterprises to efficiently manage and oversee projects within their organization.

2. Main Functions of the Product

GstarCAD for Mobile offers a suite of features for enterprise project management, including:

- Drawing Management: Organize and handle all project drawings in a centralized manner.
- Personnel Management: Manage team members and their roles within projects.
- Authority Management: Control access and permissions for different users.

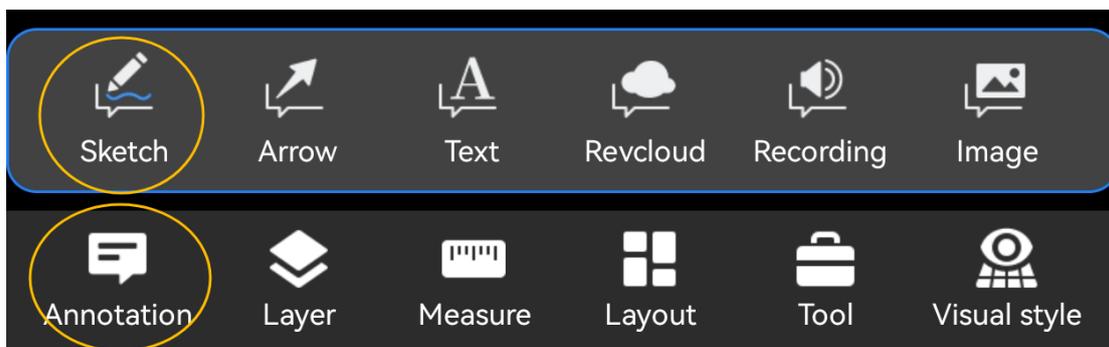
The platform provides flexible and robust management functions within the enterprise management interface, allowing for unified oversight of all enterprise projects.

3. Enterprise Project Collaboration

The product supports cloud applications and services that enable data interoperability with GstarCAD, Gstarsoft's professional software, and third-party software. This functionality allows for seamless collaboration across various products within the same project, enhancing teamwork and project efficiency.

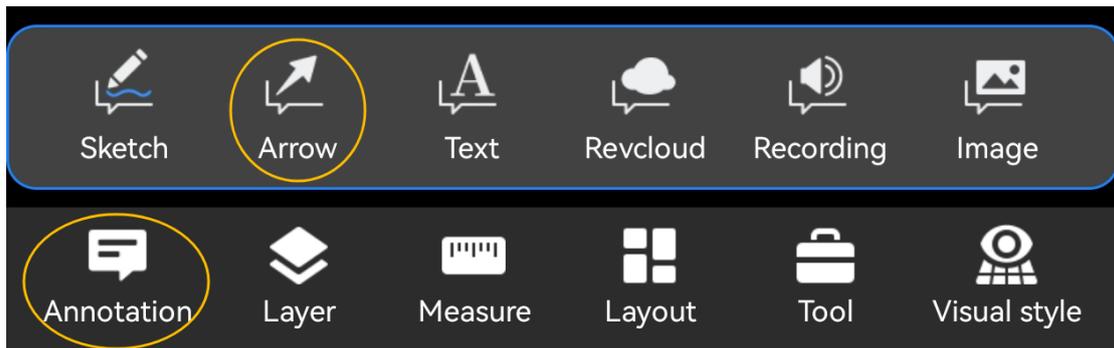
1.4.1. Annotation

1.4.1.1. Sketch



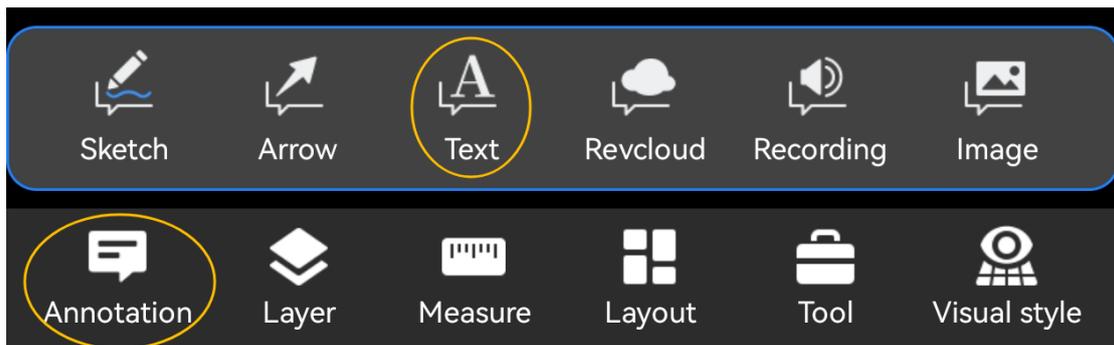
1. Click the "Annotation" button and select the "Sketch" tool.
2. Drag your finger on the screen; the dragged track is the sketch line annotation.
3. Repeat Step 2 to draw sketch lines continuously.
4. Click "✓" in the upper right corner to end the command.

1.4.1.2. Arrow



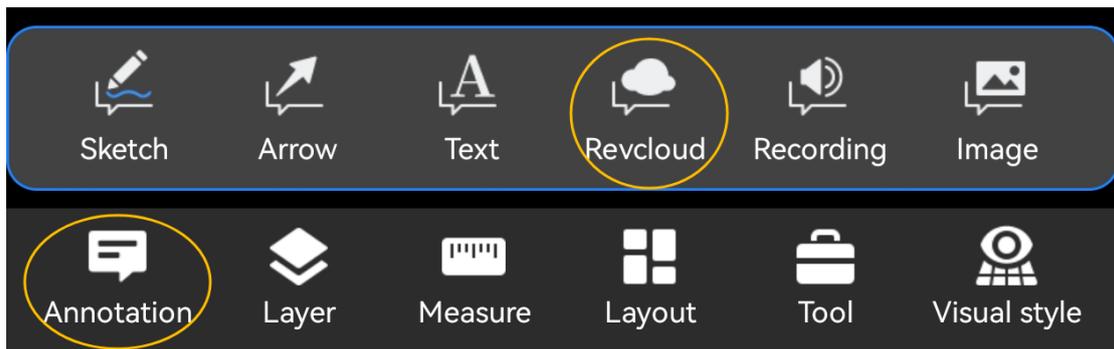
1. Click the "Annotation" button and select the "Arrow" command.
2. Drag your finger on the screen to form an arrow from the starting point of the drag track to the end point.
3. The command ends when the finger is lifted.

1.4.1.3. Text



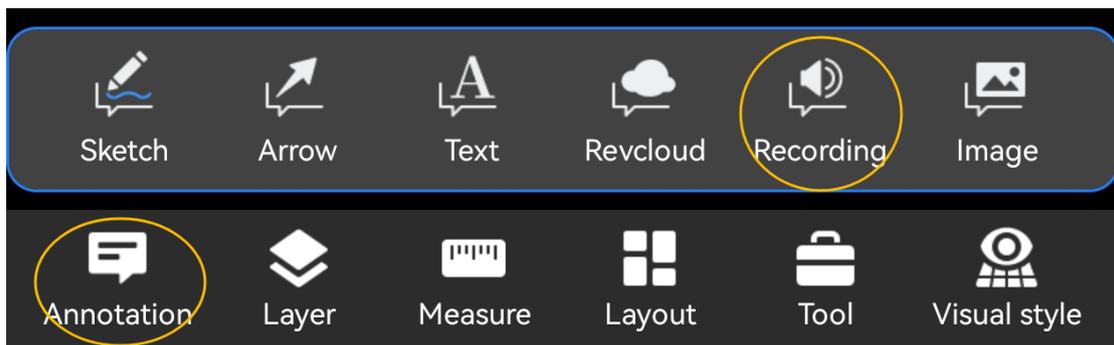
1. Click the "Annotation" button and select the "Text" command.
2. Tap your finger on the screen to specify the text insertion point.
3. Enter text in the pop-up input box. You can enter multiple lines of text and wrap.
4. Click "Finish" in the upper right corner to complete the text annotation.

1.4.1.4. Revcloud



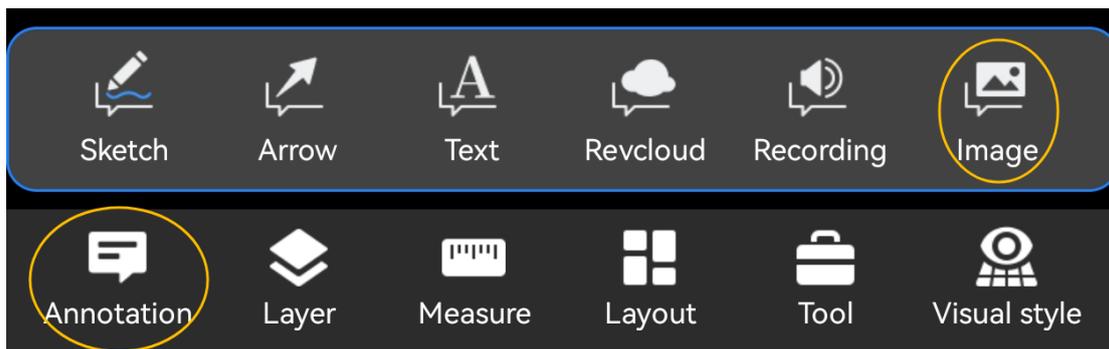
1. Click the "Annotation" button and select the "Revcloud" command.
2. Drag your finger on the screen to automatically pick up each vertex of the revision cloud.
3. Repeat Step 2 to draw revision cloud continuously.
4. Click "✓" in the upper right corner to end the command.

1.4.1.5. Recording



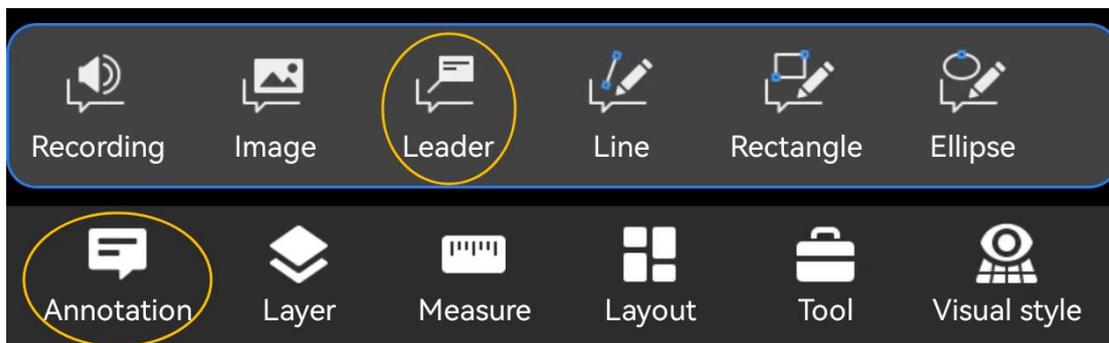
1. Click the "Annotation" button and select the "Recording" command.
2. Single-tap the screen to select a point to place the recording annotation.
3. Long-press the recording button to start recording.
4. Release the recording button to end the recording and generate the recording annotation.

1.4.1.6. Image



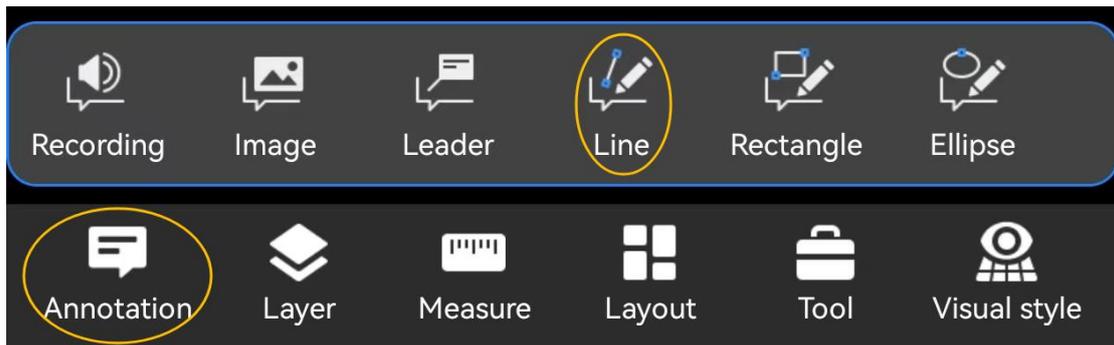
1. Click the "Annotation" button and select the "Image" command.
2. Tap the screen to specify a point to place the image annotation.
3. Take photos with the camera and add them to the current drawing, or select images from the mobile phone album (up to ten pictures can be selected).
4. Click OK, and the image annotation is created.

1.4.1.7. Leader



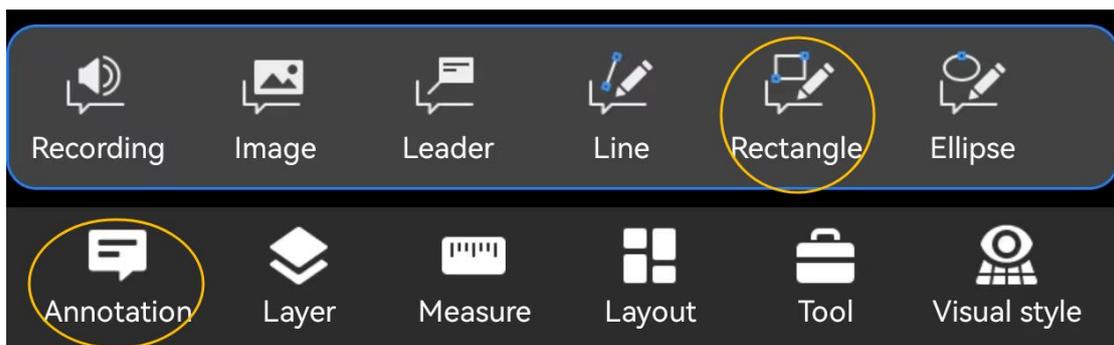
1. Click the "Annotation" button and select the "Leader" command.
2. Tap the screen to specify the starting point of the leader.
3. Tap the screen to select the text box position.
4. Enter the text content in the pop-up input box. You can enter multiple lines of text and wrap.
5. Click the OK button to generate the leader annotation.

1.4.1.8. Line



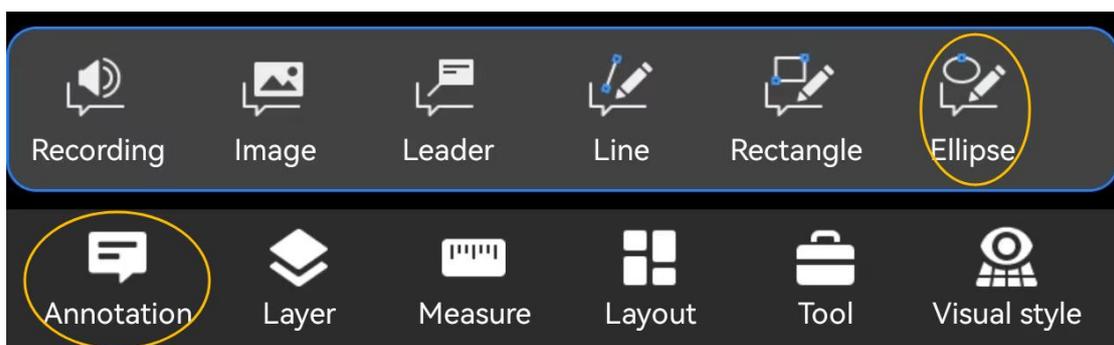
1. Click the "Annotation" button and select the "Line" command.
2. Drag your finger on the screen, and the line connecting the starting point and the end point of the finger on the screen will form the two endpoints of the line annotation.
3. Generate a line annotation when the finger is lifted.

1.4.1.9. Rectangle



1. Click the "Annotation" button and select the "Rectangle" command.
2. Drag your finger on the screen, and the line connecting the starting point and the end point of the finger on the screen will be the diagonal line of the rectangle.
3. Generate a rectangular annotation when the finger is lifted.

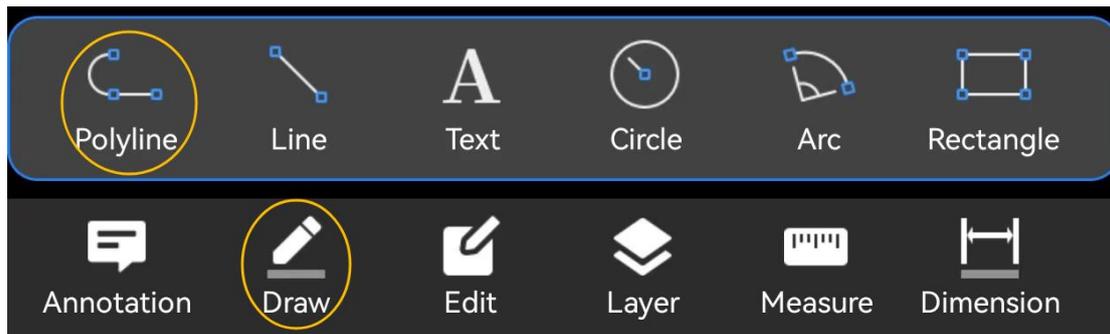
1.4.1.10. Ellipse



1. Click the "Annotation" button and select the "Ellipse" command.
2. Drag your finger on the screen to form an elliptical annotation.
3. Generate an elliptical annotation when the finger is lifted.

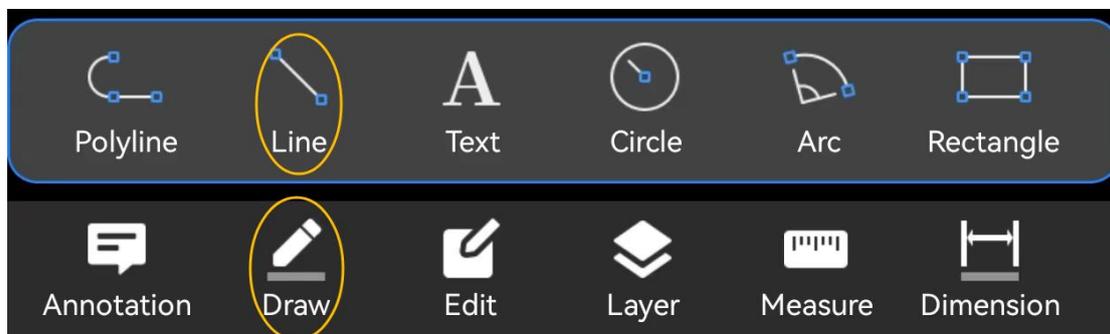
1.4.2. Draw

1.4.2.1. Polyline



1. Click the "Draw" button and select the "Polyline" command.
2. Click or drag to specify the first point of the polyline.
3. Specify the second point of the polyline.
4. Specify the third point of the polyline. If the line segment formed by the first and second points is perpendicular to the line segment formed by the second and third points, a vertical extension line will automatically display to form a right-angled effect.
5. You can click or drag to specify more points.
6. Click ✓ to finish.

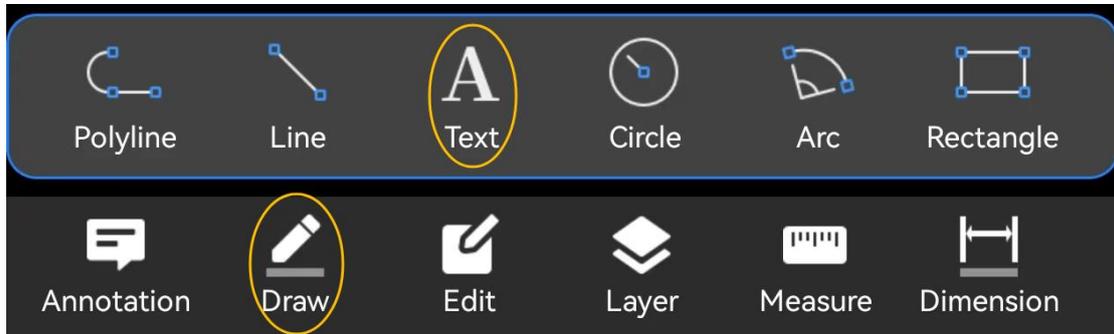
1.4.2.2. Line



1. Click the "Draw" button and select the "Line" command.
2. Click or drag to specify the first point of the line. You can specify points by inputting them on the panel.

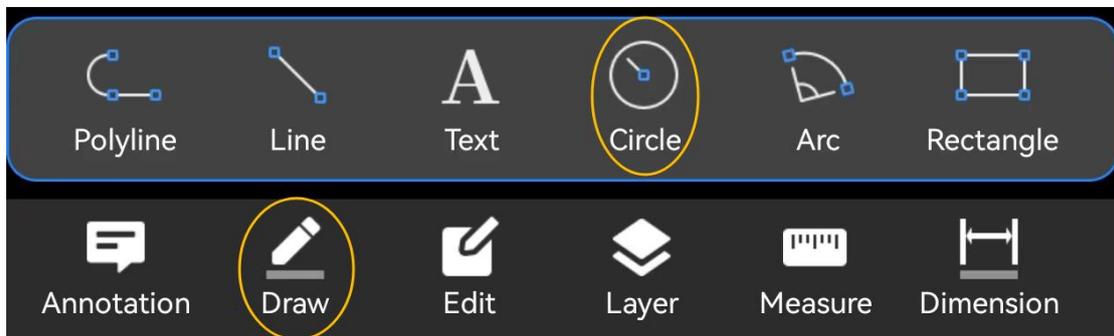
3. Click or drag with your finger to specify the second point of the line. Click ✓ to finish.

1.4.2.3. Text



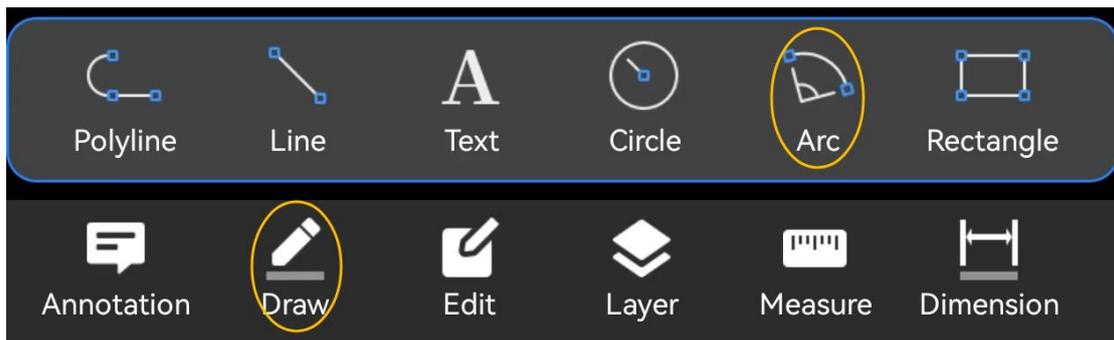
1. Click the "Draw" button and select the "Text" command.
2. Click with your finger to specify the text input position.
3. Enter the text content and click "Finish" in the upper right corner to complete the text content input. It supports changing the text size during text input.

1.4.2.4. Circle



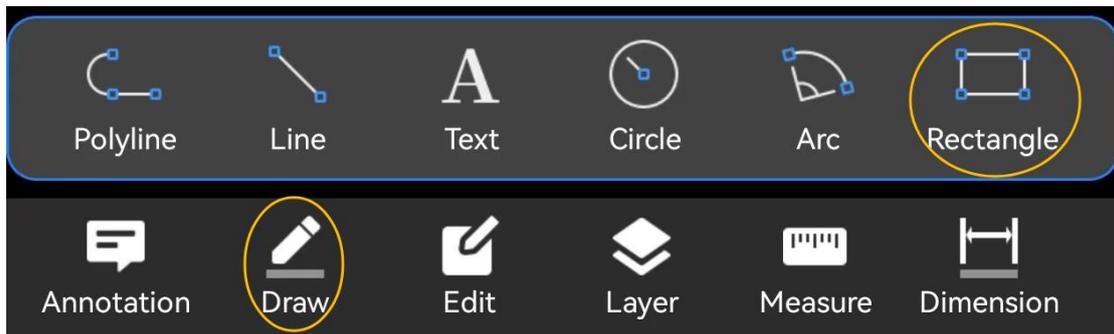
1. Click the "Draw" button and select the "Circle" command.
2. Click or drag with your finger to specify the center position of the circle.
3. Enter the radius or diameter value. It also supports using your finger to specify the radius value on the screen.
4. Click ✓ to finish.

