Collaboration
Server Management Guide
GstarCAD 2019
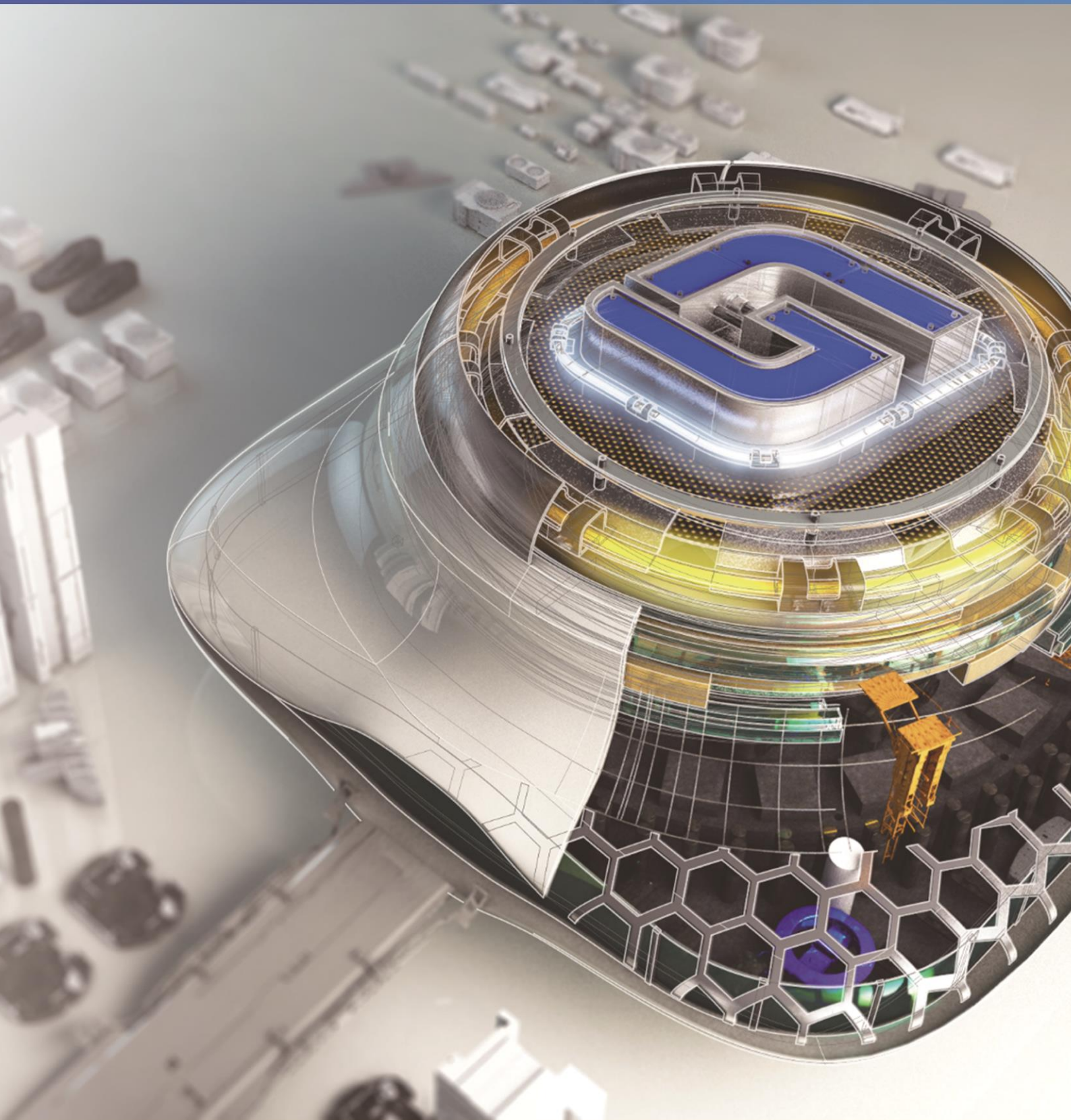
GstarCAD

Table of Contents

1. GstarCAD Collaboration Server Management

The GstarCAD Collaboration System is mainly composed of a group of clients and a server. The client part GstarCAD Collaboration Client is integrated directly into GstarCAD platform. Drawing(s) and file reference(s) submissions are done in the same user interface, making the operation and process much simpler. At the same time, GstarCAD Collaboration Server is used to manage settings related to design project on the server side. The management includes the directory structure to manage project-related data, personnel, and permissions or privileges. The server program needs to be installed separately and configured by the system administrator.