1.4.2.5. Arc



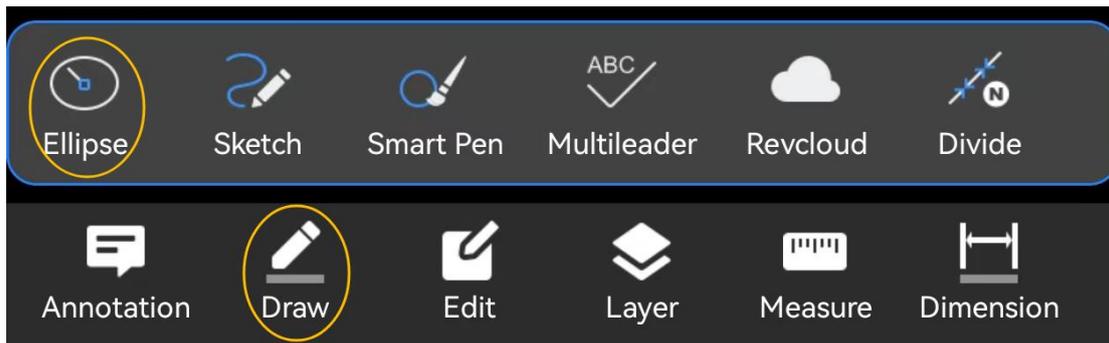
1. Click the "Draw" button and select the "Arc" command.
2. Click or drag to specify the arc start point.
3. Click or drag to specify the arc endpoint.
4. Click or drag to specify a point on the arc.
5. Click ✓ in the upper right corner to finish.

1.4.2.6. Rectangle



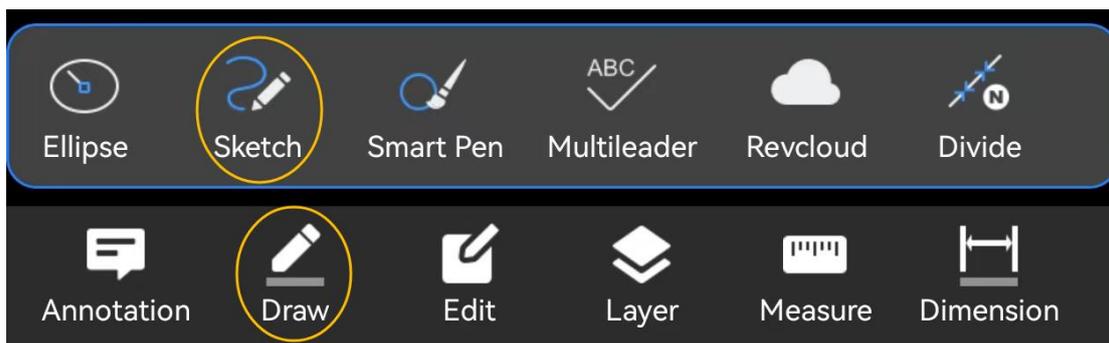
1. Click the "Draw" button and select the "Rectangle" command.
2. Click or drag to specify the first corner point of the rectangle.
3. Click or drag to specify the second corner point of the rectangle.
4. Click ✓ to finish.

1.4.2.7. Ellipse



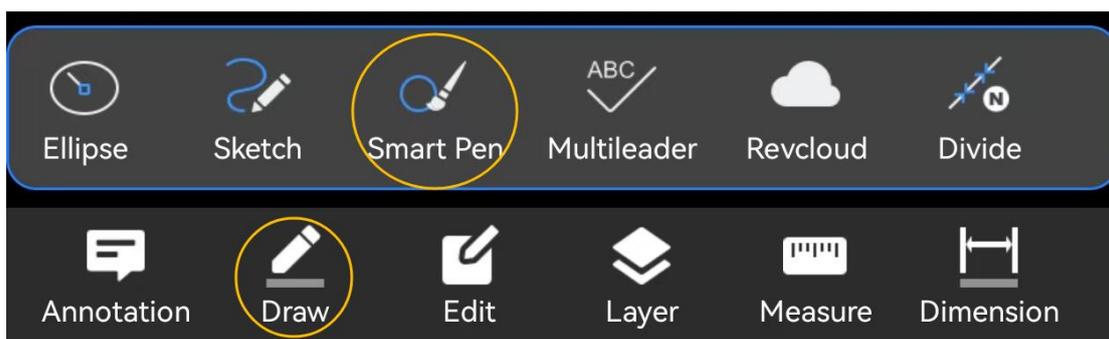
1. Click the "Draw" button and select the "Ellipse" command.
2. Click or drag to specify the axis endpoint of the ellipse.
3. Click or drag the other end point of the specified ellipse.
4. Click ✓ to finish.

1.4.2.8. Sketch



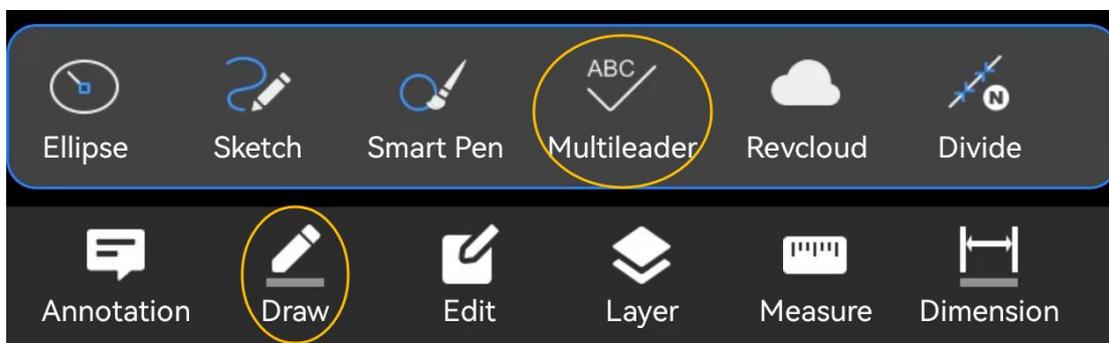
1. Click the "Draw" button and select the "Sketch" command.
2. Drag your finger on the screen to draw a sketch. You can draw multiple sketches.
3. Click ✓ to finish.

1.4.2.9. Smart Pen



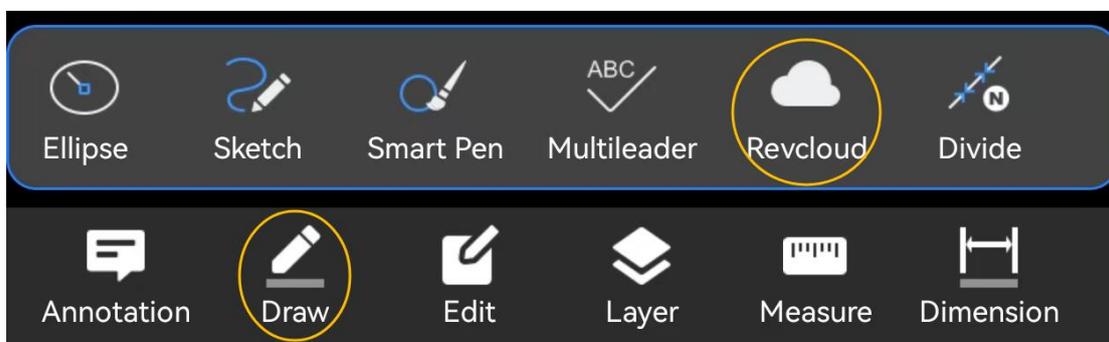
1. Click the "Draw" button and select the "Smart Pen" command. The default is continuous drawing. As your finger moves on the screen, the program automatically determines the trajectory generated by the movement and generates corresponding standard objects, such as straight lines, polylines, circles, arcs, etc. Object snapping is not supported in continuous mode. The two keywords "Single" and "Cancel" are displayed after the command prompt.
2. You can click the "Single" button to enter the mode of drawing a single object. When your finger moves on the screen, only a single entity is created, such as a straight line, polyline, circle, arc, etc. Object snapping is supported in standalone mode. The two keywords "Continuous" and "Cancel" are displayed after the command prompt.
3. Click ✓ in the upper right corner to complete.

1.4.2.10. Multileader



1. Click the "Draw" button and select the "Multileader" command.
2. Click to specify the starting point of the leader.
3. Click the second point as the end point of the leader.
4. Fill in the annotation text in the pop-up input box.
5. Click "Finish" in the upper right corner to complete the Multileader command.

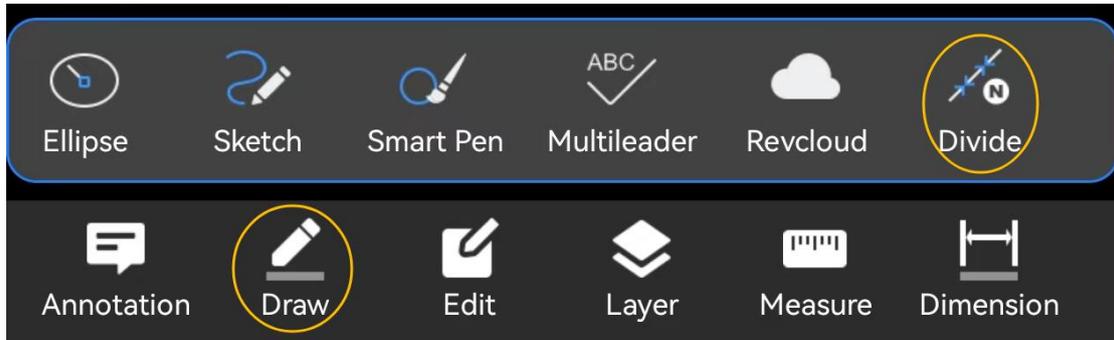
1.4.2.11. Revcloud



1. Click the "Draw" button and select the "Revcloud" command.

2. Click to specify the starting point of the Revcloud, and without leaving the screen, drag your finger to determine the other vertices of the Revcloud. When dragging your finger, each vertex of the Revcloud will be automatically picked up.
3. When you lift your finger, the Revcloud command ends.

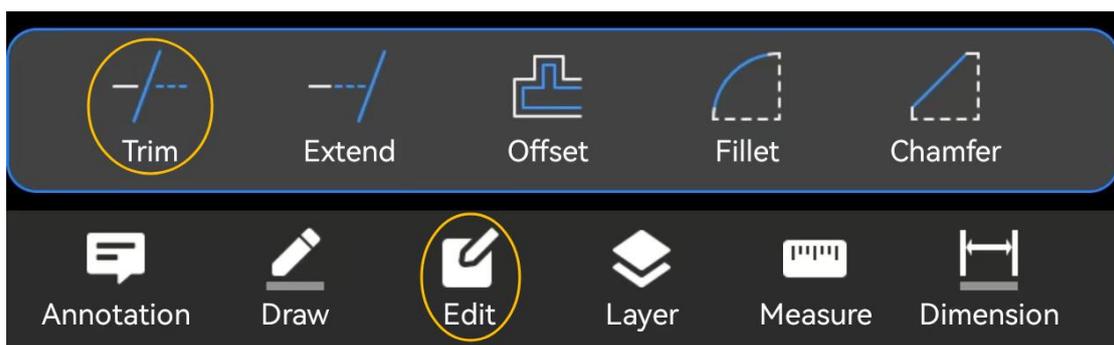
1.4.2.12. Divide



1. Click the "Draw" button and select the "Divide" command.
2. Click to select the object to be divided. You can select objects such as straight lines and polylines.
3. Enter the number of segments.
4. Click "OK" to complete the division.

1.4.3. Edit

1.4.3.1. Trim



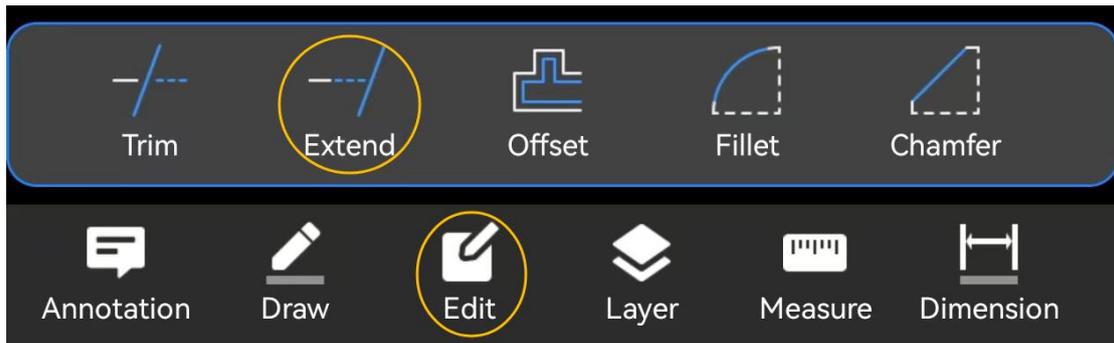
Start the "Trim" command to enter the fast trim mode.

1. Select the object to trim. Click to select the object and draw a line to select the object.

In the settings of the fast trim mode, click "Boundary Trim Mode" to switch to the boundary trim mode.

1. Select the boundary object; click to select and box to select.
2. After the boundary object is selected, click "√" in the panel to proceed to the next step; click "×" in the panel to clear the selected boundary object.
3. Select the object to be trimmed; click to select and draw a line to select.
4. Click √ in the upper right corner to complete the trimming operation.

1.4.3.2. Extend



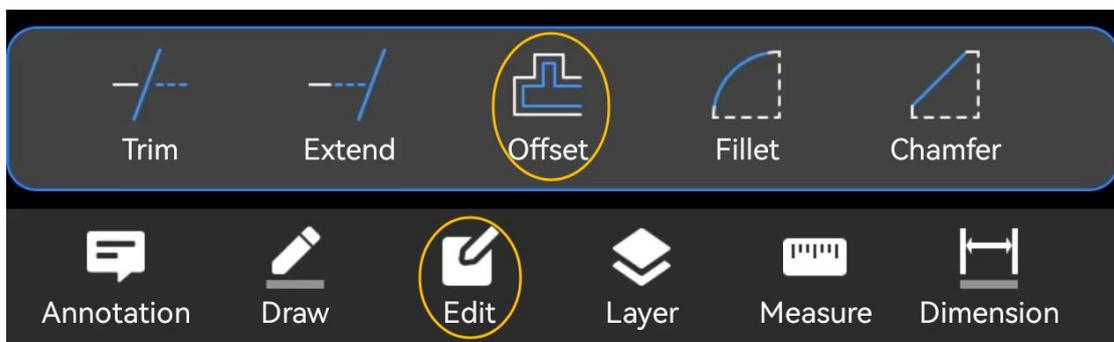
Start the "Extend" command to enter the fast extend mode.

1. Select the object to extend. Click to select and draw a line to select.

In the settings of the fast extension mode, click "Boundary Extension Mode" to switch to the boundary extension mode.

1. Select the boundary object to be extended; click selection and box selection are supported.
2. After the boundary object is selected, click "√" in the panel; click "×" in the panel to clear the selected boundary object.
3. Select the object to be extended; click selection and line selection are supported.
4. Click √ in the upper right corner to complete the extension operation.

1.4.3.3. Offset



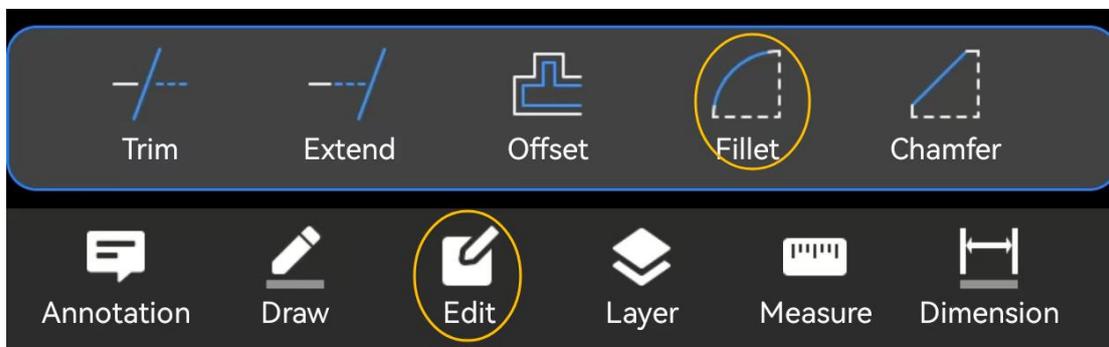
Start the "Offset" command, the default method is to specify the offset distance.

1. Specify the offset object according to the command prompt.
2. Enter the offset distance in the panel.
3. Specify the point on the offset side according to the command prompt to complete the offset of the object.
4. You can offset continuously, just select the next object.

In step 2, you can enter the offset distance in the value box, or click the "Take Points" icon to take two points from the screen as the offset distance. In "Settings," select "Specify through point" in "Specify offset method" to specify the through point to offset the selected object.

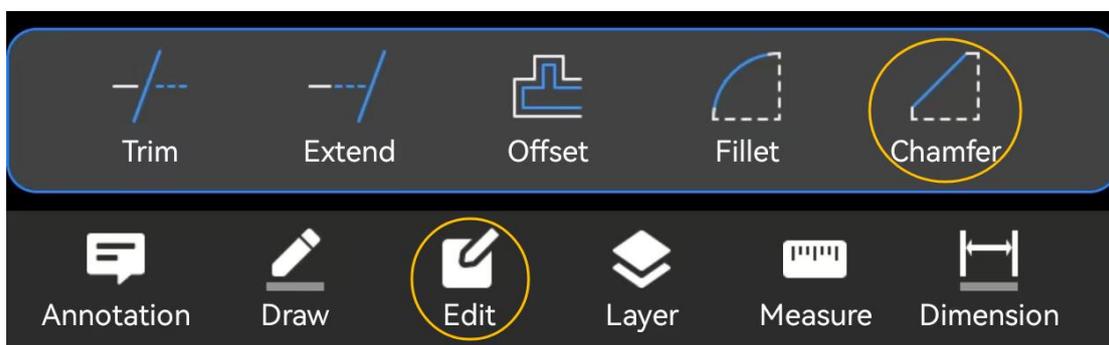
5. Click the ✓ in the upper right corner to complete the offset operation.

1.4.3.4. Fillet



1. Start the "Fillet" command, display the fillet radius input panel, and specify the fillet radius value.
2. Select the first object and the second object in turn to complete.

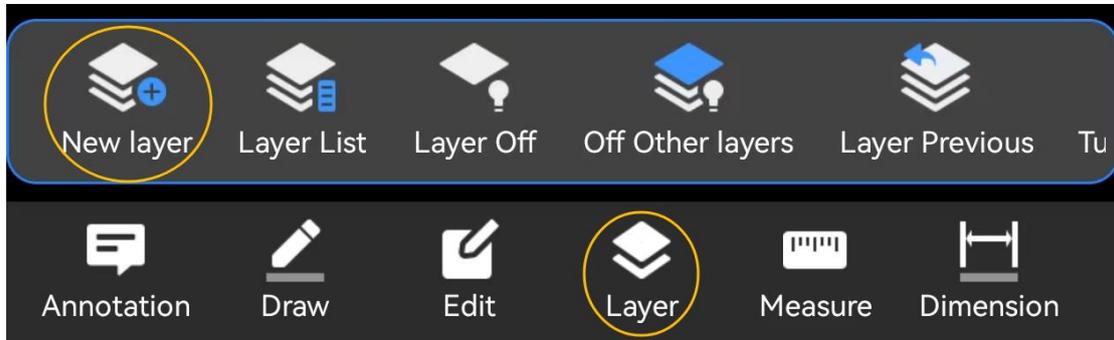
1.4.3.5. Chamfer



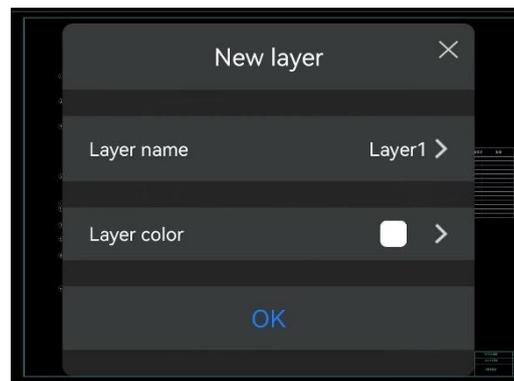
1. Start the "Chamfer" command, display the chamfer parameter input panel, support input of two chamfer distances, and also support input of chamfer distance and chamfer angle.
2. Select the first object and the second object in turn to complete.

1.4.4. Layer

1.4.4.1. New Layer

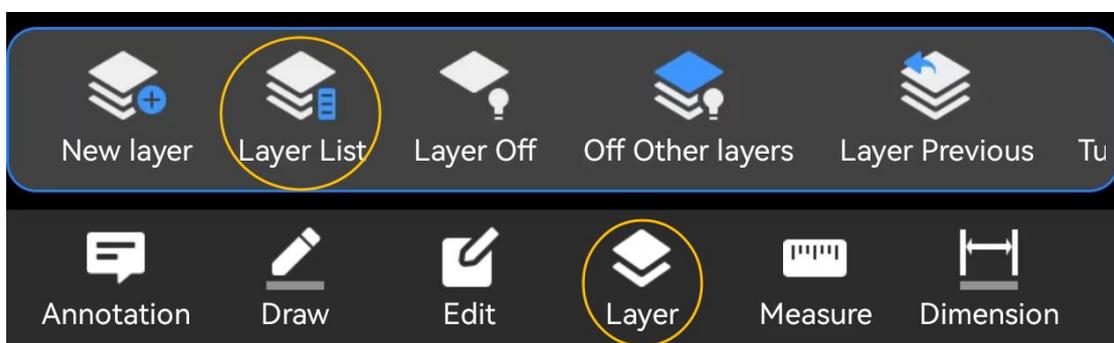


1. Start the "New Layer" command.



2. Enter the layer name in the pop-up box.
3. Select the layer color in the pop-up box.
4. Click "OK" to complete the new layer command.

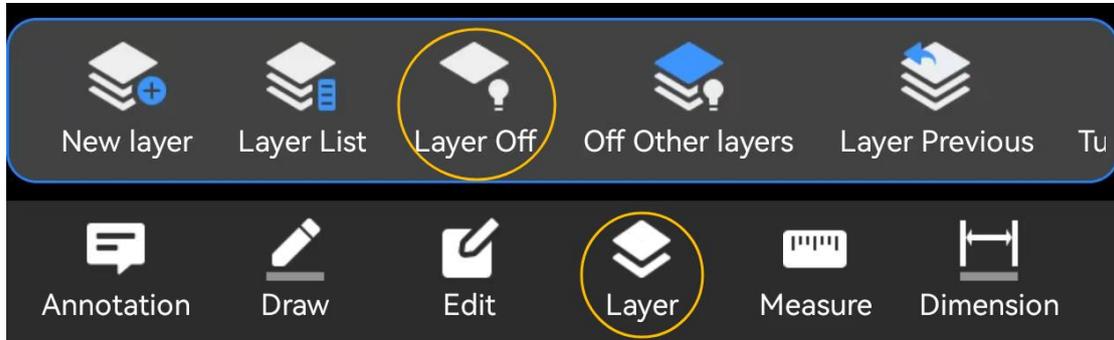
1.4.4.2. Layer List



1. Click the "Layer List" command.
2. Display all layer information of the current drawing.

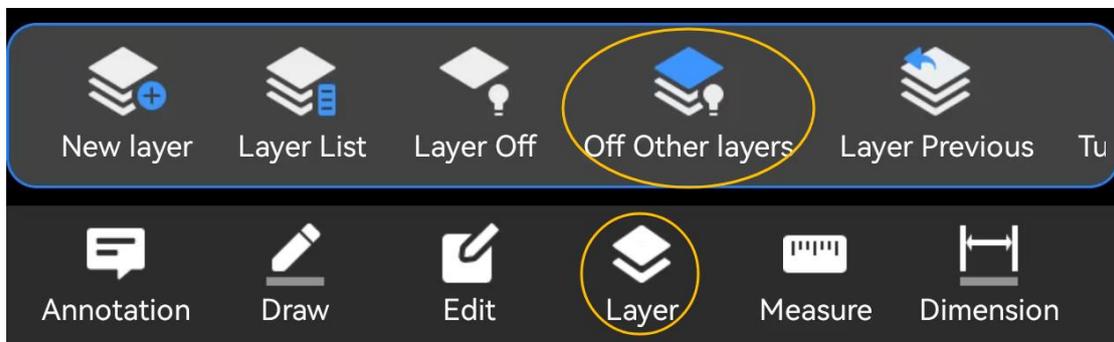
3. Support switching the current layer in the layer list, setting the selected layer as the current layer, locking and unlocking the layer.

1.4.4.3. Layer Off



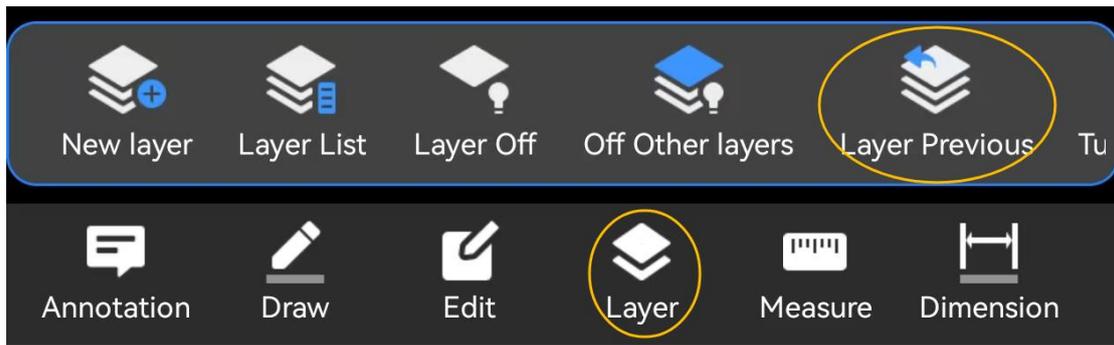
1. Start the "Layer Off" command.
2. Select an object to close the layer where the object is located. You can select multiple objects in succession to close multiple layers.
3. Click ✓ in the upper right corner to complete the operation.

1.4.4.4. Off Other Layers



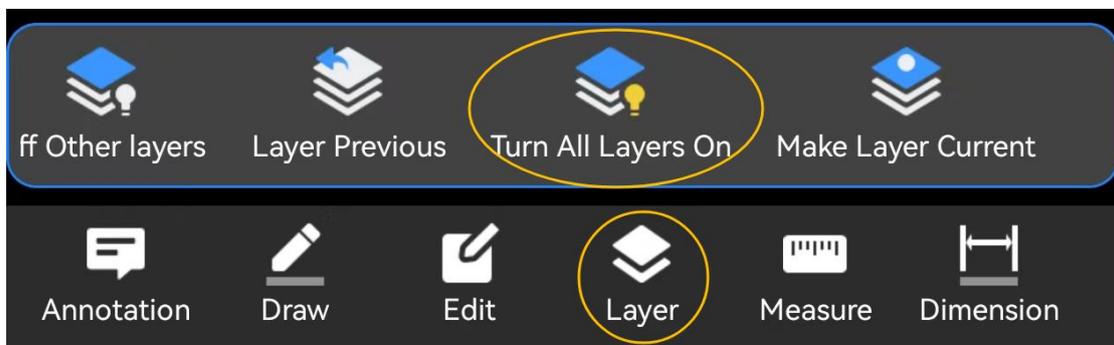
1. Click the "Off Other Layers" button.
2. "Select Object" is prompted; multiple objects can be selected continuously; click selection and box selection are supported.
3. Click the ✓ in the upper right corner; the layer where the selected object is located will be retained, and other layers will be closed.

1.4.4.5. Layer Previous



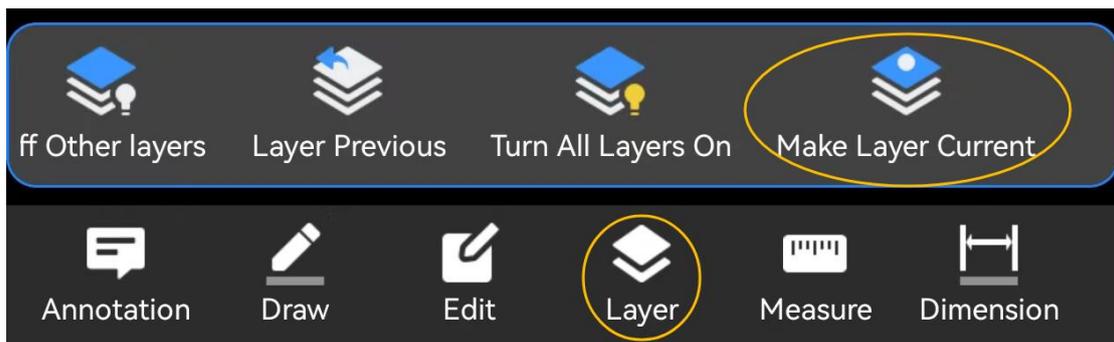
1. Click "Layer Previous" to abandon the last change or group of changes made to the layer settings.

1.4.4.6. Turn All Layers On



1. Click the "Turn All Layers On" button to open all layers.

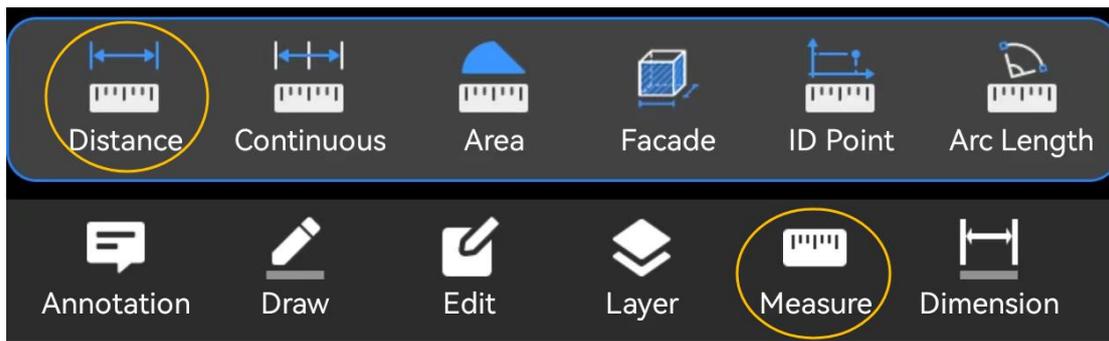
1.4.4.7. Make Layer Current



1. Click the "Make Layer Current" button.
2. The prompt "Select the object that will make its layer the current layer" appears; after clicking an object, the layer where the object is located is set as the current layer, and the command is executed.

1.4.5. Measure

1.4.5.1. Distance



Click the "Measure" button on the toolbar and select the "Distance" command on the pop-up panel. The default is single-segment measurement mode. Click the mode switch on the panel to switch to continuous measurement mode.

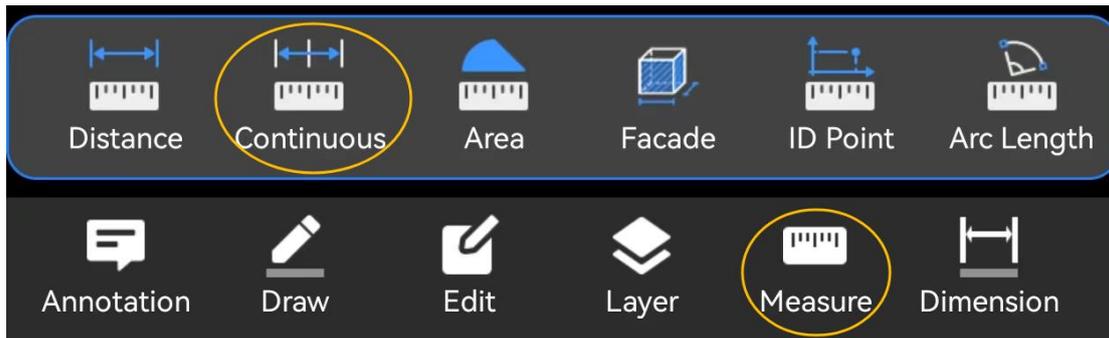
Single-segment Measurement Mode:

1. Click or drag to specify a point as the starting point for distance measurement.
2. Click or drag to specify the second point as the end point for distance measurement. The panel displays the length, angle, close button, X-axis increment, and Y-axis increment of the line.
3. You can check and mark the measurement results on the drawing.
4. Click \checkmark to complete the measurement.

Continuous Measurement Mode:

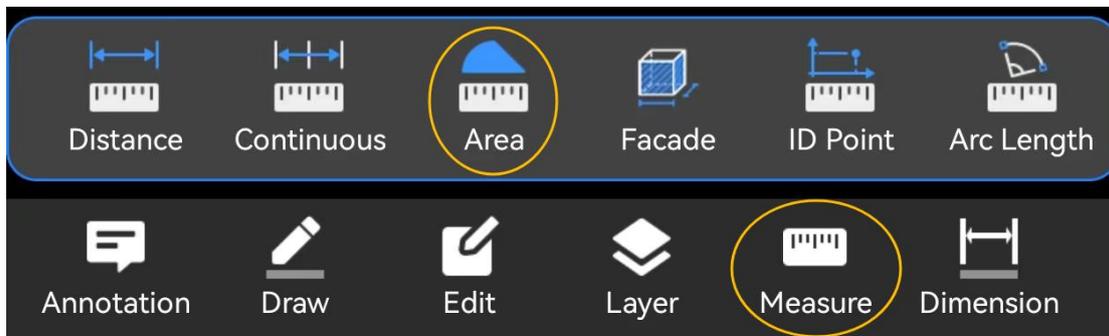
1. Click or drag to specify a point as the starting point for distance measurement.
2. Click or drag to specify the second point.
3. You can continue to click or drag to specify the third point, or more points, and the total length of each line is displayed on the panel.
4. You can check and mark the measurement results on the drawing.
5. Click \checkmark to complete the measurement.

1.4.5.2. Continuous Measurement



1. Click the "Measure" button and select the "Continuous" command.
2. Specify the first point of the first segment length.
3. Specify the second point of the second segment length.
4. Specify the first point of the second segment length.
5. Specify the second point of the second segment length.
6. Repeat steps 4 and 5 to continuously measure the length of multiple segments.
7. You can mark the result on the graph after checking.
8. Click ✓ to complete the measurement.

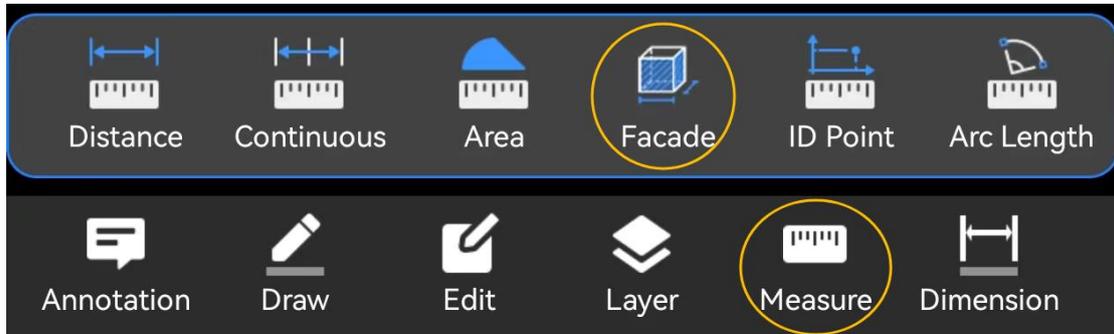
1.4.5.3. Area



1. Click the "Measure" button on the toolbar and select the "Area" command. The Area Measurement panel pops up.
2. Click or drag to specify a point as the starting point for measuring the area.
3. Click or drag to specify the next point of the measured area. You can click "New" to abandon the current area measurement and start a new area measurement. After clicking "New," return to step 1.
4. Click or drag to specify the next point of the measured area. The panel displays the area and perimeter of the area enclosed by the closed polyline.
5. Click or drag to specify the next point of the measured area. Same as step 4.

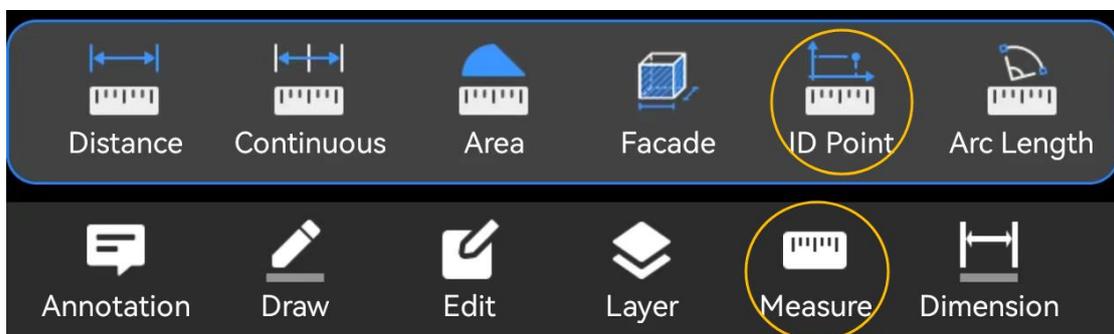
6. You can long press in the result box and select "Copy" to copy the measurement result. The measurement result can be marked on the map.
7. Click ✓ to complete the measurement.

1.4.5.4. Facade



1. Click the "Measure" button and select the "Facade" command.
2. Specify a point on the facade boundary.
3. Specify the second point on the facade boundary.
4. Specify all points on the facade boundary.
5. Enter the height value in the "Height" column of the panel.
6. Click the "Calculate" button to display the side area value.
7. You can long press in the result box and select "Copy" to copy the measurement result. The measurement result can be marked on the drawing
8. Click ✓ to complete the measurement.

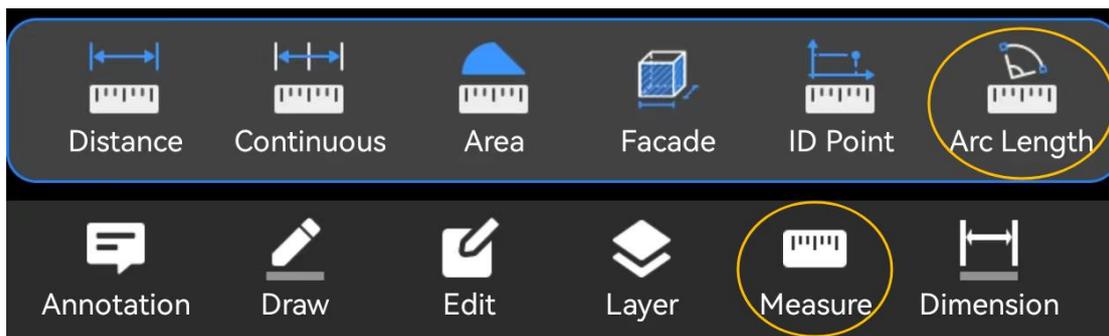
1.4.5.5. ID Point



1. Click the "Measure" button on the toolbar and select the "ID Point" command. The coordinate measurement panel pops up.

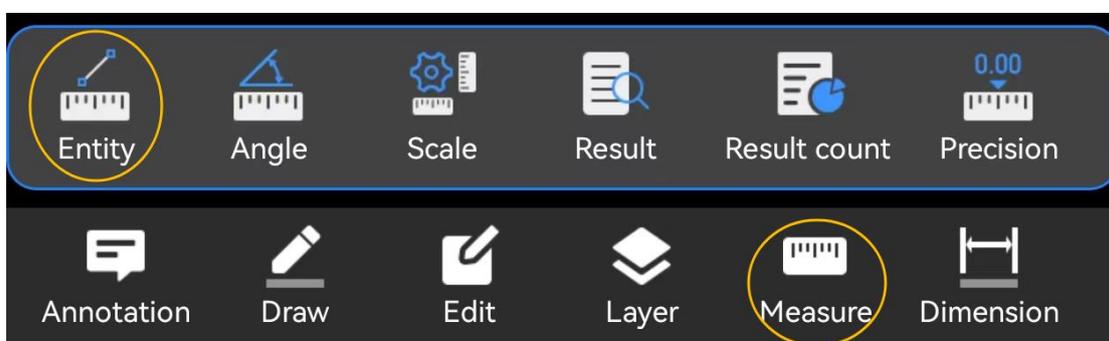
2. Point your finger in the circle of the ID Point icon and drag it. The point pointed by the arrow is the measurement point. You can switch the coordinate system as needed to measure the coordinates of points in different coordinate systems.
3. The coordinate value of the point pointed by the arrow is displayed in real-time in the panel.
4. You can long press in the result box and select "Copy" to copy the measurement result.
5. Click × to complete the measurement.

1.4.5.6. Arc Length



1. Click the "Measure" button and select the "Arc Length" command, the arc length measurement panel pops up.
2. Click or drag to specify the starting point of the arc. The point picked up when the finger is lifted is the starting point of the measurement.
3. Click or drag to specify the endpoint of the arc.
4. Click or drag to specify a point on the arc.
5. The radius, total angle, arc length, and chord length of the arc are displayed in the panel; you can press and hold in the result box and select "Copy" to copy the measurement result.
6. Click × to complete the measurement.

1.4.5.7. Entity



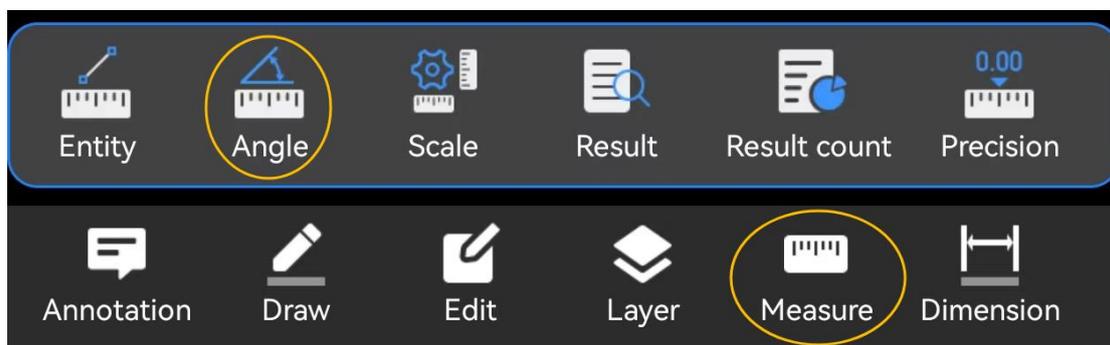
The "Entity" command allows you to measure specific properties of different objects. It supports only single selections and displays measurement results for one object at a time, enabling loop measurement.

- Line: Displays length and angle.
- Circle: Displays radius and area.
- Arc: Displays radius, total angle, arc length, and chord length.
- Polyline: Displays area and total length.

Steps:

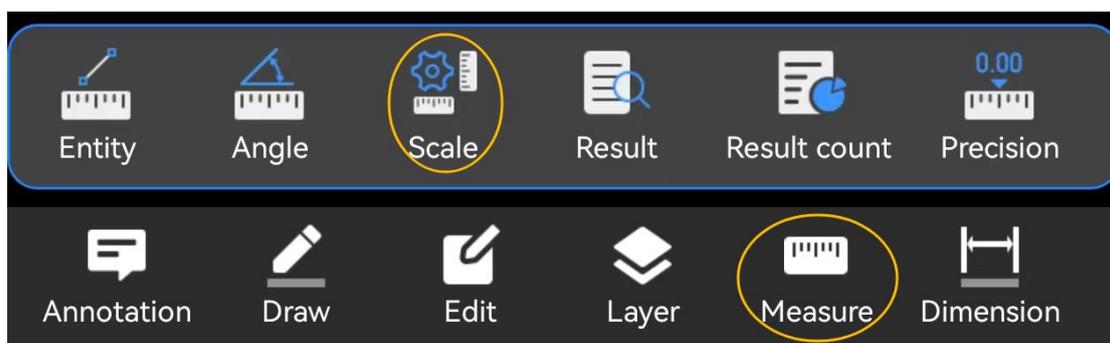
1. Click the "Measure" button on the toolbar and select the "Entity" command to open the Entity panel.
2. Select the object to be measured.
3. The measurement results are displayed in the panel. Long press to copy the results.
4. Click × to complete the measurement.

1.4.5.8. Angle



1. Click the "Measure" button on the toolbar and select the "Angle" command.
2. Specify the first endpoint of the angle according to the command prompt.
3. Specify the vertex of the angle.
4. Specify the second endpoint of the angle.
5. The angle value is displayed in the panel. By default, the angle is measured counterclockwise from the first to the second endpoint, following the angle type and accuracy settings. If the "Clockwise" option is enabled in the accuracy settings, the angle is measured clockwise from the first endpoint to the second endpoint.
6. Click × to complete the measurement.

1.4.5.9. Scale



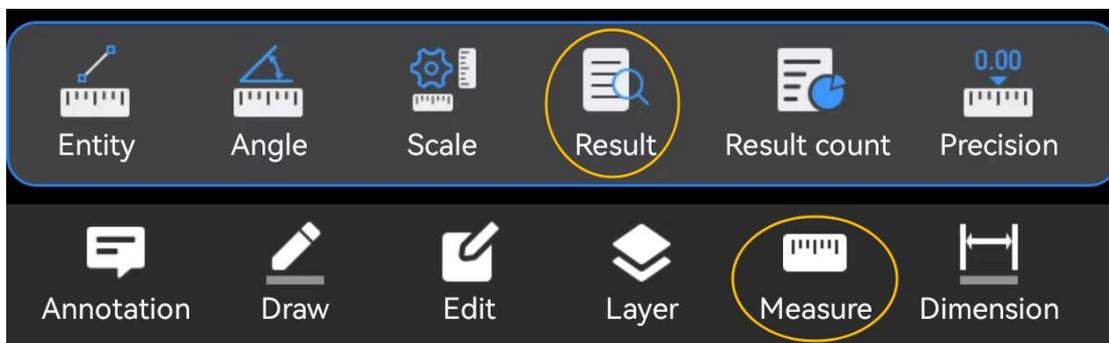
You can select and set the scale of your drawing. The default scales are 1:1, 1:50, and 1:100.

- When the model space is first opened, the default scale is 1:1.
- In drawing space, the scale is determined by the first viewport if multiple viewports are present.

Steps:

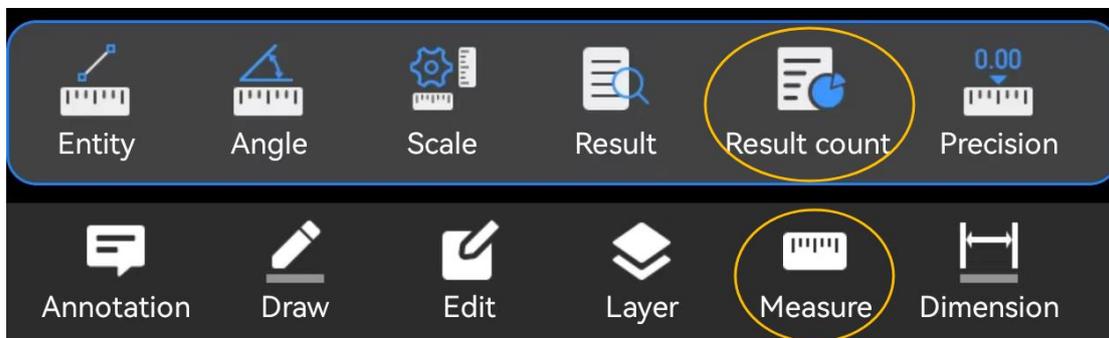
1. Click the "Measure" button on the toolbar and select the "Scale" command.
2. Choose a new scale from the current scale list and click it to set it as the current scale.
3. To add a new scale, click the "+" in the upper right corner and add the new scale to the list.
4. Click the upper left corner to return and complete the scale setting.

1.4.5.10. Result



1. Click the "Measure" button on the toolbar and select the "Result" command.
2. View the recorded measurement values in the Result list.
3. Rename measurement records, delete them individually, clear all, or export them to a document.
4. Click the upper left corner to return and end the command.

1.4.5.11. Result Count



1. Click the "Measure" button and select the "Result count" command.

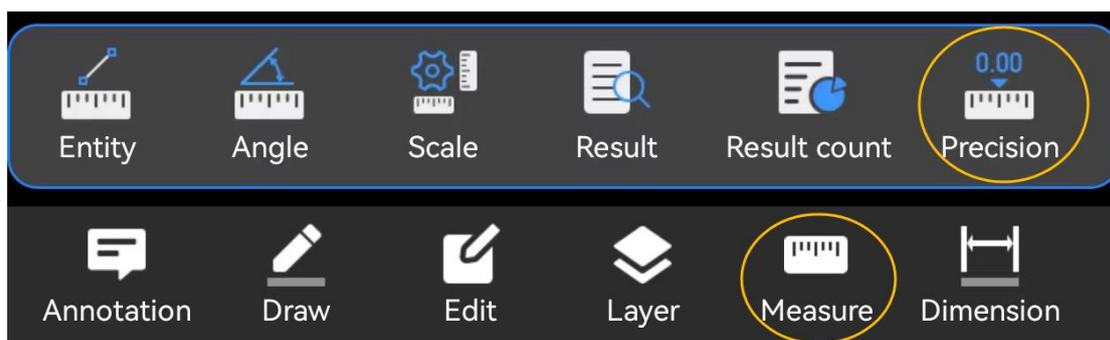
Serial number	Color	Length
1	●	5056
2	●	4252
3	●	8000

2. If "Mark the results on the drawing after checking" is enabled, the measured results will appear in the "Result Count" list, including length, area, and side area.

3. Filter results by view range and color in the "Result Count" list. Click "Export" to export the result list to a table.