1.1. General Requirements for GstarCAD Collaboration Server

Operating System Requirement

Recommended above Windows Vista 32/64bit. For the server side should above Windows Server 2008. It's recommended 64-bit Windows Server 2008 R2 or higher spec server operation system.

Hardware Requirement

x86/x64 computer or server, the memory should above 2GB, disk should above 256 GB. Recommended x64 server, memory should above 4GB (with ECC), Hard disk should above 1TB. Disk space requirement depends on the number of projects, drawing files number and size. The more projects files and size, greater disk space requires.

Internet Requirement

Support local area network (LAN) or the world wide web deployment, support cable connection or wireless connection. Recommended local area network deployment, use cable connection.
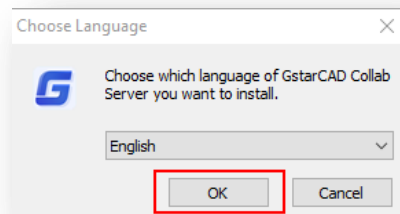
Data Base Requirement

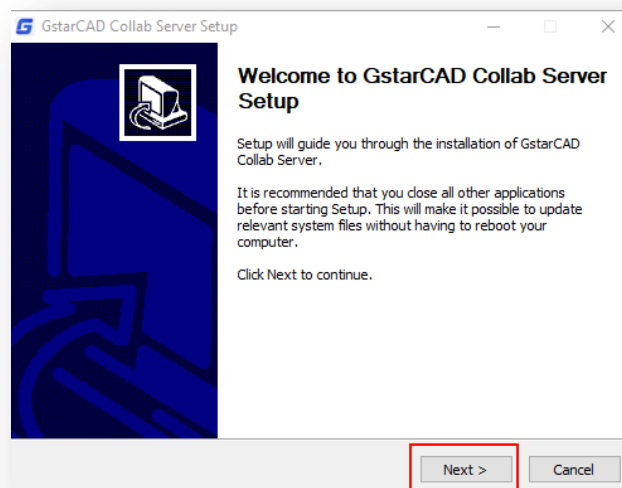GstarCAD Collaboration Server works without any external data base.

2. GstarCAD Collaboration Server Installation

1.- Run as administrator the "GstarCAD Collab Server.exe" file.   GstarCAD Collab Server(x64).exe
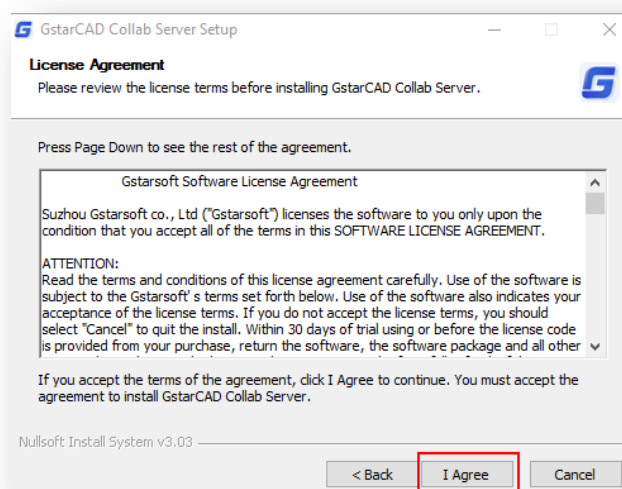
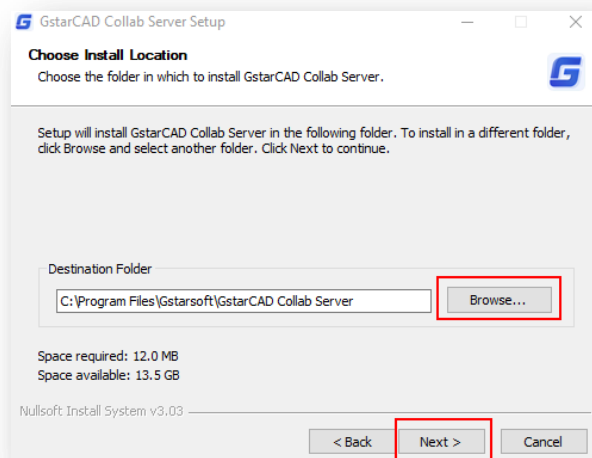2.- Choose a prefer language and press "**OK**" button to start the installation wizard.