4. Click Close to end the command.

1.4.5.12. Precision



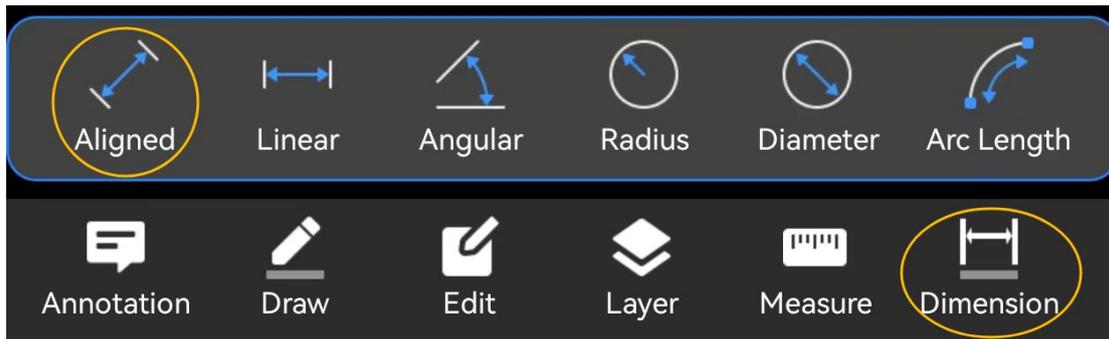
1. Click the "Measure" button and select the "Precision" command.

2. Modify the settings on the precision settings page.

3. Click Return in the upper left corner to complete the precision setting.

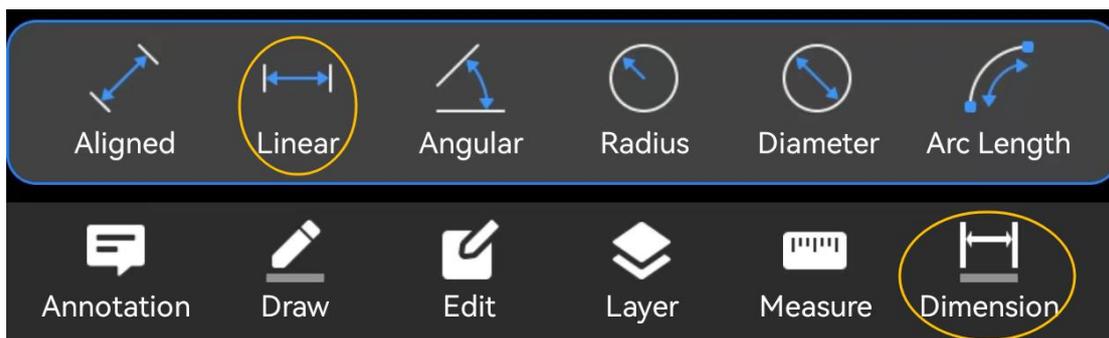
1.4.6. Dimension

1.4.6.1. Aligned



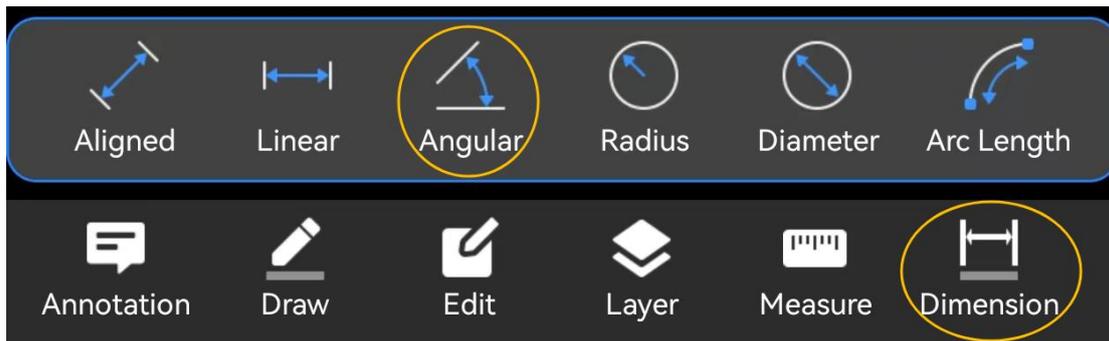
1. Click the "Dimension" button and select the "Aligned" command.
2. Specify the origin of the first extension line according to the command prompt.
3. Specify the origin of the second extension line according to the command prompt.
4. Specify the dimension line position. The command is completed when you lift your finger.

1.4.6.2. Linear Dimensioning



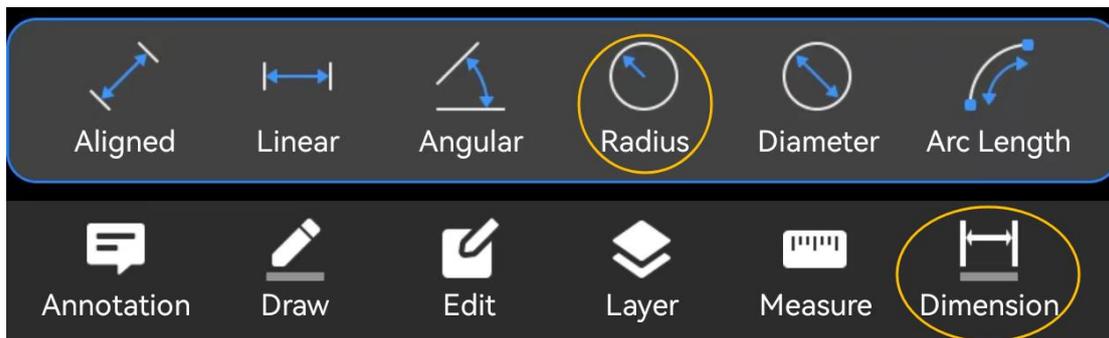
1. Click the "Dimension" button and select the "Linear" command.
2. Specify the first point according to the command prompt.
3. Specify the second point according to the command prompt.
4. Drag the translation icon to specify the dimension line position, switching between horizontal and vertical linear dimensioning. The command is completed when you lift your finger.

1.4.6.3. Angular



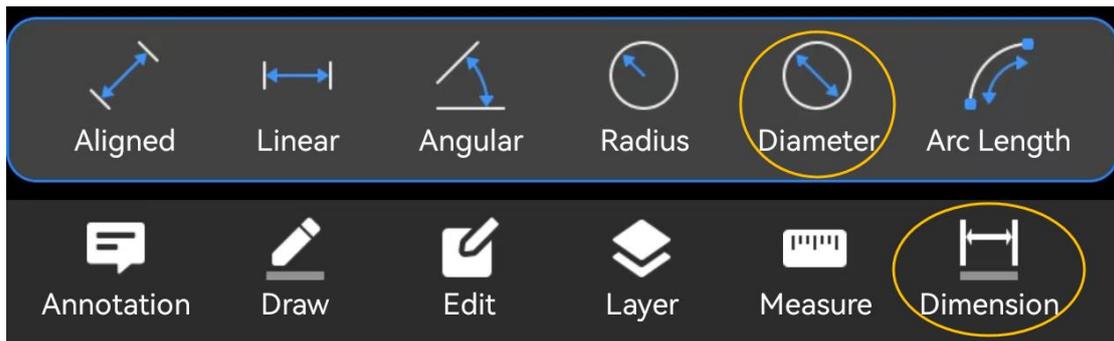
1. Click the "Dimension" button and select the "Angular" command.
2. Specify the first endpoint according to the command prompt.
3. Specify the vertex according to the command prompt.
4. Specify the second endpoint according to the command prompt.
5. Drag the arrow to adjust the position of the dimension arc. The command is completed when you lift your finger.

1.4.6.4. Radius Dimension



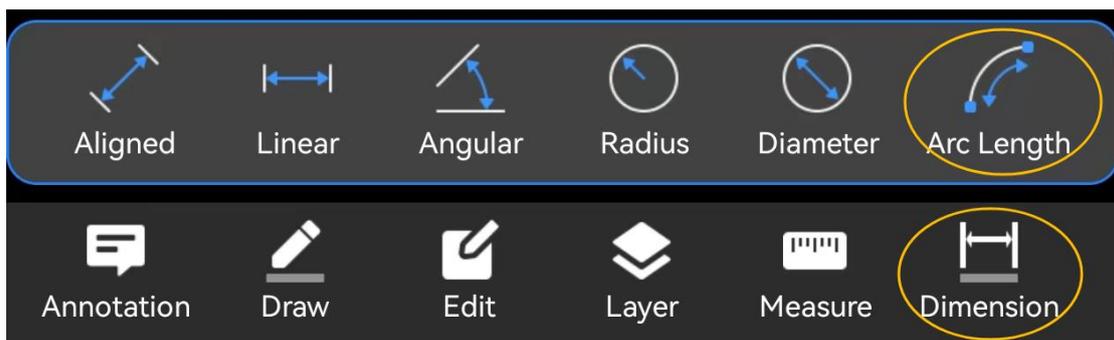
1. Click the "Dimension" button and select the "Radius" command.
2. Select a circle or arc; the selected object will fade. Only one circle or arc object can be selected at a time.
3. Click to specify the dimension line position, and drag the icon to adjust the position of the radius dimension. The command is completed when you lift your finger.

1.4.6.5. Diameter



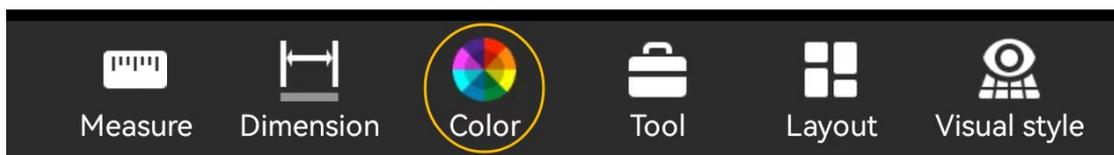
1. Click the "Dimension" button and select the "Diameter" command.
2. Select a circle or arc; the selected object will fade. Only one circle or arc object can be selected at a time.
3. Click to specify the dimension line position, and drag the icon to adjust the position of the diameter dimension. The command is completed when you lift your finger.

1.4.6.6. Arc Length

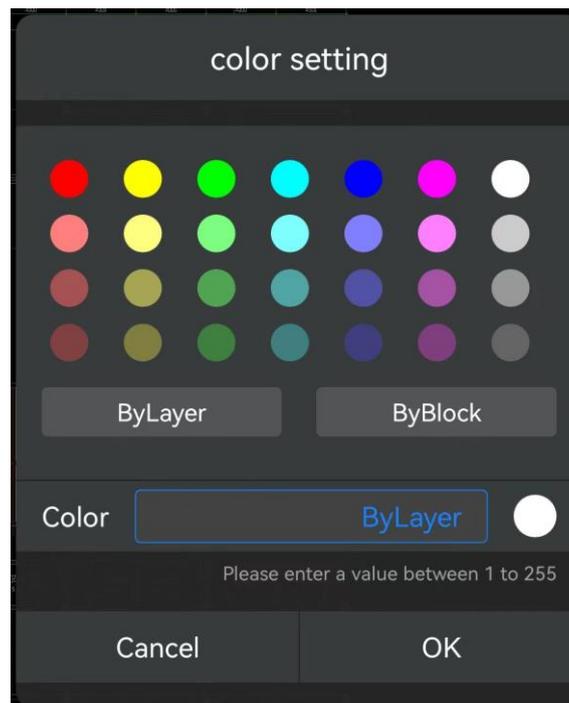


1. Click the "Dimension" button and select the "Arc Length" command.
2. Select a circle or arc; the selected object will fade. Only one circle or arc object can be selected at a time.
3. Click to specify the dimension line position, and drag the icon to adjust the position of the arc length dimension. The command is completed when you lift your finger.

1.4.7. Color



1. Click the "Color" command to open the color setting panel.

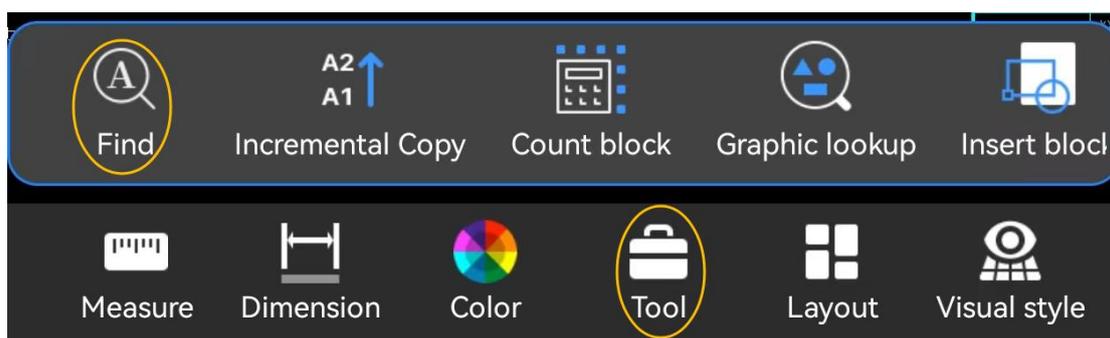


2. Select any color and click "OK."

3. When executing draw entity command, you can draw a new entity using the selected color.

1.4.8. Tool

1.4.8.1. Find



Text Search Operation:

1. Click the "Tool" button and select the "Find" command.

2. Enter keywords in the search bar.

3. Click the "Find" button or click an item in the result list to jump to the location of the search item.

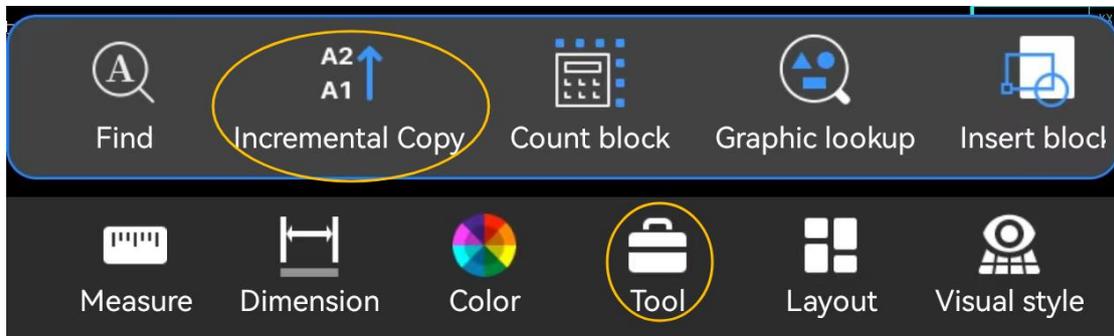
4. Click × to end the text search.

Text Replacement Operation:

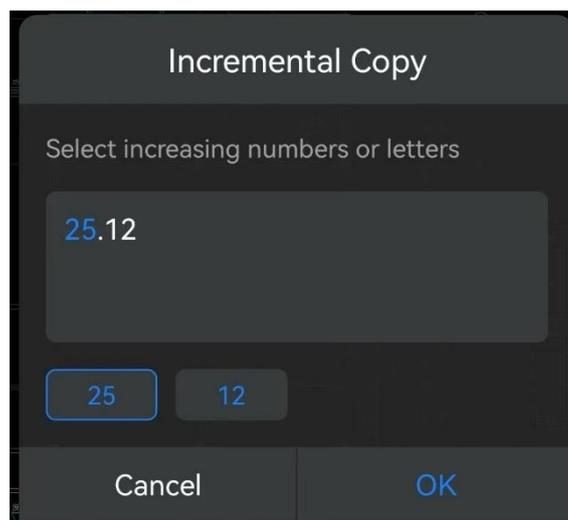
In advanced drawing mode, you can search for and replace text. Follow these steps:

1. Enter the search keyword in the text search bar and select the "Replace" option.
2. Enter the replacement content in the Replace bar.
3. Click the "Replace" button, or click "Replace All" to replace all instances.
4. Click × to end text search and replacement.

1.4.8.2. Text Increment



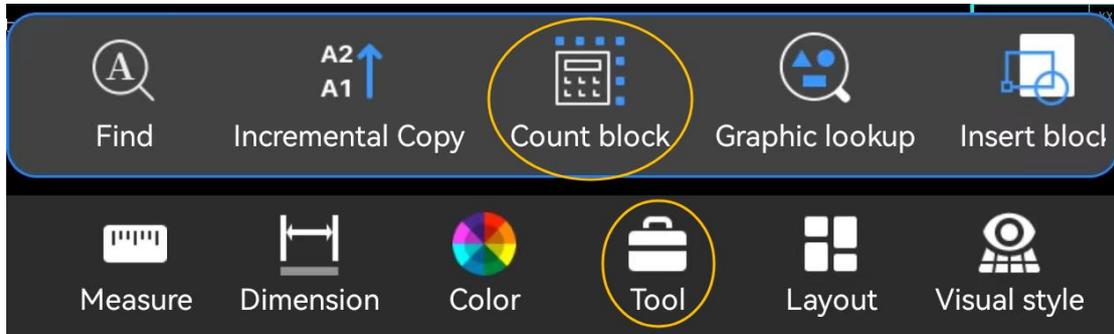
1. Click the "Tool" button and select the "Incremental Copy" command.
2. Select the text to be incremented in the drawing.



3. Choose the number or letter to increment in the "Incremental Copy" pop-up box.
4. Click "OK".
5. Drag the generated increment result and adjust its position.

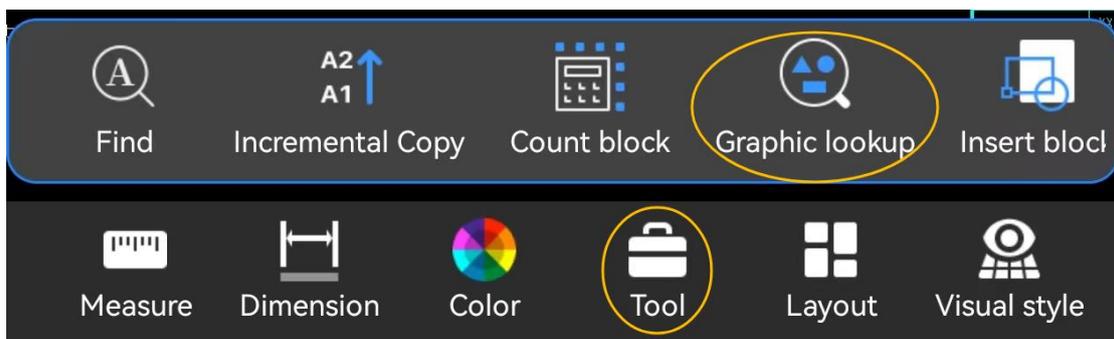
6. Click "Next" on the panel to generate the next result.
7. Adjust the position of the generated result.
8. Click ✓ on the panel to end the command.

1.4.8.3. Count Block



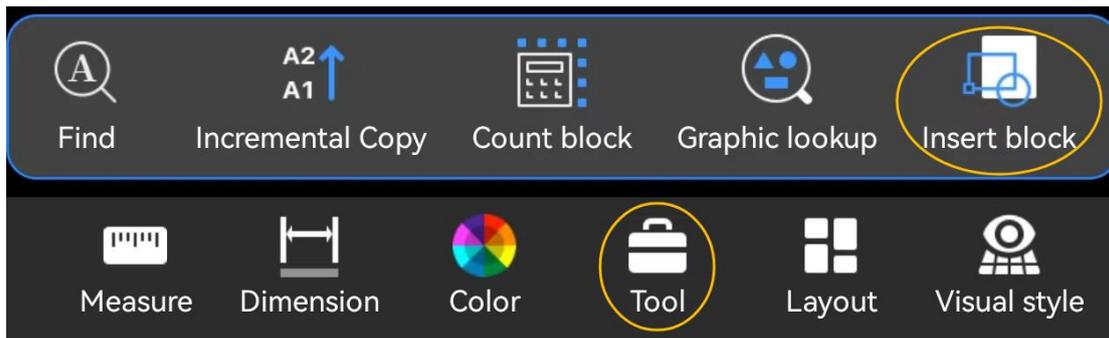
1. Click the "Tool" button and select the "Count Block" command.
2. Select the block to be counted.
3. The "Number of Blocks Counted" dialog box pops up, displaying the number of blocks in the default state. You can modify the statistical conditions as needed.
4. Click the × in the pop-up box to complete the operation.

1.4.8.4. Graphic Lookup



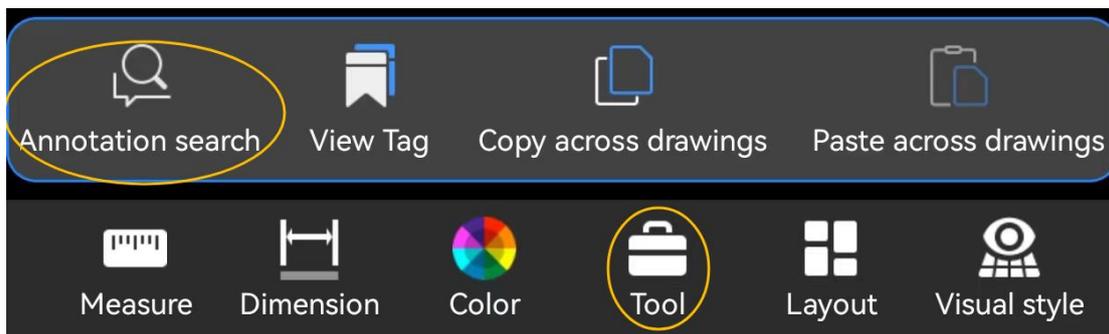
1. Click the "Tool" button and select the "Graphic Lookup" command.
2. Select the graphics to be searched. You can select one or more graphics. After selecting, click the ✓ in the upper right corner to proceed to the next step.
3. The search result list will be displayed. Click an item in the list to switch the view to the position of the result item.
4. Click the × in the upper left corner to end the command.

1.4.8.5. Insert Block



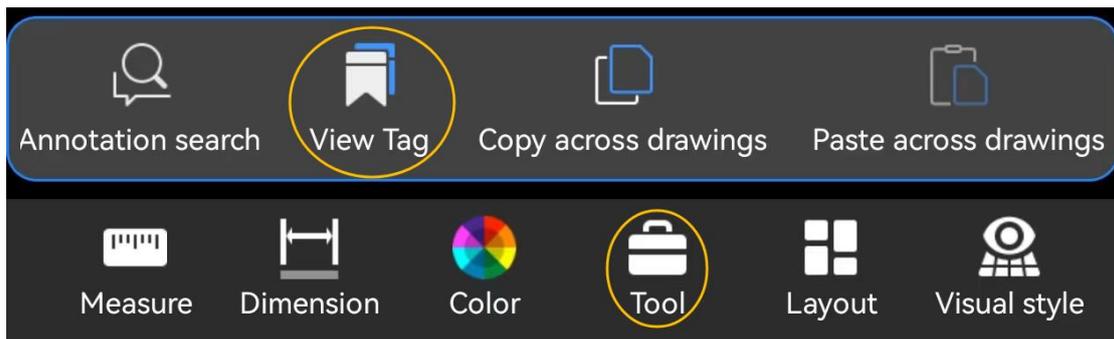
1. Click the "Tool" button and select the "Insert Block" command.
2. Select a block from the "My Block Library" or "Current Drawing" page to insert into the current drawing.
3. Specify the location to insert the block.
4. Specify the insertion scale and angle.
5. Click ✓ to complete the block insertion operation.

1.4.8.6. Annotation Search



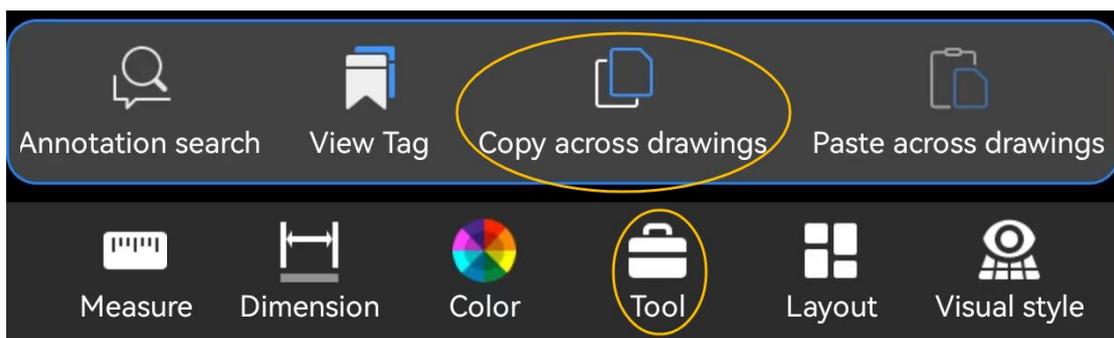
1. Click the "Tool" button and select the "Annotation Search" command.
2. Select the annotation type to be searched.
3. Specify the search range, which defaults to the entire map range.
4. Click "OK" to perform the search and display the search results.
5. Click × to end the command.

1.4.8.7. View Tag



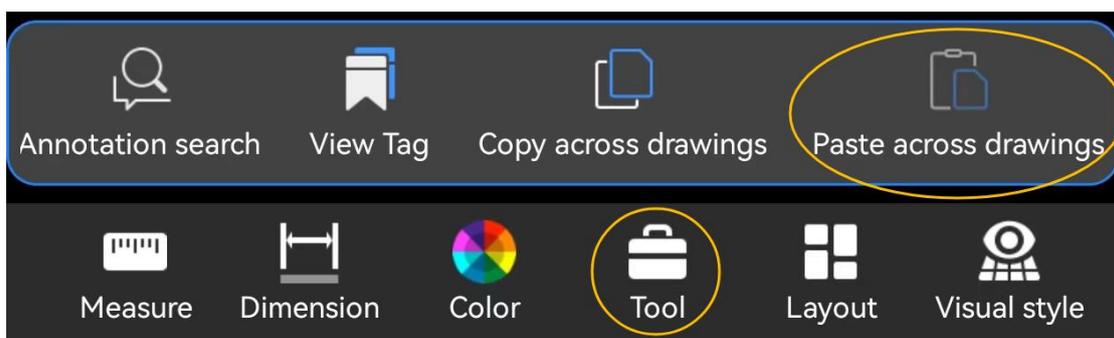
1. Click the "Tool" button and select the "View Tag" command.
2. If there is a view tag in the list, click its name to view the content. If the list is empty, create a new view tag.
3. Click × to end the command.

1.4.8.8. Copy Across Drawings



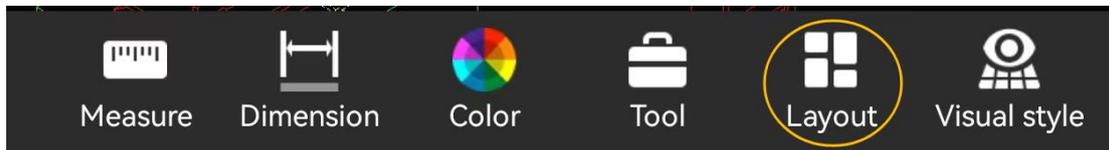
1. Click the "Tool" button and select the "Copy Across Drawings" command.
2. Select the object to be copied (the selected object will be grayed out) and click ✓ to complete the selection.
3. Click × to close the current drawing.

1.4.8.9. Paste Across Drawings

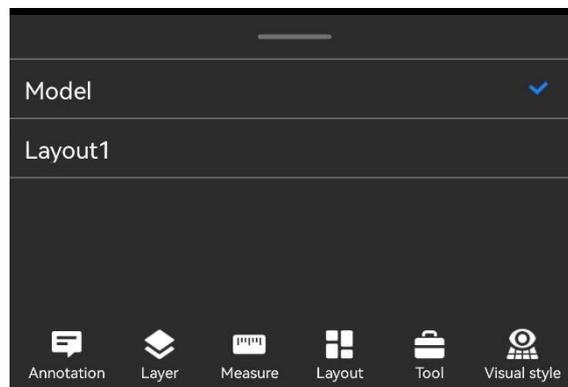


1. Open the drawing where you want to paste the object.
2. Click the "Tools" button and select the "Paste Across Drawings" command.
3. Click or drag to select the paste base point and click "✓" to complete the paste.

1.4.9. Layout

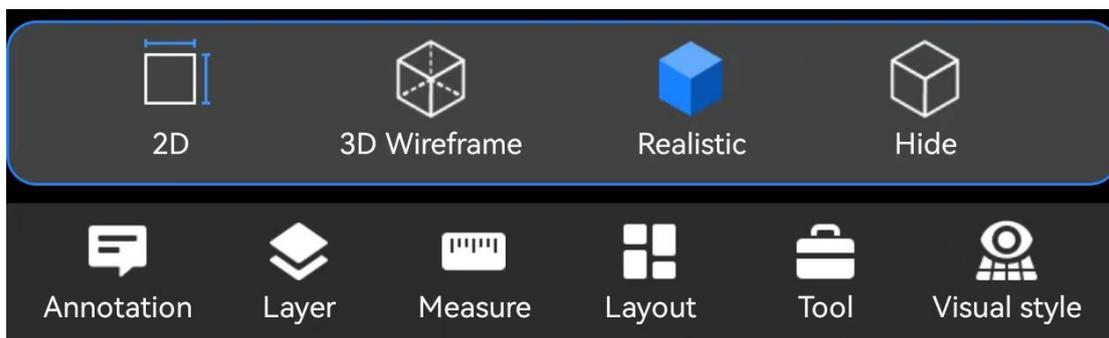


1. Select the "Layout" command to display the layout list.



2. In the layout list, select the desired layout to switch the view to that layout.
3. Click a blank area on the screen to close the layout list display.

1.4.10. Visual Style

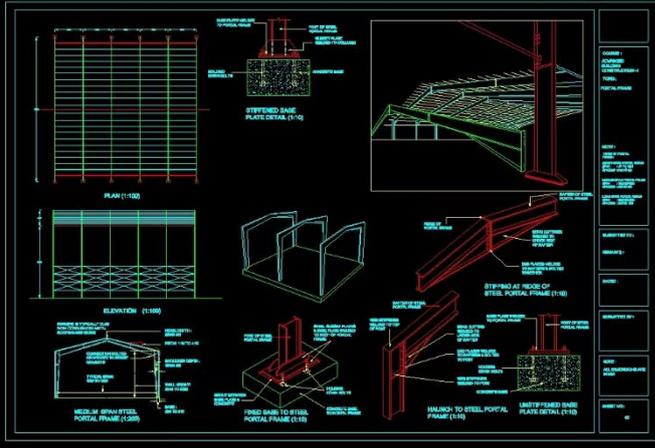
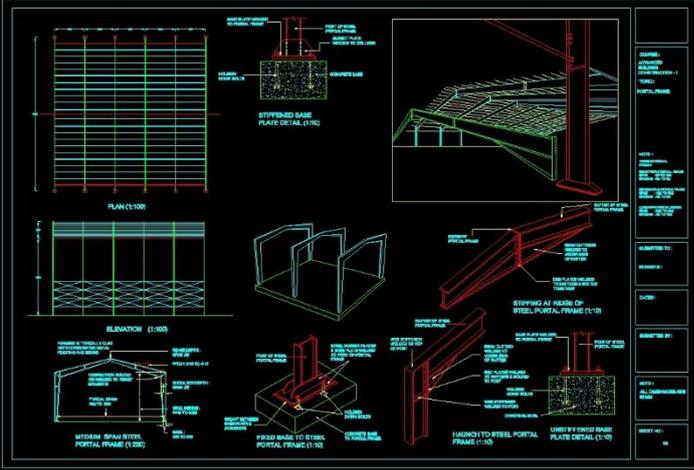


1. Select "Visual Style" to open a menu with four visual styles: 2D, 3D Wireframe, 3D Real, and 3D Hidden. The current mode of the drawing will be selected.
2. Switch between 2D and 3D visual styles as needed.
3. Click a blank area on the screen to close the visual style menu.

1.4.11. Multi-image Viewing

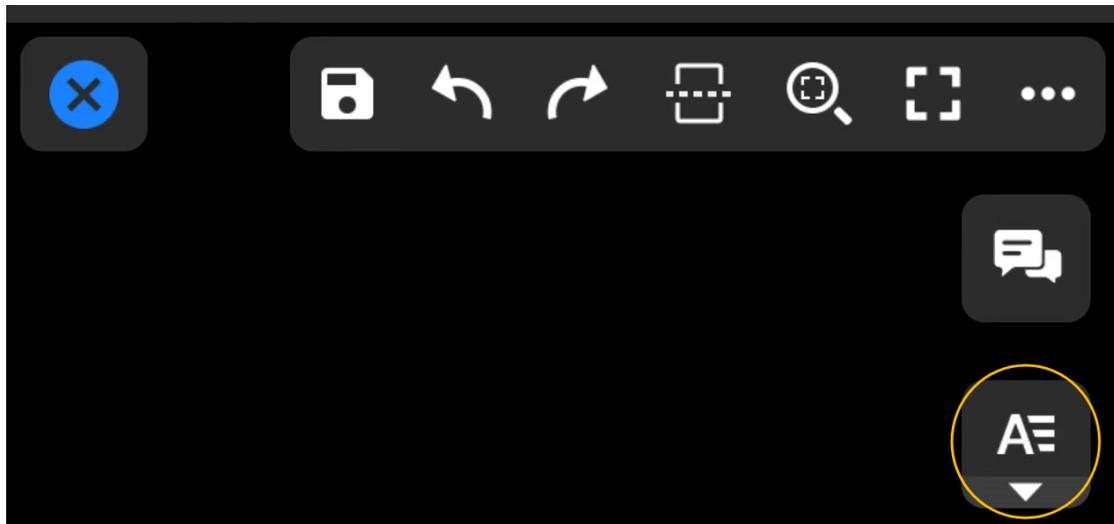


1. Start multi-image viewing.
2. When the prompt pop-up box appears for multi-image viewing, click "OK" to open the second drawing.
3. Select the location where the drawing will open.
4. Choose the drawing to open from the list.
5. Compare the two opened drawings side by side.



6. Click the × in the upper left corner of one of the drawings to end the command.

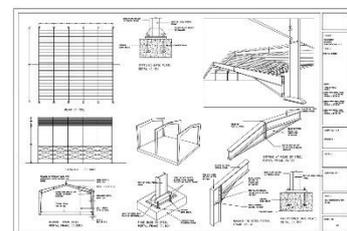
1.4.12. Common Words



1. Click the common word icon.
2. In the common word list, click a word to specify its insertion position in the drawing. If the list is empty, long press to add common words.
3. Repeat step 2 to insert the required text multiple times. The command ends once all insertions are completed.

1.4.13. PDF to CAD

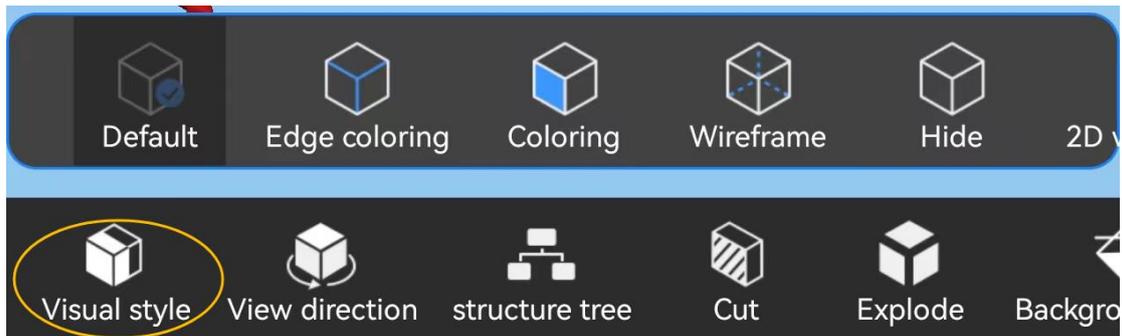
1. Open the PDF file to be converted.
2. Click the "PDF to CAD" button at the bottom.
3. A prompt box will appear, informing you of the save location for the generated CAD file. Click "OK".
4. Click the "Conversion List" icon in the upper right corner to view the conversion status of the PDF file.
5. Click the arrow on the right side of the successfully converted PDF file, then click "View Now" in the prompt box to jump to the location of the generated CAD file.
6. Click to open the CAD file at its location.



1.4.14. 3D View

1.4.14.1. Visual Style

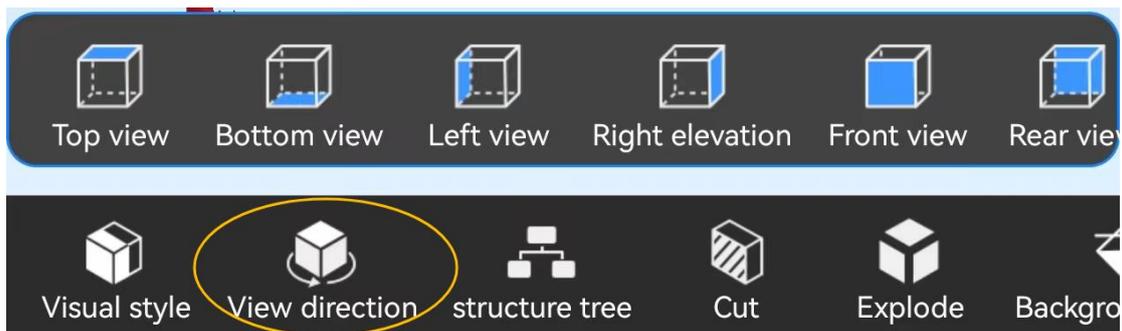
1. Open a 3D model.
2. Click the "Visual Style" menu, which supports nine visual styles: Default, Edge Coloring, Coloring, Wireframe, Hide, 2D Wireframe, Sketchy, X-Ray, and Concept.



3. Click any visual style to apply it.

1.4.14.2. View Direction

1. Open a 3D model.
2. Click the "View Direction" menu, which supports ten view directions: Top View, Bottom View, Left View, Right View, Front View, Rear View, Southwest, Southeast, Northeast, and Northwest.

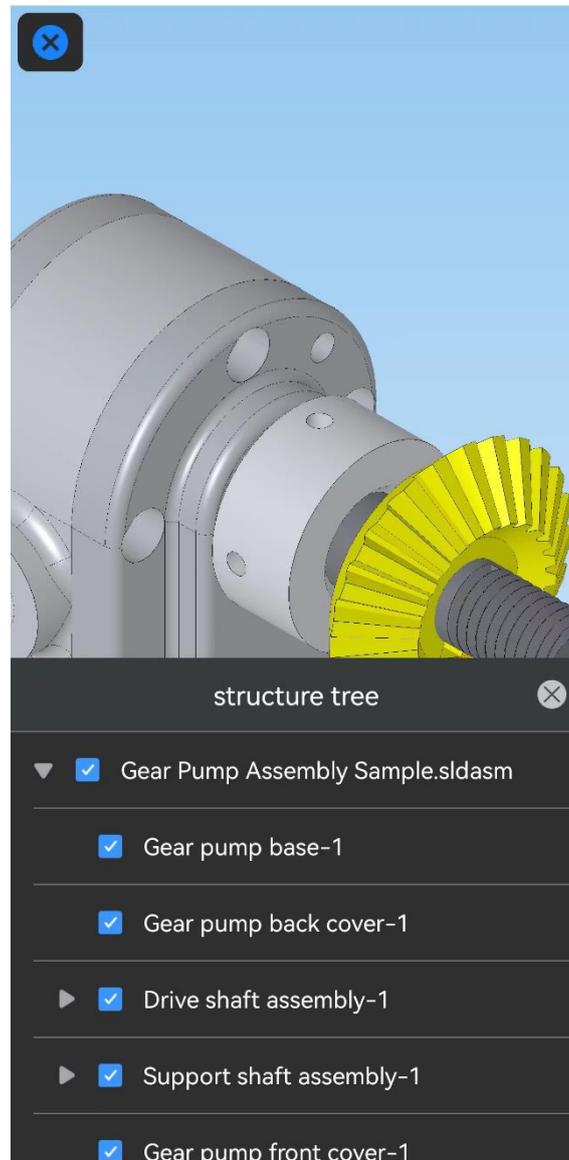


3. Click any view direction to apply it.

1.4.14.3. Structure Tree



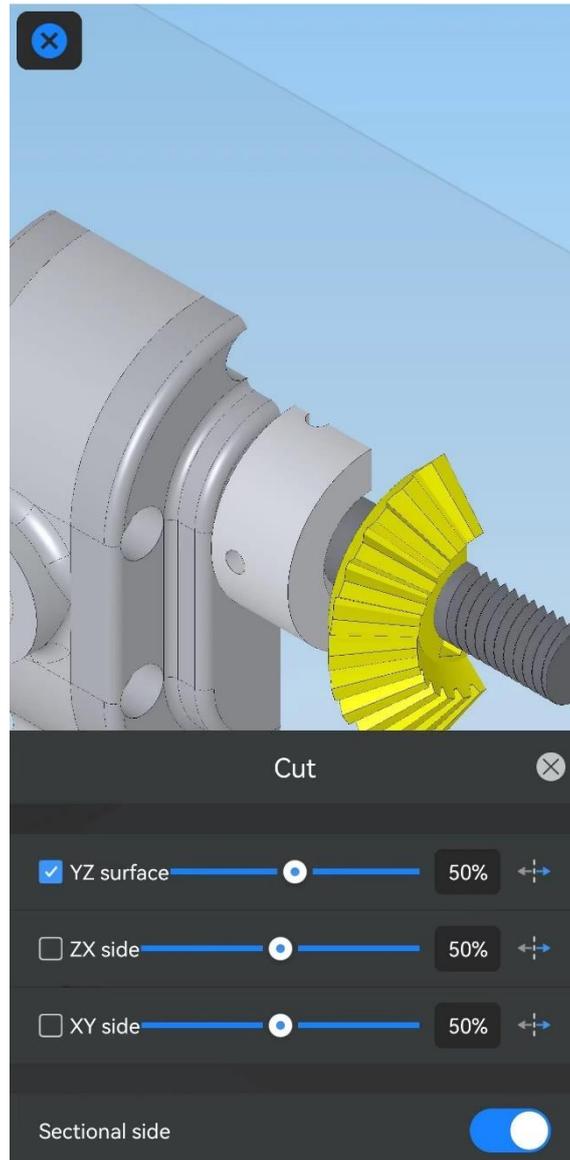
1. Open a 3D model.
2. Click the "Structure Tree" menu to display the structural hierarchy of the current model.



3. Deselecting an object in the structure tree will hide it in the view area.
4. Click the × in the upper right corner of the structure tree to close it.

1.4.14.4. Cut

1. Open the 3D model.
2. Click the "Cut" menu. The default sectioning plane is the YZ plane.



3. You can select the ZX plane and XY plane for sectioning and drag the slider to adjust the sectioning depth.
4. Supports reverse sectioning and hiding sectioning planes.
5. Click the "×" in the upper right corner to end the command.

1.4.14.5. Explode



1. Open the 3D model.
2. Click the "Explode" menu.

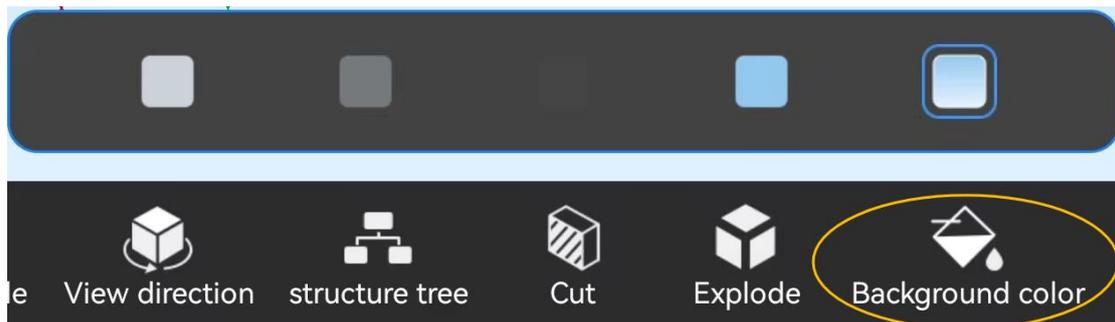


3. Supports Center Explosion, X Explosion, Y Explosion, and Z Explosion. You can drag the slider to adjust the explosion degree.
4. Supports setting the explosion structure tree level.
5. Click the "×" in the upper right corner to end the command.

1.4.14.6. Background Color

1. Open the 3D model.

2. Click "Background Color" to modify the background color.

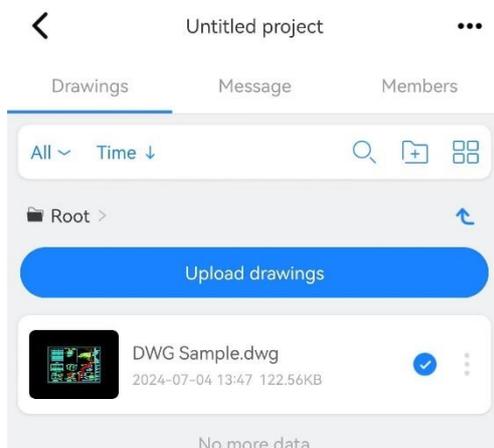


1.4.15. Project

1.4.15.1. Drawings Tab

1. Log in to your Gstarsoft account.

2. Click on the Project to access the Drawings tab.



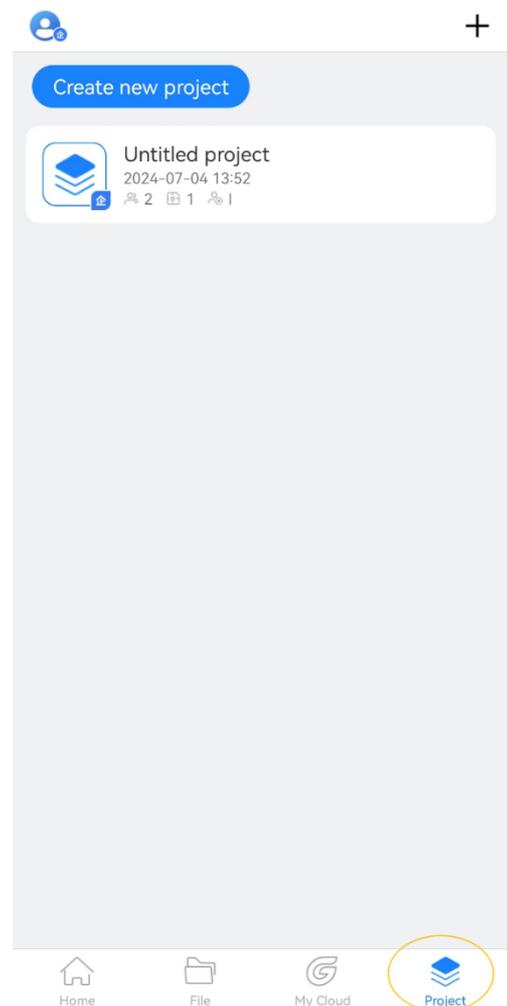
3. Click "Upload Drawings" select the drawing source, choose a drawing, and complete the upload.

4. Click the "More" button on the right side of the drawing to view drawing details. Then click "Upload New Version."

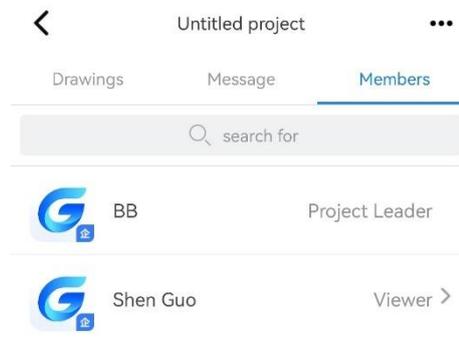
5. Select the drawing source, choose a drawing, and complete the upload of the new version.

1.4.15.2. Members Tab

1. Log in to your Gstarsoft account.



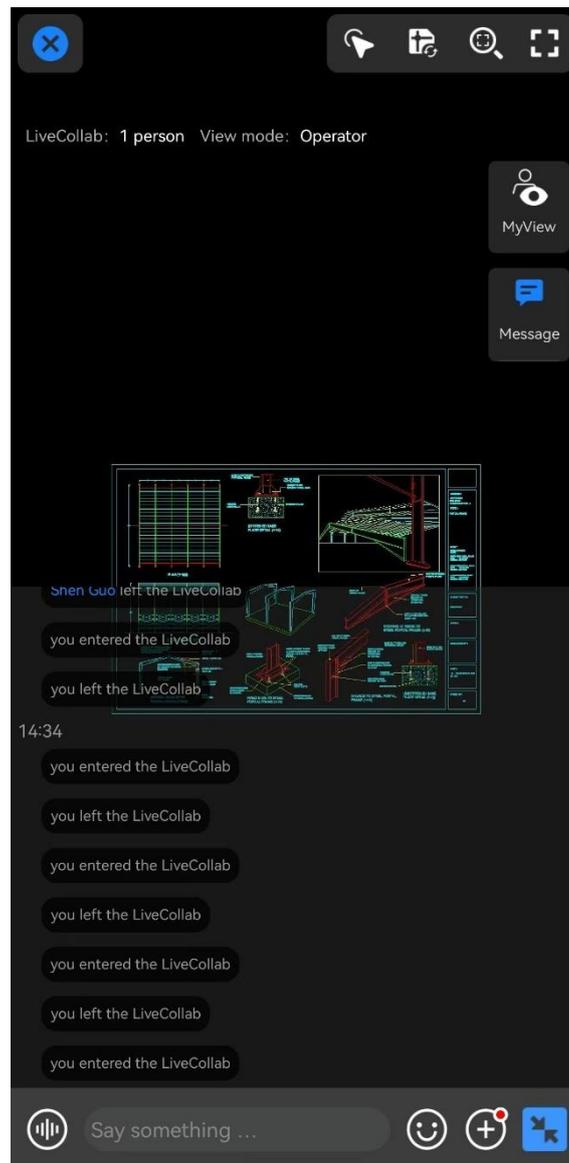
2. Click on the Project and then select the "Members" tab.
3. Click the "Add Member" button, select a friend, and add them to the project.
4. Click on a member in the list, assign permissions, and save the changes.
5. To remove a member, click the "Remove Member" button, select the member to be removed, and click "Finish."