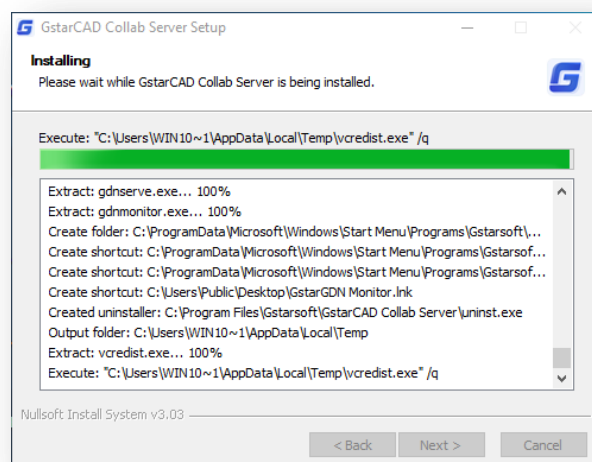3.- Click "**Next**" button to access to license agreement window.

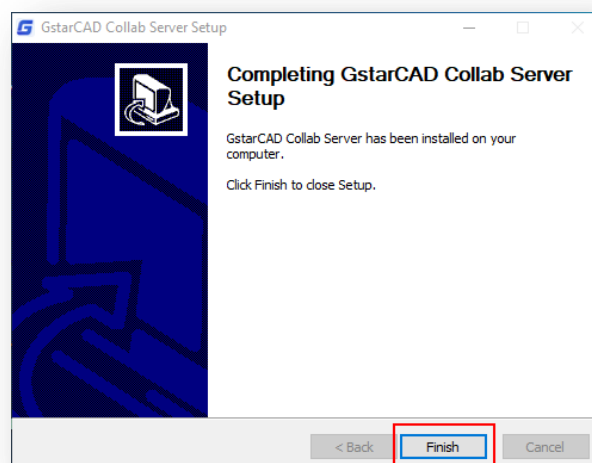4.- Click "**I Agree**" button to agree license terms.

5.- Click "**Browse**" button to save GstarCAD Collaboration Server tool to a new folder or let the path by default. Then click "**Next**" button.


6.- The installation progress is done in few seconds.

7.- After installed successfully, click **"Finish"** button to close the setup wizard.

8.- After the installation is done, at desktop, you could see **"GstarCAD Collaboration Monitor"** booting icon. By default, **"GstarCAD Collaboration Monitor"** service is registered and running correctly on the system, so you can setup its options directly from the taskbar.
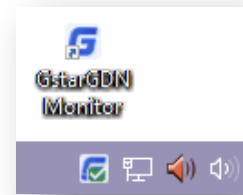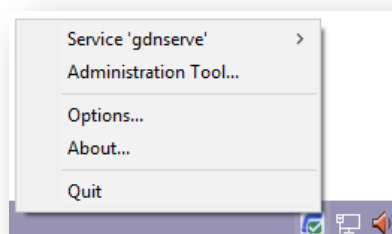

 "GstarCAD Collaboration Monitor" service running status can be distinguished by different icons:

- ✓ **Green checked mark:** Service already registered and running normally.
- ✓ **Red crossed mark:** Service already registered but stopped working or booting abnormally.
- ✓ **Yellow exclamation mark:** Service hasn't been registered or the monitor couldn't detect the corresponding service status.