1.4.15.3. LiveCollab

1. Log in to your Gstarsoft account.
2. Click on the Project to access Drawings tab
3. Click the "More" button next to the drawing to view details. In the drawing details, click "LiveCollab"

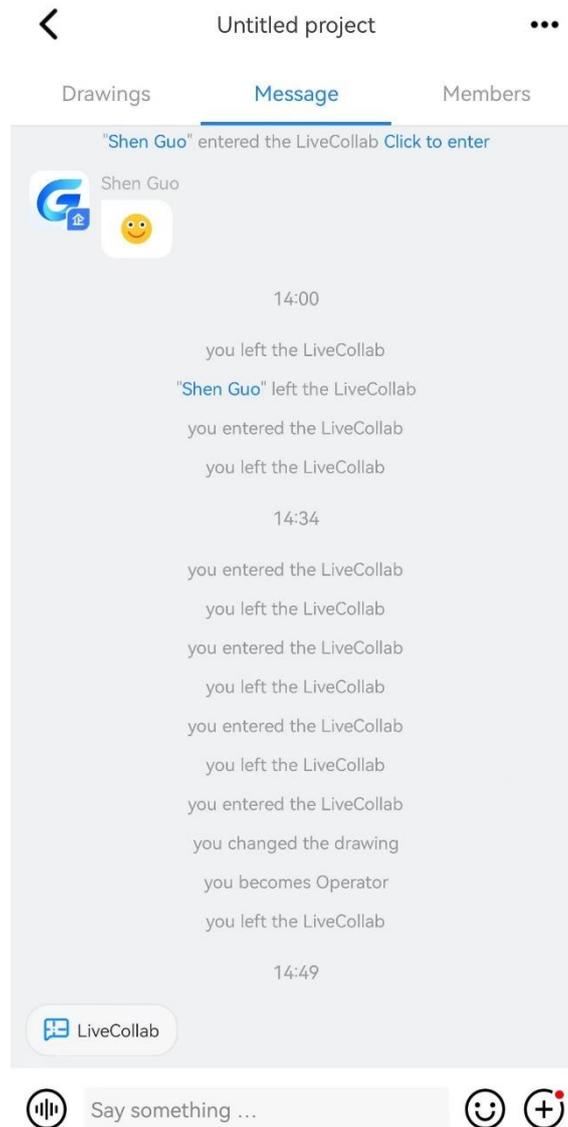
4. Use the "My View" button to switch to Self-Viewing mode or the " TeamView" button to switch to Shared View mode.



1.4.15.4. Message Tab

1. Log in to your Gstarsoft account.
2. Click on the Project to access the Message tab.

3. Select a conversation to open it. You can send and receive text messages, voice messages, images, and emoticons.

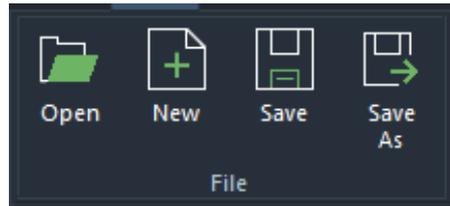


1.5. GstarCAD View on PC

The GstarCAD View on PC provides a variety of functions for managing, viewing, and outputting CAD drawings. The main functions are categorized under the File and Print menus.

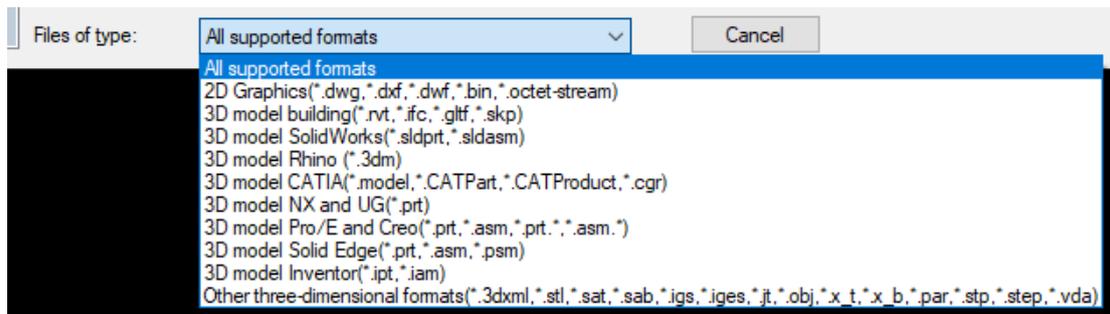
1.5.1. File Menu

The following features are available under the File panel:



1.5.1.1. Open

Opens the Open dialog box, allowing you to select the directory and file type to open.



1.5.1.2. New

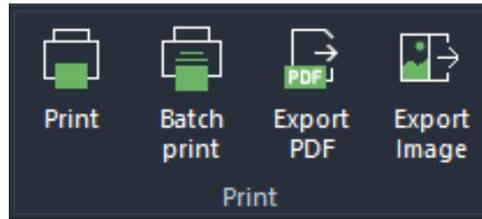
Creates a new, blank DWG document.

1.5.1.3. Save

Saves the currently modified drawing.

1.5.2. Print

The following functions are available under the Print panel:



1.5.2.1. Print

Allows you to print objects on the drawing and set relevant printing properties.

1.5.2.2. Batch Print

Prints multiple blocks at once.

1. Select the Batch Print function from the Ribbon.
2. A prompt box appears to set relevant parameters and add drawings.
3. Batch print the added drawings.

1.5.2.3. Export PDF

Exports drawings in PDF format and allows you to set related export properties. The function supports automatic identification of drawing frames and batch export.

1. Select the Export PDF feature in the Ribbon.
2. A prompt box appears to set parameters and add drawings.
3. Print the added drawings.

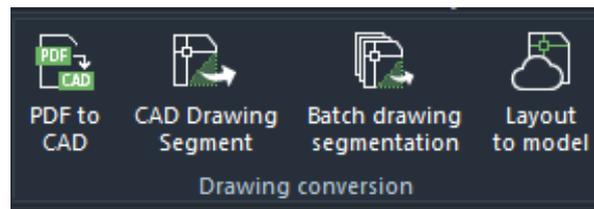
Note: Both single PDF file export and paged PDF export are supported.

1.5.2.4. Export Image

Outputs DWG drawings as images.

1.5.3. Drawing Conversion

The following functions are available under the Drawing Conversion panel:



1.5.3.1. PDF to CAD

Converts the drawing content in a PDF file to the CAD format (.dwg).

1.5.3.2. CAD Drawing Segment

Splits any feature or view in a CAD drawing into a separate CAD drawing.

1.5.3.3. Batch Drawing Segmentation

Splits multiple features or views in a CAD drawing at once to create separate CAD drawings.

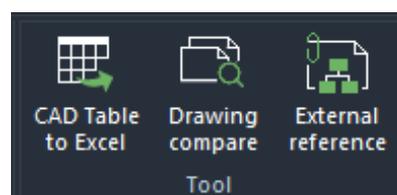
1. In the file menu, select the Batch Drawing Segmentation feature.
2. In the pop-up prompt box, select Add Drawings and set the save path.
3. Convert the added drawings.

1.5.3.4. Layout to Model

Outputs the CAD drawing layout to the model space graphics.

1.5.4. Tool

The following features are available under the Tool panel:



1.5.4.1. CAD Table to Excel

Converts tables consisting of lines and text in a CAD drawing into an Excel table.

1. In the File menu, select the CAD Table to Excel feature.
2. A prompt box pops up to select the table to be extracted.
3. The Excel file automatically pops up to display the extracted table content.

1.5.4.2. Drawing Compare

Compares previous and current versions of the same CAD drawing and display changes in color.

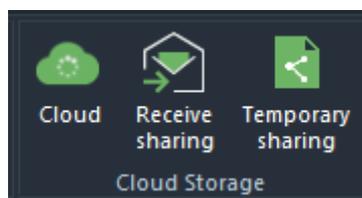
1. In the File menu, select the Drawing Compare feature.
2. A prompt box pops up to select the two drawings to be compared.
3. Click Start Comparison to view the comparison results.

1.5.4.3. External Reference

After logging in, the external reference window is displayed, allowing operations on external references.

1.5.5. Cloud Storage

The following features are available under the Cloud Storage panel:



1.5.5.1. Cloud

After logging in, view all files and folders saved on the Cloud.

1.5.5.2. Receive Sharing

Receives shared drawings from others.

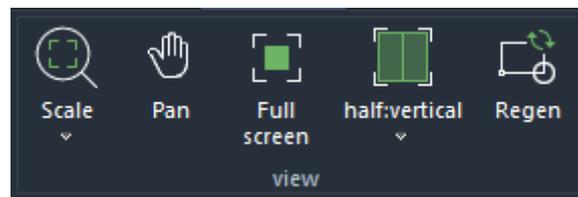
1. In the Ribbon, select the Receive Sharing tool.
2. A prompt box pops up; enter the link address shared from the Cloud.
3. After the shared drawing pops up, choose to save it locally or to the Cloud. You must be logged in to save it to the Cloud.

1.5.5.3. Temporary Sharing

Temporarily share a drawing with others as a link.

1.5.6. View

The following functions are available under the View panel:



1.5.6.1. Scale

Real-time (R): Reduces or enlarge the apparent size of the displayed object.

Previous (P): Displays the previous view.

Window (W): Zooms to display the area specified by the rectangular window.

Dynamic (D): Pans or zooms using the rectangular frame.

Center (C): Zooms to display the view defined by the center point and the scale value or height.

Object: Zooms to display one or more selected objects as large as possible in the center of the view.

Zoom in (I): Zooms using a scale factor of 2 to increase the scale of the current view.

Zoom out (O): Zooms using a scale factor of 2 to reduce the scale of the current view.

Full view (A): Zooms to display all visible objects and visual aids.

Zoom (E): Zooms to display the maximum range of all objects.

1.5.6.2. Pan

Pan (R): Moves the object in the current viewport.

- When the real-time tool is selected, use the mouse wheel to rotate forward to zoom in the drawing, and rotate backward to zoom out.
- When the real-time tool is selected, you can also zoom in and out locally by the location of the small hand icon.

1.5.6.3. Full Screen

Turns on or off the full-screen display mode; press Esc to exit full-screen mode. The "Full Screen" on the toolbar functions the same way.

1.5.6.4. Single Viewport

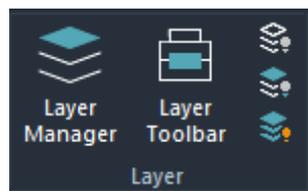
Adjusts drawings from a single viewport to multiple viewports, or merge multiple viewports into a single viewport.

1.5.6.5. Regen

Reloads the drawing content without restarting the software.

1.5.7. Layer

The following features are available under the Layer panel:



1.5.7.1. Layer Manager

Creates a new layer, delete a layer, set it as current, turn a layer on or off, and set the layer name, color, line width, and line type.

1.5.7.2. Layer Toolbar

Displays the name, color, status, and other characteristics of all layers in the drawing.

1.5.7.3. Layer Off

1. Select the Layer Off feature, and the prompt "Select Object" appears.
2. After selecting an object, add the keyword "√" to select multiple objects continuously, supporting only click selection. After selecting an object, the layer closes immediately.
3. Click the keyword "√" to end the command.

1.5.7.4. Off Other Layers

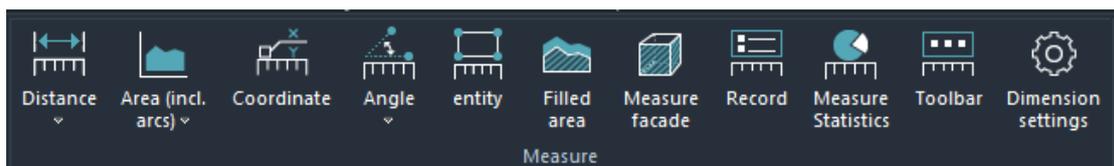
1. Select the Off Other Layers feature.
2. The prompt "Select Object" appears. You can only select a single entity with a click; the selected object is displayed in faded color.
3. Click "√" to execute the operation of closing other layers.

1.5.7.5. Turn All Layers On

Opens all closed layers; click the " Turn All Layers On " button to open all layers.

1.5.8. Measure

The following features are available under the Measure panel:



1.5.8.1. Distance

1. Select the Distance feature.
2. Click the starting position of the distance to be measured with the left mouse button.
3. Drag the mouse from the starting position.
4. Click the end position of the distance to be measured with the left mouse button.
5. Right-click to exit the measurement; the measurement result dialog box will display values such as distance, angle, and total.

Additional Information:

If multiple segments are measured continuously, you can export "Detailed Results" in "Record" to view the length of each segment.

1.5.8.2. Area (Including Arcs)

1. Select the Area feature.
2. Click or drag to specify a point as the starting point of the area.
3. Click or drag to specify the next point of the area.
4. Right-click the last endpoint; the measurement result dialog box will display the perimeter and area values.

1.5.8.3. Coordinate

1. Select the Coordinate feature.
2. Select the specific location where the coordinates are to be measured.
3. Click the left mouse button to end; the coordinate value will be displayed in the result display box at the bottom.

1.5.8.4. Angle

1. Select the Angle feature.
2. Select the object to be measured.
3. First, select the vertex, then select the two edges to be measured; the angle between the two edges will be calculated, and the measurement result dialog box will display the angle value.

1.5.8.5. Entity

Supported Entity Types:

- Straight lines
- Circles
- Ellipses
- Arcs
- Polylines (spline curves, face regions, rectangles, and polygons)

Steps to Measure an Entity:

1. Select the figure to be measured.

2. The measurement result is displayed at the bottom.

1.5.8.6. Filled Area

1. Select the Filled Area feature.
2. Select the fill figure to be measured.
3. The result is displayed at the bottom, showing the fill perimeter and fill area.

1.5.8.7. Measure Facade

Calculates the side facade area of a certain area according to the set facade height.

1. Use polylines to draw a closed outline according to the plane of the component or area to be measured.
2. In the pop-up facade measurement window, set the uniform height or different heights of each side.
3. Calculate the corresponding facade area.
4. After confirmation, mark the required parameters on the drawing according to the settings.

1.5.8.8. Record

All measurement data are saved in the Record feature. The measurement record can be exported to an Excel file, or the data can be cleared.

1.5.8.9. Measure Statistics

All length, area, and side area marking results are saved in the Measure Statistics feature.

1.5.8.10. Toolbar

After opening the Toolbar, commonly used measurement features will be available on the drawing in the form of a toolbar for convenient access.

1.5.8.11. Dimension Settings

1. Select the Dimension Settings feature.

2. A dialog box will pop up to set the number of decimal places to be displayed.
3. Confirm and save; the measured data will be displayed according to the modified number of decimal places.

1.5.9. Quantity

The following features are available under the Quantity menu:



1.5.9.1. Graphical Statistics

Counts the number of identical graphics within the selected range.

1. Select the Graphical Statistics feature.
2. Click the left mouse button to select the graphics to be counted, then click the right mouse button to end the selection.
3. A dialog box pops up; select the search range and click Find.
4. A dialog box pops up to display the statistical results. The found graphic positions will be displayed in the list in the graphical statistics dialog box.

1. Select the Line feature.
2. Click the left mouse button to locate the starting point of the line.
3. Adjust the first point or create the second point.
4. Adjust the second point or confirm the input.

1.5.10.2. Polyline

Creates a polyline entity.

1. Select the Polyline feature.
2. Click the left mouse button to locate the starting point of the polyline segment.
3. Adjust the first point or create the next point.
4. Repeat step 3 to adjust the current point or create the next point.
5. Right-click to select.

1.5.10.3. Rectangle

Creates a rectangle entity.

1. Select the Rectangle feature.
2. Click the left mouse button to locate the starting point of the rectangle.
3. Drag the mouse to the endpoint and click the mouse.

1.5.10.4. Circle

Creates a circle entity.

1. Select the Circle feature.
2. Click or drag with the left mouse button to specify the center of the circle.
3. Adjust the center of the circle or specify the radius of the circle.
4. Adjust the radius of the circle or confirm the input.

1.5.10.5. Ellipse

Creates an ellipse entity.

1. Select the Ellipse feature.
2. Click or drag with the left mouse button to specify the starting point of the ellipse.
3. Adjust the starting point or specify the endpoint of the ellipse.
4. Adjust the endpoint or specify a point on the ellipse.
5. Adjust the current point or confirm the input.

1.5.10.6. Revision Cloud

Creates a revision cloud entity.

1. Select the Revision cloud feature.
2. Click the left mouse button to locate the revision cloud starting point.
3. Drag the mouse to the endpoint and click the right mouse button.
4. Select whether to reverse.

1.5.10.7. Freehand Line (Sketch)

Creates a Freehand line entity.

1. Select the Freehand Line feature.
2. Click the left mouse button to locate the starting point of the Freehand line.
3. Drag the mouse to the endpoint and click the mouse.
4. Press the Enter key to directly close the Freehand line drawing.

1.5.11. Modify

The following features are available under the Modify panel:

1.5.11.1. Move

Moves the selected entity to the specified position.

1. Select the entity to be moved.
2. Click the Move button.
3. Click or drag to specify a point as the base point for movement.
4. Adjust the current point or specify the second point.
5. Adjust the current point or confirm the input.

1.5.11.2. Rotate

Rotates the selected entity to the specified angle.

1. Click to select the entity to be rotated.
2. Select the Rotate button.
3. Click or drag to specify a point as the base point for rotation.
4. Adjust the current point or specify the rotation angle.
5. Adjust the rotation angle or confirm the input.

1.5.11.3. Copy

Copies the selected entity.

1. Click to select the entity to be copied.
2. Select the Copy button.
3. Click or drag to specify a point as the base point for copying.
4. Adjust the current point or specify the second point.
5. Adjust the current point or confirm the input.

1.5.11.4. Paste

Supports users to copy the content of one drawing and paste it in another drawing.

1.5.11.5. Scaling

Scales the selected element proportionally.

1. Select the graphic scaling feature.
2. Click to select the entity to be scaled, and press Enter to confirm.
3. Select the origin to scale based on.
4. Set the scaling ratio, and press Enter to confirm.

1.5.11.6. Trim

Trims the selected element according to the trimming line segment.

1. Select the trim feature.
2. Click to select the entity to be trimmed.
3. Press Enter to confirm the selected entity object.
4. Click the content to be trimmed with the left mouse button.

Extended Feature:

Press and hold the Shift key to select the object to be extended, or use [Fence selection (F)/Window intersection (C)/Projection (P)/Edge (E)/Delete (R)/Cancel (U)].

1.5.11.7. Extend

Extends the selected entity according to the extended line segment.

1. Select the extend feature.
2. Click to select the entity to be extended.
3. Press Enter to select all objects in the drawing as boundaries.
4. Select the object to be extended, or press and hold the SHIFT key to select the object to be trimmed, or use [Fence selection (F)/Window intersection (C)/Projection (P)/Edge (E)/Cancel (U)].

1.5.11.8. Interrupt

Interrupts the selected straight line according to the selected point.

1. Select the interrupt feature.
2. Click the left mouse button to select the line to be interrupted.
3. Select the point to be interrupted on the selected line and click the left mouse button.

1.5.11.9. Mirror

Mirrors the selected primitive based on the specified symmetry axis.

1. Select the primitive to be mirrored.
2. Select two points to be specified as coordinate axes.
3. Confirm whether to delete the objects before mirroring.

1.5.11.10. Offset

1. Select the offset feature.
2. Specify the offset distance.
3. Select the object to be offset.
4. Select the direction to be offset.

Note: You can select multiple objects to be offset continuously.

1.5.11.11. Delete

Deletes the selected primitive.

1. Select the entity to be deleted.
2. Click the Delete command to delete the selected entity.

1.5.11.12. Erase

Cleans up redundant or meaningless entities in the DWG file.

1. Select the Erase feature.
2. Check and confirm the items that can be cleaned and those that cannot be cleaned.
3. Select Erase or Erase All.

1.5.12. Properties

The following features are available under the Properties window:

1.5.12.1. Properties

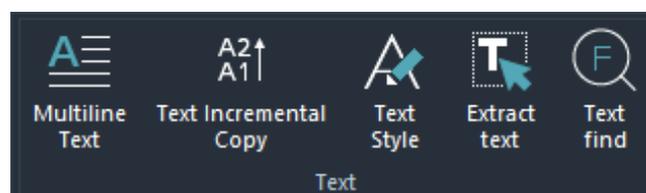
Modifies the color, layer, line type, and other parameters of the drawings.

1. Select the Properties feature; the properties content will be displayed on the left side of the software.
2. Click the entity you want to view or modify.
3. After modifying the relevant properties, it will take effect immediately.

Note: You can modify the entity color, layer, line type, line width, line type ratio, and other contents.

1.5.13. Text

The following features are available under the Text menu:



1.5.13.1. Multi-line Text

Creates multi-line text.

1. Select the Multi-line text feature.
2. Click the left mouse button to enter H to select the height and drag to the specified text length or click the left mouse button to directly drag to the specified text height and length.
3. Enter single-line text or multi-line text in the pop-up input box (press Enter to start a new line).
4. Click the OK button to end text addition.

1.5.13.2. Text Incremental Copy

Incrementally copy the numeric/letter part of the existing text.

1. Select the Text Incremental Copy feature.
2. Select the data to be incremented; currently supports numbers and letters.
3. You can set the spacing and interval combing of each incremented data, as well as the number of increments.
4. Right-click the mouse to end or press Enter to exit the text increment feature.

Note: Currently, text increment only supports single-line text.

1.5.13.3. Text Style

Modifies the text style type of the selected text in the drawing.

1. Select the Text Style feature; the current text style will be displayed on the left side of the software.
2. Click a text style to modify the font and the corresponding font width factor.
3. After modifying the relevant properties, click Apply to take effect.

1.5.13.4. Extract Text

Extracts the text in the selected area of the DWG drawing as text.

1. Select the drawing area where the text needs to be identified.
2. Select the extract text feature to extract all text content in the selected area.

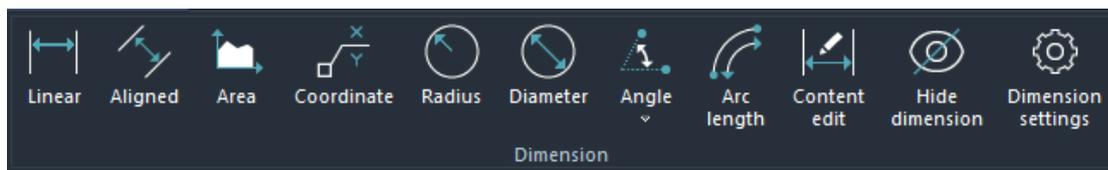
1.5.13.5. Text Find

Finds the location and quantity of the target text.

1. Select the Text Find feature.
2. Enter the text content you want to find in the drawing.
3. Click the Find button; the drawing containing the content you want to find will be displayed in the list.
4. Click the Find button or click an item in the result list, and the page will jump to the relevant position of the drawing. Text replacement operations can be performed in edit mode.

1.5.14. Dimension

The following features are available under the Dimension menu:



1.5.14.1. Linear

Annotates the horizontal or vertical distance between two points on the drawing.

1. Select the Linear feature.
2. Click the left mouse button to locate the annotation start point.
3. Drag the mouse to the end point and click the left mouse button.
4. Drag the mouse to the end point of the annotation and click the left mouse button to complete the annotation.

1.5.14.2. Aligned

Annotates the straight-line distance between two points on the drawing.

1. Select the Aligned feature.
2. Click the left mouse button to locate the annotation start point.
3. Drag the mouse to the end point of the annotation and click the left mouse button.

4. Drag the mouse to the end point of the annotation and click the left mouse button to complete the annotation.

1.5.14.3. Area

Calculates the area of the selected area.

1. Select the Area feature.
2. Draw the area to be measured.
3. Right-click to confirm and complete the area measurement.

1.5.14.4. Coordinates

Marks the coordinates of a point on the drawing.

1. Select the coordinate feature.
2. Select the location to be marked.
3. Click the left mouse button, drag the mouse to the end point of the marking, and click the left mouse button to complete the marking.

1.5.14.5. Radius

Marks the radius of the selected circle on the drawing.