Note: GstarCAD Collaboration Server program can be only installed on one server with one language chosen. If you want to install the program again with different structure and language, you need to uninstall the previous one.
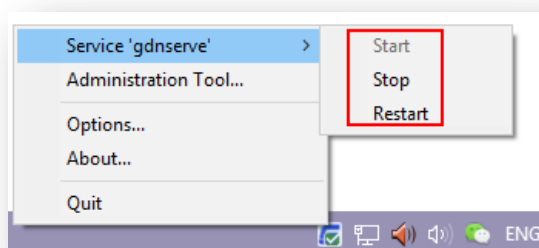
3. Exploring GstarCAD Collaboration Monitor Service Menu

Once **"GstarCAD Collaboration Monitor"** service is running on the system, click its icon at taskbar to deploy a context menu. If you couldn't find **"GstarCAD Collaboration Monitor"** icon at taskbar, you can restart it directly through its shortcut in desktop or from its installation directory **\bin\gdnmonitor.exe**. Let's explore each option form the menu.


3.1. Service 'gdnserve'

This option allows to start, stop or restart GstarCAD Collaboration Monitor service.

3.2. Administration Tool

Opens the **"Login"** dialog box. After installed the **"GstarCAD Collaboration Monitor"** program, the login interface will show by default a server IP, port number, admin as user name and password. You can input a preferred server IP address, port number, create a user name and change default password. To change the password, click **"Change password"** button. Within **"Change Password"** dialog box, input old, new and confirmation password. Click **"Apply"** button to save the new password.

> **Remark:** The project administrator by default is a power user type with the highest authority. The administrator can also create and assign a user or participant member as power user type. To access to **"GstarCAD Collaboration Administration"** dialog box, you need to login with power user account.
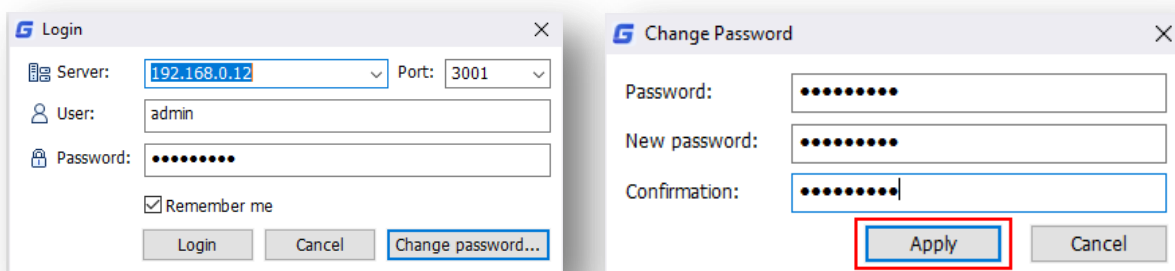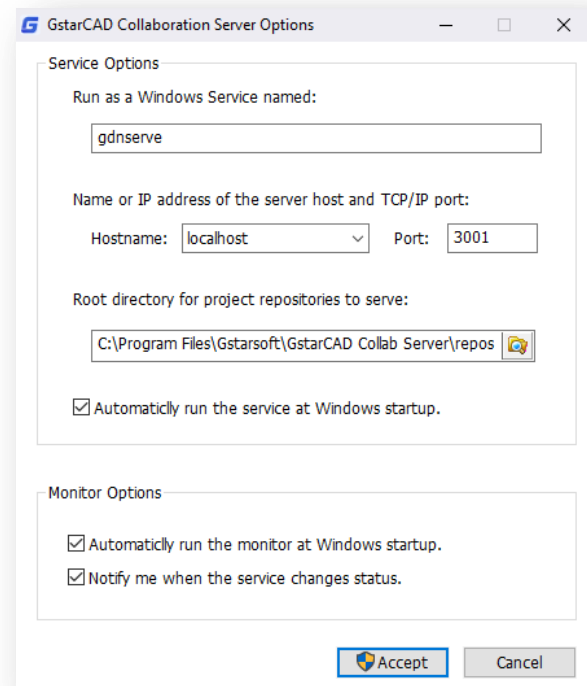
3.3. Options

Opens **"GstarCAD Collaboration Server Options"** dialog box where you can setup server service and monitor options.
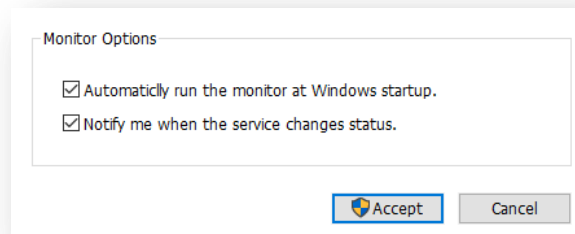
   Service Options:

- ➢ **Run as a Windows Service named:** You can input a new windows service name or let it by default. The name Length limits must be less than 80 characters, special characters not supported as the following: < > / \ \ \ ":;?* | = `.If the default service name has been occupied by other applications, you need to change the service name, or use the default value.

- ➢ **Name or IP address of the server host and TCP/IP port > Hostname:** You can input IP address as hostname. Now GstarCAD Collaboration Monitor service only supports TCP/IPv4. Select one IP address in pull- down list or input the host IP address. If the server has multiple network cards or configures multiple IP addresses for one network card, there will display many valid IP address in pull-down list. The default value of hostname: 0.0.0.0, indicates all the network cards and IP addresses binding with this server. Meanwhile, the client can connect to GstarCAD Collaboration Monitor service with any valid IP address. If you specify the IP address 127.0.0.1 or localhost, you can only access to GstarCAD Collaboration Monitor service from local computer.

- ➢ **Port:** Specifies GstarCAD Collaboration service binding port. The default port is 3001, if the specified port has been occupied by other ports, GstarCAD Collaboration service will not boot normally, at this time, the port number should be changed. The port number is integer from 0 to 65535. In Windows system, you can check whether the port has been occupied by DOS command "netstat -aon".

- ➢ **Root directory for project repositories to serve:** Specifies directory for project repositories to server. the target directory should have write permission, the disk should have enough space. The project root directory changes will not affect the original files location. If you want to access the existing project, please stop GstarCAD Collaboration Monitor service first, then clip or copy the all the files and catalog to the new directory, restart GstarCAD Collaboration Monitor service.

- ➢ By default, the **"Automatically run the service at Windows startup"** option is checked. You can uncheck this option, so next time you restart Windows system, the GstarCAD Collaboration Monitor service will not run.

8

Monitor Options:

➢ By default, the **"Automatically run the monitor at Windows startup"** option is checked. You can uncheck this option, so next time you restart Windows system, you need to boot GstarCAD Collaboration Monitor program manually.

➢ By default, the "**Notify me when the service changes status**" option is checked, so it will seed a notice message to notification area. if you don't want to receive the notice, uncheck this option or close it from **"notice and operation"** area in Windows.

3.4. About

Displays version information of **"GstarCAD Collaboration Monitor"**.
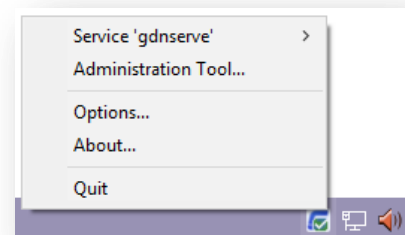
3.5. Quit

Exits the **"GstarCAD Collaboration Monitor"** program.