1. Select the Radius feature.
2. Click the left mouse button and click on the circumference.
3. Select the marking placement position and click the left mouse button to complete the marking.

1.5.14.6. Diameter

Marks the diameter of the selected circle on the drawing.

1. Select the Diameter feature.
2. Click the left mouse button and click on the circumference.

3. Select the marking placement position and click the left mouse button to complete the marking.

1.5.14.7. Angle

Marks the angle between two straight lines on the drawing.

1. Select the Angle feature.
2. Click the left mouse button to locate the marking starting point.
3. Drag the mouse to the positioning end point and click the left mouse button.
4. Drag the mouse to the marking end point and click the left mouse button to complete the marking.

Note: This feature can mark coordinates continuously and press Enter or ESC to end.

1.5.14.8. Arc Length

Marks the arc length of the selected arc on the drawing.

1. Select the Arc Length feature and select an arc in the drawing for measurement. If marking a non-arc shape, do not do anything.
2. Select the arc to be marked.
3. Click the left mouse button, drag the mouse to the marking end point, and click the left mouse button to complete the marking.

1.5.14.9. Text Edit

Edits and modify the marked content.

1. Select the Text Edit feature.
2. Click the annotation content on the drawing with the left mouse button to modify the annotation content, set the character height, modify the font, etc.
3. Click the OK button to end the modification of the annotation content.

1.5.14.10. Hide Dimension

Hides the dimension content in the drawing.

1. Click Hide Dimension to hide all dimension contents.
2. Click again to display all dimension contents.

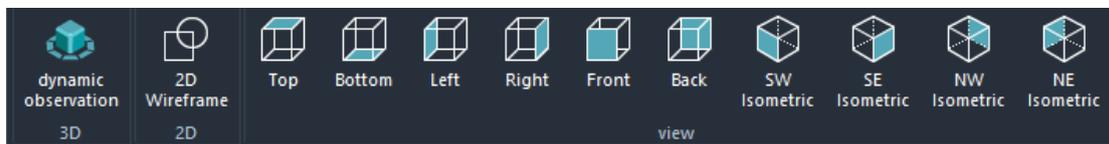
1.5.14.11. Measurement Settings

Sets the accuracy and style of the measurement feature.

1. Select the Measurement Settings feature.
2. The following interface pops up to set the number of decimal places to be displayed.
3. Confirm and save, and the measured data will be displayed according to the modified number of digits.

1.5.15. View

The following features are available under the View panel:



1.5.15.1. Dynamic Observation

Equivalent to the "3DORBIT" command in CAD. Click it to enter the 3D mode. The drawings have Z coordinates and the space segments can be displayed in 3D.

1. Click Dynamic Observation.
2. Press and hold the left mouse button and drag the mouse to observe the drawing from different angles.

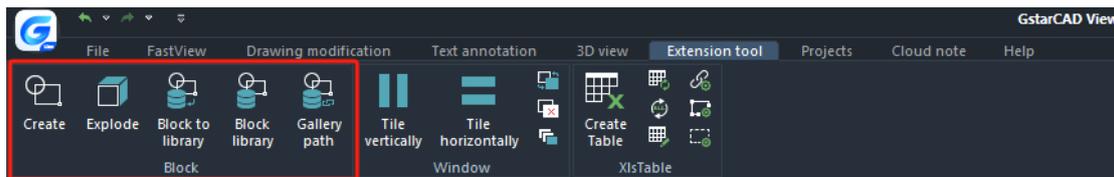
1.5.15.2. 2D Wireframe

The drawing is displayed in a 2D plane state, which is equivalent to a top view.

1.5.15.3. View

1. Open the drawing.
2. Click Dynamic View. The view feature is only enabled in 3D state. It supports Top View, Bottom View, Left View, Right View, Front View, Back View, Southwest, Southeast, Northeast, Northwest— a total of 10 visual styles.
3. Click any view direction to switch to the current style.

1.5.16. Blocks



1.5.16.1. Create

Saves the selected objects in the drawing as blocks.

1.5.16.2. Explode

Explodes the contents of the block into individual elements.

1. Click to select the block to be exploded.
2. Click the Explode feature, and the block becomes a single entity.

Note: If there are nested blocks, you need to select multiple explodes to convert the block into a single entity.

1.5.16.3. Block to Library

Saves the blocks in the local block library.

1.5.16.4. Block Library

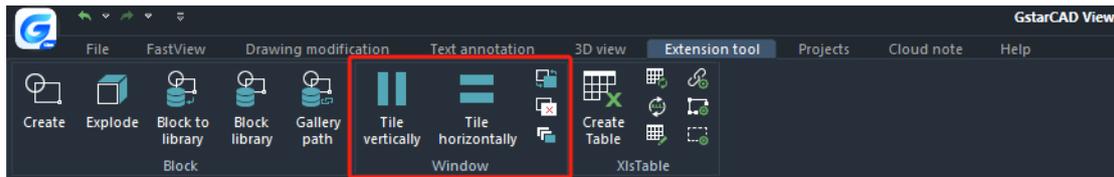
Opens the local block library and insert the blocks in the library into the drawing.

1.5.16.5. Gallery Path

Sets the local block library path.

1.5.17. Window

The following features are available under the Window panel:



1.5.17.1. Tile Vertically

Arranges windows and icons in a non-overlapping tiled manner in the vertical direction.

1.5.17.2. Tile Horizontally

Arranges windows and icons in a non-overlapping tiled manner in the horizontal direction.

1.5.17.3. Window Switch

Display the window list and activate the selected window as the current active window.

1.5.17.4. Close All

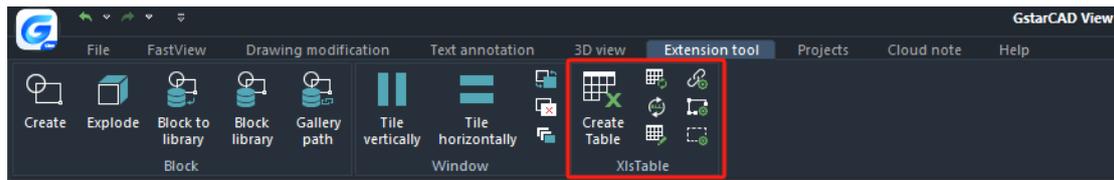
Closes all windows.

1.5.17.5. Cascade

Makes windows overlap and keep the title bar visible.

1.5.18. Table

The following features are available under the Table panel:



1.5.18.1. Create Table

Creates a new table in the EXCEL software and insert it into the software.

1. Start the Create Table command.
2. If the EXCEL program is installed, the system automatically starts the EXCEL program.
3. Complete the creation of the table in EXCEL.
4. Click Add-in, and there is an AutoXlsTable option in the EXCEL add-in.
5. Select the table and select "Range Import" in the AutoXlsTable drop-down list.
6. The system pops up the dialog box shown in the figure below, select "Yes".
7. Return to the software, specify the insertion point of the table, and complete the table creation.

1.5.18.2. Update Table

Modifies the content of the EXCEL table and synchronize it to the software.

1. Click the table in the software and its associated EXCEL table.
2. Modify the associated EXCEL table content.
3. Save and close EXCEL.
4. Start the table update command in the software.
5. Select the table object associated with the previously modified EXCEL table in the software.
6. Press Enter to confirm, and the selected table will be automatically updated.

1.5.18.3. Update All the Tables

After executing this command, the system automatically updates all table objects created by the "Create Table" command in the drawing.

1.5.18.4. Edit Table

Edits the object created by the "Create Table" command.

1. Start the Edit Table command.
2. Select the table to be edited. This table must be created using the "Create Table" command in the XlsTable.
3. After selecting the table object, the system will automatically open it in EXCEL.
4. Modify it in EXCEL.
5. Select "Finish" in the AutoXlsTable drop-down list.
6. Return to the software to complete the table modification.

1.5.18.5. File Link Management

Associates the table with the local XLS file.

1. Start the File Link Management command.
2. Select the table object, and the dialog box shown in the figure below will pop up.
3. Click the "Browse" button to open the file selection dialog box.
4. Select the XLS file to be connected to the table object, and click "Open" to return to the Link Manager dialog box.
5. Use the "Replace", "Delete" and "Update" buttons in the dialog box to complete link-related editing and management.

1.5.18.6. Path Settings

Sets the path method of the EXCEL file.

1. Start the path setting command, and the dialog box shown in the figure below will pop up.
2. In the dialog box, you can set the path method of the EXCEL file.

1.5.18.7. Selection Management

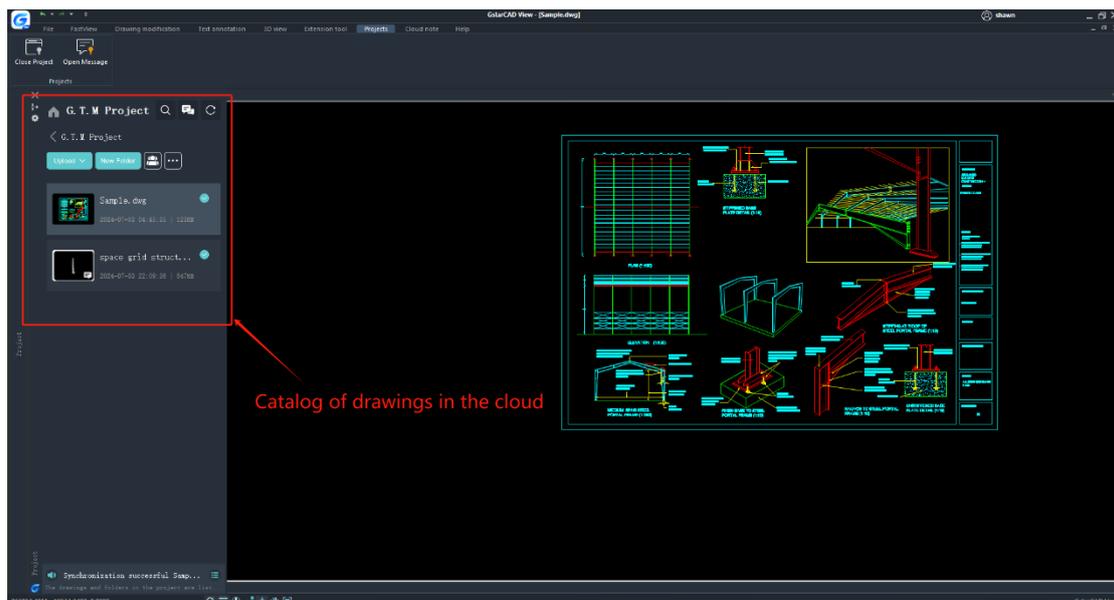
Automatically calculates the area of the graphic based on the selection.

1. Start the "Selection Management" command, and a dialog box as shown below will pop up.
2. Enter "Circle" in the "Name" field and click the "New Group" button on its right.
3. Select the circle.
4. Press Enter, and the "Circle" item is added to the list of the "Selection Manager" dialog box.
5. Use the same method to add the "Rectangle" item and select the rectangle as its associated object.
6. Click "Close" to exit the Selection Manager.
7. Enable the "Edit Table" command, select the table and press Enter to edit the table.
8. Select the cell to the right of "Circle" and click the Insert Feature icon in the add-in.
9. In the pop-up dialog box, specify the entity as "Circle" and the layer as "All", and click "OK".
10. Use the same method to insert the rectangle area calculation feature.
11. Click the "Finish" option in the AutoXlsTable drop-down list.
12. Return to the software, and the table automatically calculates the area of the circle and rectangle.
13. Zoom in and out of the rectangle, and the data in the table automatically changes.

1.5.19. Project

1.5.19.1. Import Project

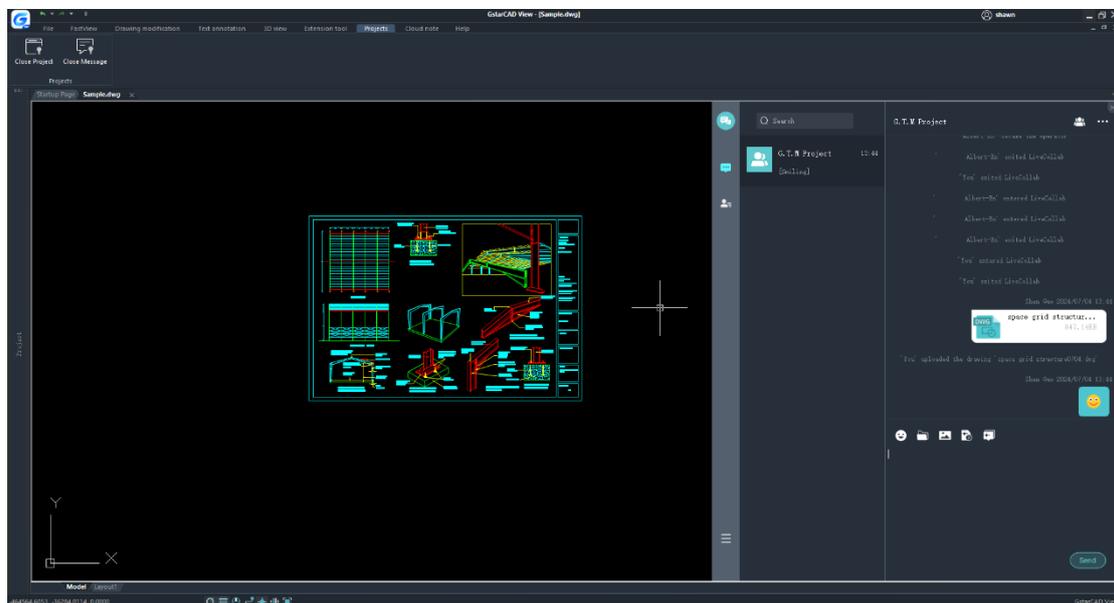
Click Open Project under the Project menu to open the cloud project drawings in the GstarCAD View. At the same time, this module supports some GstarCAD 365 background management functions, such as uploading drawings, project member permission management, project information editing, etc.



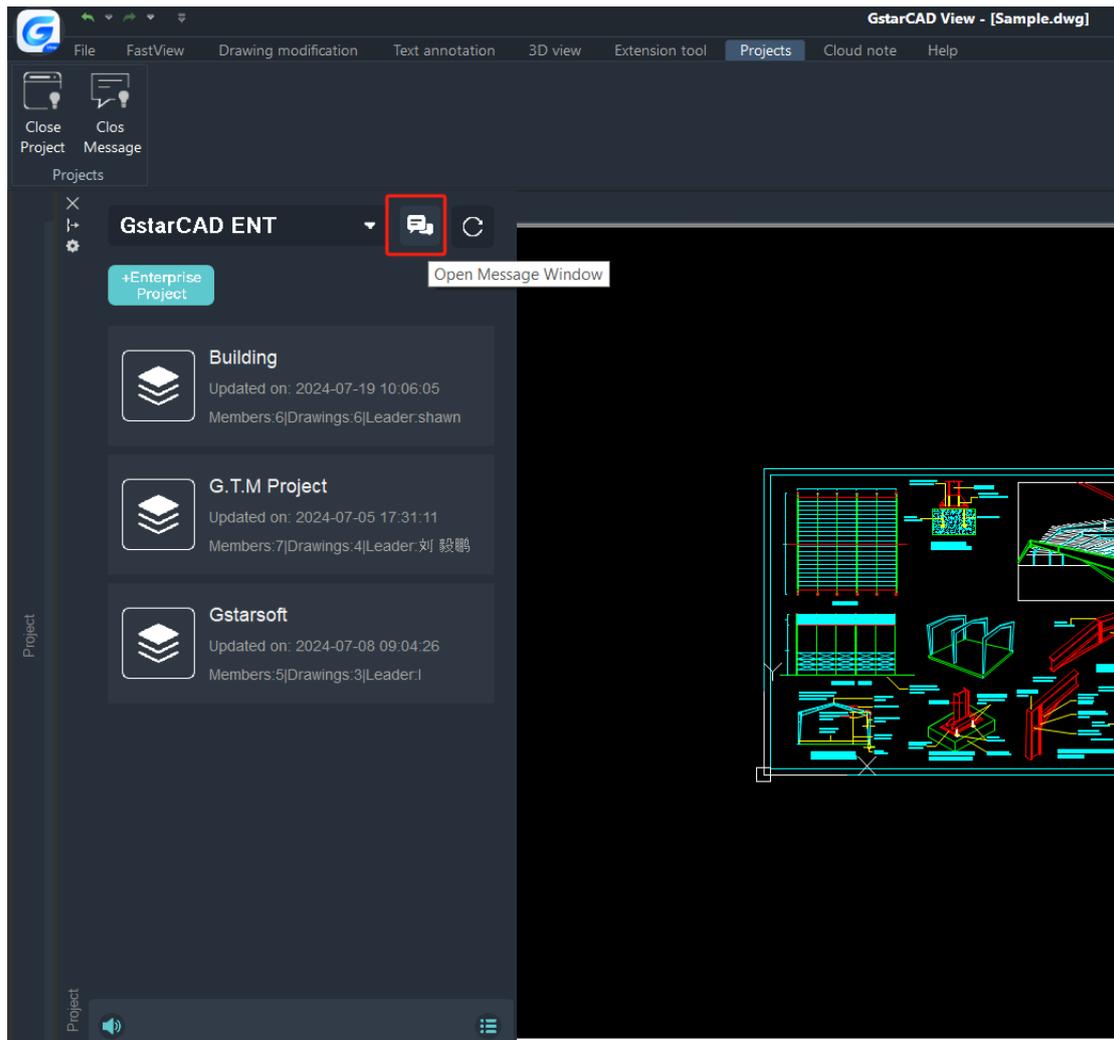
1.5.19.2. Online Collaboration Feature

As an important module for GstarCAD View to achieve collaborative office and improve work efficiency, online collaboration provides three features: Message, Drawing Management, and LiveCollab.

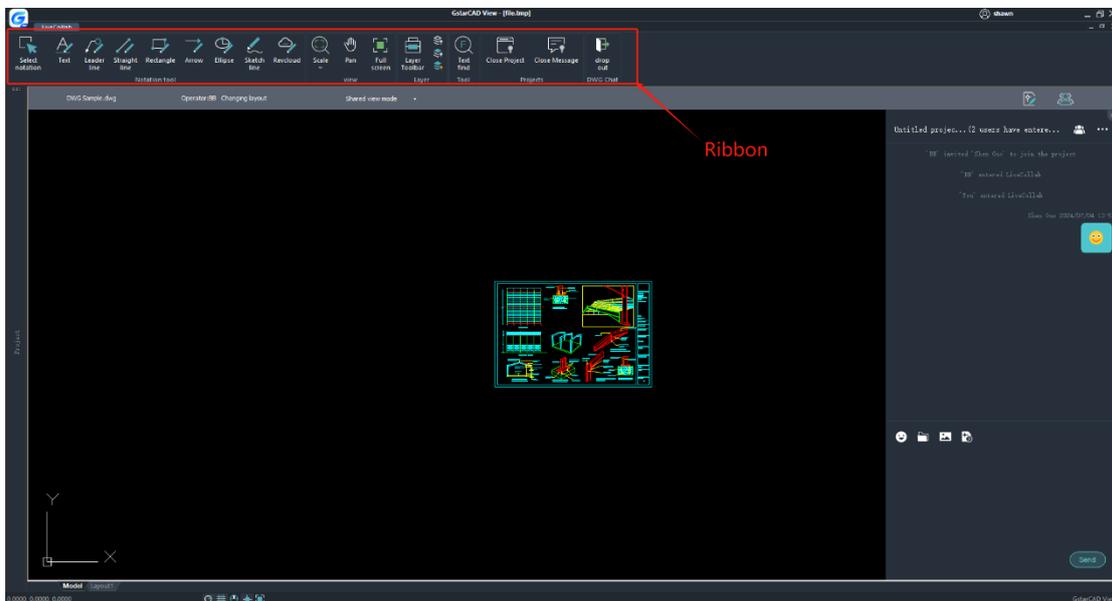
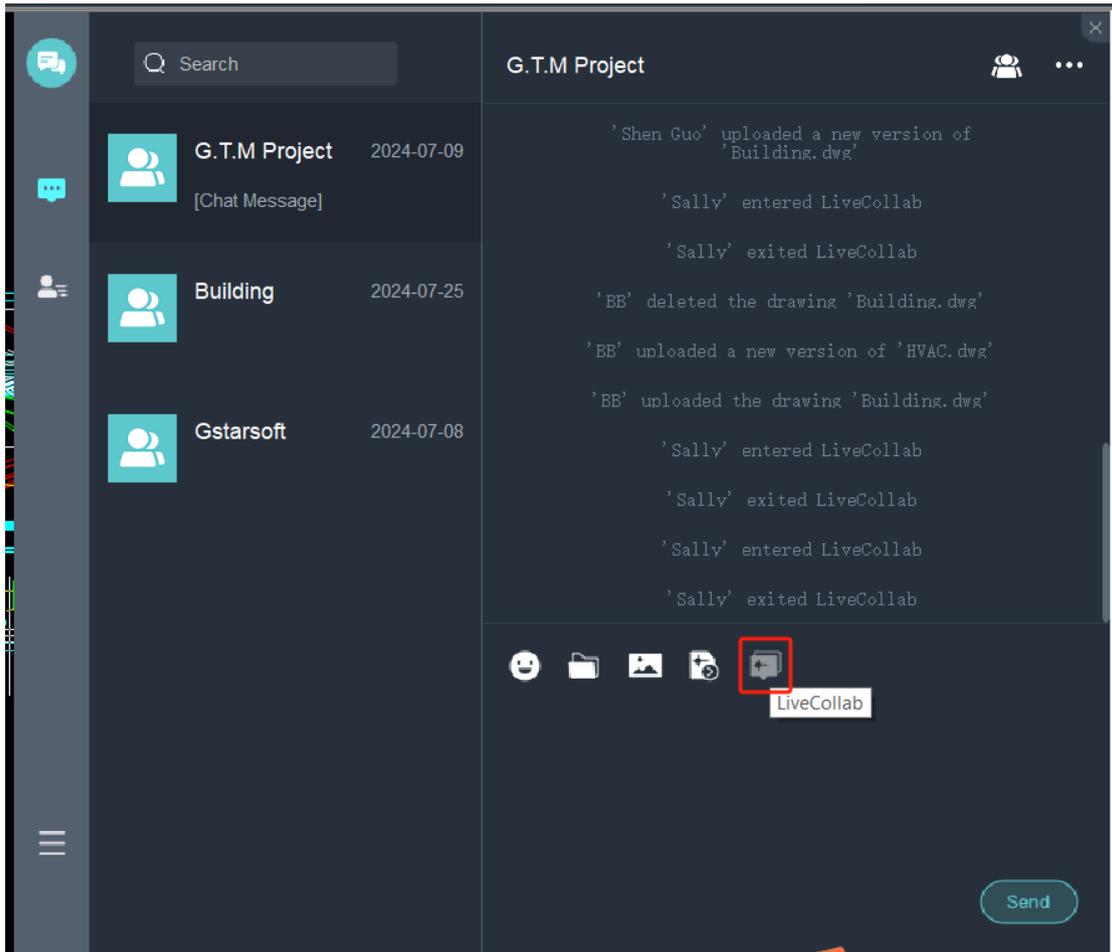
- Message: You can send and receive ordinary text, files, and pictures; in addition, you can also send CAD drawings directly in the chat session.
- Drawing Management: The drawings in the drawing management are the drawings sent by the user to the group chat or single chat; after one person in the drawing management modifies the drawing and synchronizes it, others can view the latest modifications anytime and anywhere through the synchronization feature.
- LiveCollab: It can realize that multiple people can view a drawing remotely, and one person's operation on the drawing can be displayed in real-time on the terminals of other participants; at the same time, you can send and receive messages while viewing or operating the drawing.



Click Open Message Window under the Project palette to pop up the online collaboration interface, where members of the project team can discuss and exchange ideas online and send and receive files.

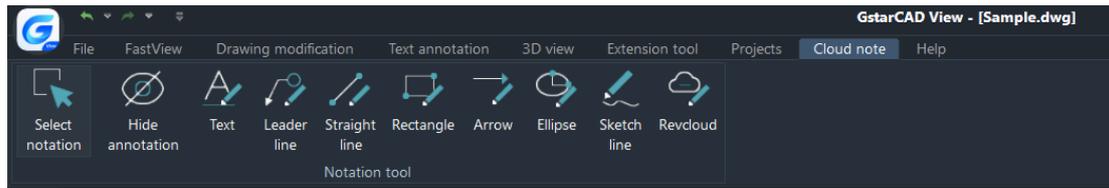


Click LiveCollab button to enter a new operation interface, where project team members can perform online demonstrations, real-time annotations, voice communication, and other operations on drawings. The LiveCollab module provides annotation tools, drawing viewing tools, layer tools, and text search tools.



LiveCollab provides two modes: Shared View mode and Autonomous Viewing mode. In the shared view mode, only one operator can exist at the same time. In this mode, the operator's interface and corrections can be shared with the viewing members in real time; in the autonomous viewing mode, the viewing members can freely operate the drawings, but the operator's work interface cannot be synchronized.

1.5.20. Cloud Note



The Cloud Note panel contains 10 notation tools:

1.5.20.1. Select Notation

When this feature is turned on, you can select the annotation entity in the drawing.

1. When you need to edit or select the annotation, you need to click this feature to switch the note mode first.
2. When you do not need to edit or select the annotation, you need to click this feature again to release the note mode.

1.5.20.2. Hide Annotation

Hides all annotation contents in the drawing.

1. Click Hide Annotation to hide all annotation contents.
2. Click again to display all annotation contents.

1.5.20.3. Text

Annotates the drawing content with text.

1. Select the text annotation feature.
2. You can modify the properties of the text annotation (text color, fill color), or use the default value to create a text annotation.
3. Click the place where you need to annotate with the left mouse button to insert the text annotation.
4. Then enter the text (supports multi-line text).
5. Select OK with the left mouse button, and the annotation is created.

6. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.4. Leader Line

Annotates the drawing content with leaders.

1. Select the lead annotation feature.
2. You can modify the properties of the lead annotation (text color, fill color, line color, line width), or use the default value to create the lead annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the lead annotation.
4. Drag the mouse to the endpoint of the lead and confirm with the left mouse button.
5. Then enter text (supports multi-line text).
6. Select OK with the left mouse button, and the annotation is created.
7. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.5. Straight Line

Annotates the drawing content with lines.

1. Select the Straight Line feature.
2. You can modify the properties of the straight-line annotation (line type selection, line type color, line width), or you can use the default value to create a straight-line annotation directly.
3. Click the place where you need to annotate with the left mouse button to insert the starting point of the straight-line annotation.
4. Drag the mouse to the endpoint of the straight line and confirm with the left mouse button.
5. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.6. Rectangle

Makes rectangular annotations on the drawing content.

1. Select the Rectangle annotation.
2. You can modify the properties of the rectangular annotation (line type selection, fill color, line type color, line width), or you can use the default value to create a rectangular annotation.
3. Click the place where you need to annotate with the left mouse button to insert the starting point of the rectangular annotation.
4. Drag the mouse to the endpoint of the rectangle and confirm with the left mouse button.
5. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.7. Arrow

Annotates the drawing content with arrows.

1. Select the Arrow feature.
2. You can modify the properties of the arrow annotation (line type selection, line type color, line width), or use the default value to create an arrow annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the arrow annotation.
4. Drag the mouse to the endpoint of the arrow and confirm with the left mouse button.
5. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.8. Ellipse

Annotates the drawing content with ellipses.

1. Select the Ellipse feature.
2. You can modify the properties of the ellipse annotation (line type selection, fill color, line type color, line width), or you can use the default value to create an ellipse annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the ellipse annotation.
4. Drag the mouse to the endpoint of the ellipse and confirm with the left mouse button.
5. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

1.5.20.9. Sketch line

Sketch line annotations are made to the drawing content.

1. Select the Sketch Line feature.
2. You can modify the properties of the sketch line annotation (line color, line width), or use the default value to create a sketch line annotation.
3. Click the left mouse button where you need to annotate and insert the starting point of the sketch line annotation.
4. Press and hold the mouse to drag to the endpoint of the hand-drawn line, and release the mouse to complete the hand-drawn line.
5. Press the ESC key on the keyboard or click the Close Annotation button to exit this feature. If you do not exit, you can continue to create.

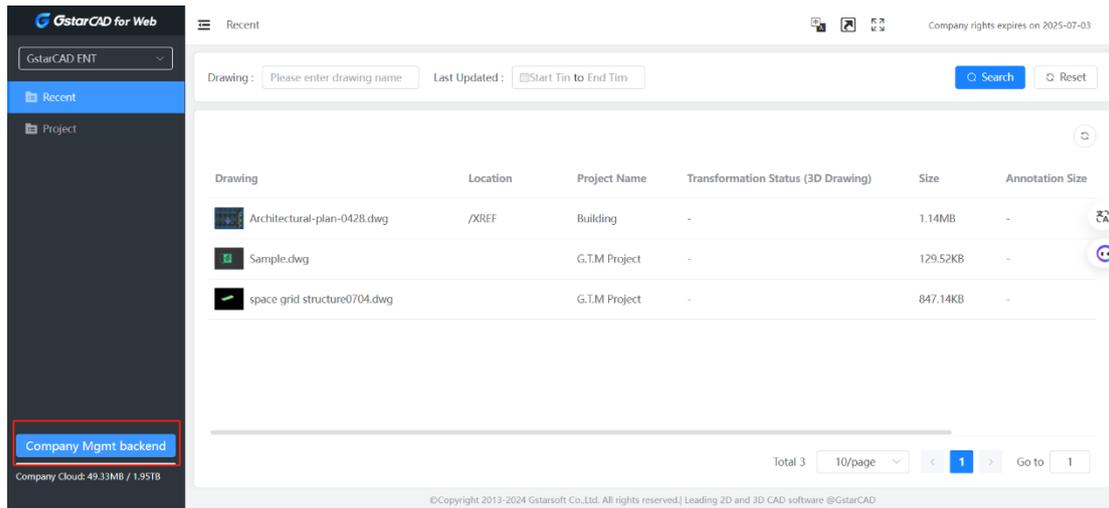
1.5.20.10. Revcloud

Annotates the drawing content with revision cloud lines.

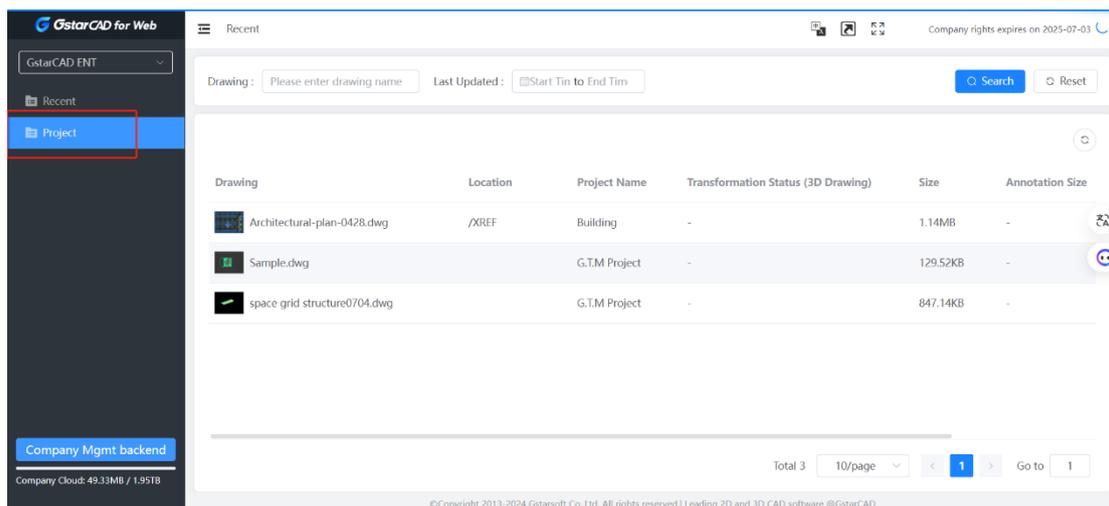
1. Select the Revcloud feature.
2. You can modify the properties of the revision cloud lines (line color, line width), or use the default values to create the revision cloud lines.
3. Click the left mouse button where you need to annotate and insert the starting point of the revision cloud lines.
4. Press and hold the mouse to drag to the endpoint of the cloud line, and release the mouse to complete the cloud line drawing (it can be a closed cloud line).
5. Press the ESC key on the keyboard or click the Close button to exit this feature. If you do not exit, you can continue to create.

1.6. GstarCAD for Web

The GstarCAD for Web includes two main functions: Recent information and Project Information. The Company Management Backend interface is located in the lower left corner of the Web interface. Upon entering the GstarCAD for Web, you can quickly view recently browsed drawing information for the logged-in account. This information includes the Project Name, Location, Transformation Status, Size, Annotation Size, And Last Update Time. A search bar is available above the operation interface, allowing for quick indexing by project name and update time, and supports online preview of drawings.



The Project Interface allows you to view an overview of your projects. A search bar above this interface enables quick location of projects by name, creation time, and project status. The creation of projects, drawing management, and project management functions are consistent with those in the GstarCAD 365 Company Management Backend.



2. Gstarsoft Product Features

2.1. Maturity and Advantages

Since its establishment in 1992, Gstarsoft has been dedicated to CAD software development. In 2001, the company began developing the GstarCAD platform, launching the first version of GstarCAD in 2003. After a decade of accumulating expertise and refining its technology, Gstarsoft reconstructed the core of GstarCAD in 2011. This reconstruction involved the adoption of advanced technologies, including original intelligent area display, hierarchical memory exchange, and adaptive compression of graphic data. These innovations significantly enhanced the software's performance, improving the fluency of operating with super-large drawings by more than five times.

After a further ten years of enhancement and testing by hundreds of thousands of users, the software has become highly stable and mature, fully leveraging the advantages of its reconstructed core. The performance of conventional editing operations, such as reading and storing drawings, zooming and panning, and moving and copying, now surpasses similar products both domestically and internationally.

2.2. Innovation

GstarCAD View caters to the needs of customers across various professional fields, including construction, power, petrochemical, shipbuilding, and manufacturing. Its user base spans more than 80 countries and regions worldwide, generating substantial economic and social benefits. Throughout the development of GstarCAD View, Gstarsoft has adhered to a research and development strategy focused on the independent innovation of core technologies. This approach has involved in-depth research in areas such as software architecture, display engine, performance optimization, data processing, and project collaboration, resulting in the development of numerous CAD core technologies.

The primary core technologies currently owned by the company are as follows:

No.	Technology Name	Technology Description	Field
Core Algorithms and Technical Mechanisms			
1	Multi-line text typesetting algorithm driven by a dictionary and table	<p>The dictionary and driver table algorithm enable intelligent word segmentation and line breaking for multi-line text. This technology enhances the GstarCAD text typesetting engine, making it more intelligent and effective in handling standard characters, punctuation marks, mathematical symbols, and engineering symbols.</p> <p>The algorithm achieves two key objectives:</p> <ol style="list-style-type: none">1. Compatibility with AutoCAD: It ensures maximum compatibility with AutoCAD text typesetting rules, preventing confusion in text layout.	Core Algorithm

		<p>2. Correctness in Various Language Environments: It ensures accurate text typesetting in languages with special writing rules, such as Thai.</p>	
2	<p>Based on the multi-layer pyramid model, memory mapping technology, and parallel computing technology, we have achieved efficient processing of ultra-large raster images.</p>	<p>Key features include:</p> <ol style="list-style-type: none"> 1. Memory Mapping Technology: By using a multi-level image cache architecture and parallel optimization of key algorithms, raster images can be quickly loaded, displayed, and manipulated. 2. Reduced Hardware Requirements: This technology significantly decreases the hardware resources needed by GstarCAD for processing ultra-large raster images. 3. High-Performance Support: It provides high-performance support, effectively solving the issue of lag during operations involving ultra-large raster images. 	Core Algorithm
3	<p>Three-Dimensional Model Vector Hidden Layer Algorithm Using Spatial Index Technology</p>	<p>This algorithm leverages spatial index technology, utilizing a quadtree space partitioning algorithm to rapidly analyse the occlusion relationships of entities in a 3D space. It removes invisible surfaces within the scene through back face culling and entity segmentation techniques. Combined with highly optimized parallel processing technology, this approach enables realistic and efficient three-dimensional scene rendering. It provides essential technical support for visual style functions and hidden layer printing capabilities.</p>	Core Algorithm
4	<p>Efficient Spline Curve Solution Algorithm Using Gaussian Integral Method and Fast Convergence Logic</p>	<p>This algorithm enhances the calculation of spline curve lengths by integrating fast convergence logic with the conventional Gaussian integral method. Compared to commonly used algorithms, this approach significantly improves the accuracy and performance of calculations. Notably, it enhances the performance when computing spline curves with a large number of control points, effectively eliminating lag during spline curve parameter calculations.</p>	Core Algorithm
5	<p>Polyline Self-Intersection Solving Algorithm Using Spatial Tree Filtering</p>	<p>This algorithm enhances commonly used methods by incorporating spatial tree filtering and proprietary improvements to quickly and accurately compute polyline self-intersections. It achieves top-tier accuracy and computational performance on an international scale. Additionally, the algorithm maintains excellent</p>	Core Algorithm

		compatibility and performance for polylines with a large number of nodes.	
6	Dynamic Block Editing Technology Using 2D Parametric Constraints	This technology leverages 2D parametric constraint methods to parameterize a large number of blocks with similar characteristics. Users can dynamically adjust entire blocks or specific parts as needed, enhancing the reusability of design data. GstarCAD is the only 2D CAD product, apart from AutoCAD, that offers dynamic block editing technology.	Core Algorithm
7	Real-Time Preview Technology for Editing	This patented technology leverages efficient geometric algorithms to provide real-time previews of editing results during common CAD operations such as cutting, extending, and filling. It significantly enhances drawing efficiency for designers by allowing them to see changes instantly as they work.	Scenario Innovation
8	CAD Drawing Fault Tolerance Technology Using Big Data	This technology addresses local data compatibility issues and errors that can occur in CAD drawings after repeated editing. By analyzing and classifying errors across large volumes of CAD data, it automatically corrects errors to ensure the proper display of CAD drawings. This prevents issues where drawings cannot be opened due to local data errors, greatly enhancing the fault tolerance of GstarCAD drawings.	Technical Mechanisms
9	CAD Graphic Data Cloud Storage Technology	This technology leverages CAD graphic data and user usage patterns, combined with Internet cloud storage, to offer intelligent hierarchical storage for massive datasets. It provides features such as permission control, elastic expansion, lifecycle management, and data security encryption. These capabilities ensure the consistency, availability, fault tolerance, and security of data storage. Additionally, it enables multi-terminal data synchronization and unified cloud storage for CAD drawings.	Technical Mechanisms
10	Lightweight Graphics Display Processing Performance Improvement Technology	This technology enhances the performance of displaying complex graphics by integrating spatial tree layered display technology with data separation, caching, and on-demand loading. These operations reduce memory usage and boost GstarCAD's drawing speed, as well as improve graphics display accuracy and integrity.	Core Algorithm
11	Smart Area Display Technology	This technology enhances large-format graphics display performance and operational fluidity by shielding and processing off-screen data. It leverages the GPU for parallel data calculations, thereby optimizing the overall user experience.	Technical Mechanisms

12	Graphics Data Adaptive Compression Technology	This technology applies adaptive compression techniques to 2D and 3D models to efficiently generate and compress graphics data. It reduces memory usage and enhances operational speed by optimizing the data based on its specific characteristics.	Core Algorithm
13	Intelligent Parsing and Processing Technology for Complex Graphic Elements	This technology efficiently parses and processes the parametric feature information of complex graphic elements, significantly reducing memory usage. It intelligently adapts to different forms of graphic elements based on environmental requirements, thereby enhancing user drawing efficiency.	Core Algorithm
Main Core Technology Innovation			
14	Large Software System Performance Optimization Technology	This technology employs a range of techniques, including efficient memory management models, CPU instruction optimization, GPU acceleration, and parallel computing, to enhance the performance of large software systems. These methods collectively advance the performance of the GstarCAD platform, achieving an industry-leading level of efficiency.	Technical Mechanisms
15	CAD Data Memory Management Technology Based on Fragments	This technology enhances software data throughput and system performance by storing and processing CAD data in fragments. It effectively manages massive entity data, prevents performance bottlenecks, and maintains system efficiency. Additionally, it utilizes a memory pool to store data uniformly, reducing memory fragmentation, optimizing hardware performance, and improving storage speed.	Core Algorithm
16	CAD Graphic Data Incremental Storage Technology with Version Traceability	Traditional CAD graphic data formats are complex, lack built-in version management, and result in large file sizes, which can be inefficient for network transmission. Our developed technology addresses these issues by implementing incremental storage with version traceability. This approach provides a timeline management system for graphic data, storing data as a combination of summaries and incremental changes. This reduces storage and transmission overhead, enhancing overall storage performance.	Application scenarios, Technical Mechanisms
17	Distributed Graph Database Indexing Technology	This technology overcomes the limitations of entity-level retrieval and distribution in graph databases by implementing distributed indexing. It enables high-speed downloading and updating of graph data, significantly improving performance and scalability.	Technical Mechanisms

18	Project-Level Graphic Database Version Management Technology	Traditional graphic database version management typically relies on file-based versioning, which often fails to maintain consistency across different files. Our company's independently developed project-level graphic database version management technology ensures consistent versioning across all files within a project. This approach enhances the integrity of the file content and ensures that all components of the project remain synchronized.	Application scenarios, Technical Mechanisms
19	Graphic Data Comparison and Conflict Resolution Technology	This technology enables entity-level version comparison of graphic data and provides solutions for conflict resolution. It addresses challenges related to tracking graphic data versions and merging data across different users, ensuring seamless integration and consistency.	Application scenarios
20	Differentiated Control Technology in CAD Systems	When project team members collaborate on designs, complex data relationships can arise from cross-references and non-differentiated references, which can negatively impact the user experience. Our differentiated control technology allows designers to filter graphic data in DWG drawings based on project requirements. This reduces interference from irrelevant data, addresses users' needs for differentiated data usage, and enhances operational efficiency and accuracy.	Application scenarios, Technical Mechanisms
21	CAD System External Reference Filtering Management Technology	This technology enables users to quickly create and customize data view templates tailored to their professional needs. By allowing for precise external reference filtering, it enhances user convenience and streamlines workflow according to individual expertise.	Application scenarios, Technical Mechanisms
22	CAD Reference Real-Time Change Tracking Technology	This technology enables users to dynamically track and respond to changes in graphic data in real-time during collaborative CAD design. By providing immediate updates on modifications, it significantly enhances the efficiency of collaborative design efforts.	Application scenarios, Technical Mechanisms
23	Large-Format Printing Technology	This technology features a specialized printing driver that enhances the accuracy of printing long and complex images. It ensures high-quality output for large-format prints, improving detail and precision.	Technical Mechanisms
24	Rasterization Image Processing Technology	This technology enables the rasterization of large-format vector graphics, enhancing the stability and quality of large-format graphics output.	Core Algorithm

25	Cross-Operating System CAD Software Architecture Technology	This technology features a low-coupling kernel designed with a message dispatch mechanism that operates independently of the underlying operating system. It addresses data processing challenges in the CAD core layer across different platforms, enhancing the stability and performance of the kernel on environments such as Android, iOS, and web pages.	Technical Mechanisms
26	Secondary Development Interface Technology	This technology offers a comprehensive secondary development interface that is highly compatible with mainstream international CAD products. It allows the same source code to be compiled and executed on GstarCAD as well as leading global CAD systems, thereby simplifying the process of application software migration for secondary developers.	Technical Mechanisms
27	FAS/VLX Parsing and Running Technology	This technology enables the direct loading and execution of FAS/VLX binary programs compiled with VLISP on the GstarCAD platform. It supports a wider range of secondary development software, ensures the security of VLISP source code, and enhances the execution efficiency of VLISP programs.	Core Algorithm

2.3. Reliability and Stability

GstarCAD 365 is designed to operate continuously and without interruption. If the software encounters issue due to server access problems or system environment errors, it will display a corresponding prompt. If server access is unavailable and the account login cannot be completed, a dialog box will appear to notify the user. Once the connection issue between the client and server is resolved, the software can be re-logged into and used normally. In cases where file corruption prevents GstarCAD View from starting, simply reinstalling the software on the client will restore normal operation.

GstarCAD 365 is resource-efficient, requiring relatively low hard disk and memory usage. However, for users frequently processing complex or multiple drawings, it is recommended to install a 64-bit operating system and allocate sufficient memory to prevent system crashes caused by insufficient resources.

While GstarCAD 365 meets high standards of reliability and stability, external factors such as operating system issues, software environment conflicts, memory limitations, hard disk failures, or power outages can still cause anomalies. To safeguard design files, GstarCAD View offers multiple protection methods, such as cloud image storage, minimizing potential data loss during unforeseen events.

2.4. File Compatibility

GstarCAD 365 is designed to meet the needs of backward compatibility while also allowing for version upgrades in line with future developments. Upgrading does not affect system performance or operation, ensuring the protection of early data assets.

1. Backward Compatibility:

- Software versions from different periods are backward compatible.
- Upgrading the software version is straightforward, and system operations remain unaffected during the upgrade process.

2. Timely Updates:

- Gstarsoft commits to providing the latest software versions promptly.
- Each software release undergoes rigorous testing to verify its reliability and stability before official launch.

GstarCAD 2D CAD files and data are fully compatible with AutoCAD. Historical drawing data can be opened, edited, and saved directly without any conversion, ensuring seamless data exchange with upstream and downstream partners. GstarCAD View can open and save the latest versions of 2018 DWG/DXF files and is compatible with AutoCAD versions 2.5 through 2023, achieving full two-way compatibility without the need for version conversion.

Beyond drawing files, GstarCAD also supports various data files used within benchmark software, such as:

- Font files (.shx)
- Line type files (.lin)

- Hatch pattern files (.pat)
- Alias files (.pgp)
- Sheet set files (.dst)
- Slide files (.sld)
- Script files (.scr)

The table below illustrates the range of drawings and data files with which GstarCAD is compatible:

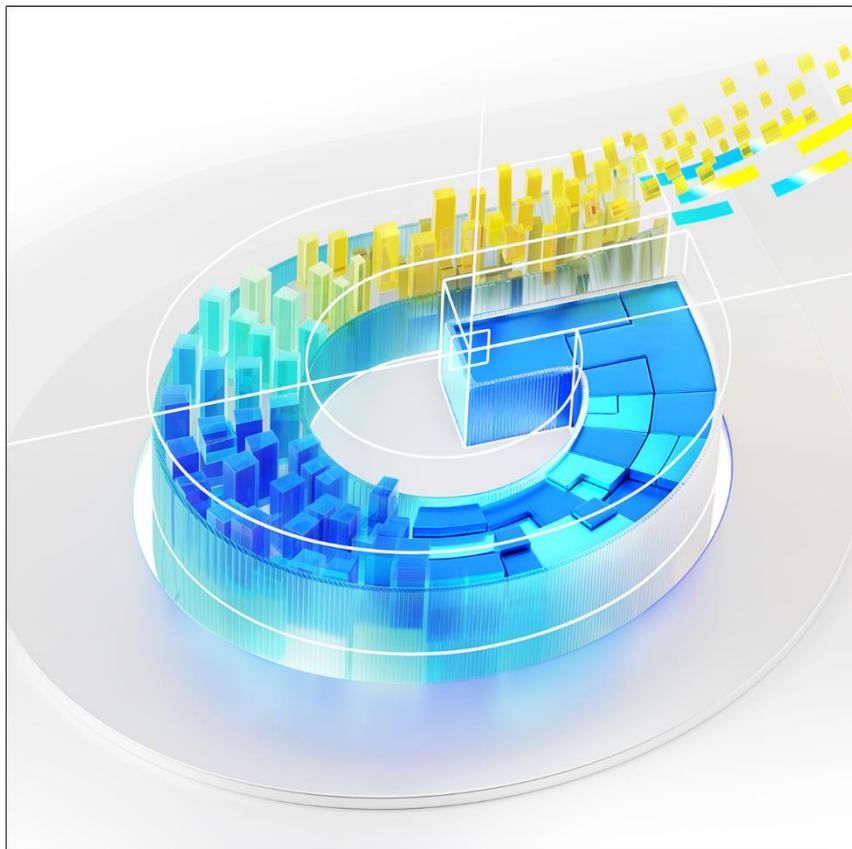
Compatible item	GstarCAD 365
2.5-2018 version of DWG/DXF	✓
Template files (*.DWT)	✓
Standard files (*.DWS)	✓
Font files (*.shx)	✓
Linetype files (*.lin)	✓

GstarCAD can directly read and write various versions of DWG and DXF formats. These standard two-dimensional drawing formats ensure data compatibility with a wide range of similar software, as well as upstream and downstream applications that support these formats, such as CAD, CAPP, CAM, CAE, PLM, PDM, and other products.

2.5. Security

GstarCAD 365 implements a comprehensive security strategy to ensure the system's stable operation. It addresses four key aspects: encryption, authentication, data integrity, and non-repudiation, meeting the security requirements of enterprise information systems.

The GstarCAD 365 platforms regularly communicate with the server to verify license authorization. As long as the server is running normally, the platform can access it without issues. GstarCAD 365 supports 24/7 uninterrupted operation.



■ <https://www.gstarcad.net/>