4. Interface of GstarCAD Collaboration Administration

As a project administrator, in the **"Login"** dialog box, click **"Login"** button to access to **"GstarCAD Collaboration Administration"** interface.
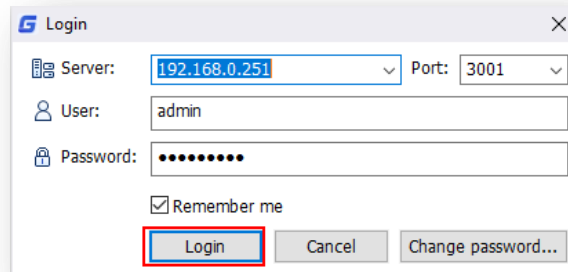
The **"GstarCAD Collaboration Administration"** interface allows the project administrator to create a flexible project structure by adding users, groups and assigning roles and permissions for them.

4.1. Project Tab

The administrator can create, rename, delete or copy a new project, adding multidisciplinary groups and users as roles in the project, creating folder or subfolders as project structure and assigning permissions for each of them.

4.2. User Tab

The administrator can create, delete or modify user's information prior to build the project structure. The administrator has the right to give a proper user type for each member according to project restrictions.

4.3. Group Tab

The administrator can create, delete or rename a group, even users can be added or deleted to an existing group.
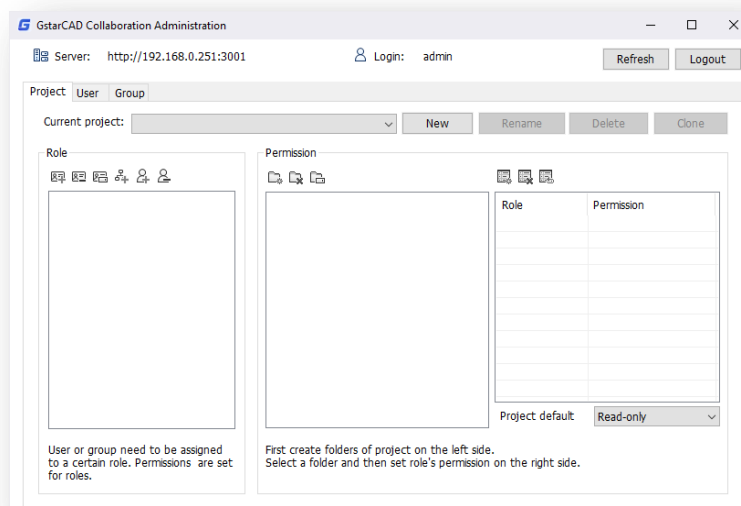
5. New Project Configuration

5.1. Creating New Project

The project administrator has the right to create, rename, delete or clone as many projects as needed in the same server IP.
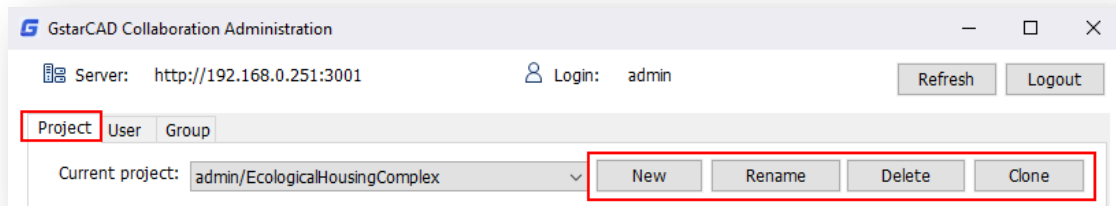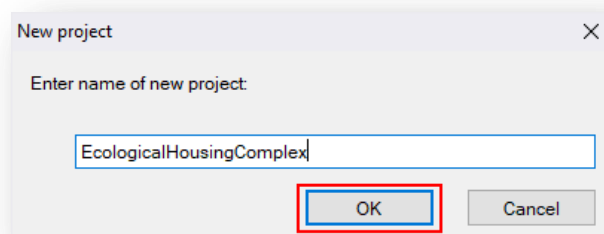

In this case, let's create a basic architectural project sample as follow.

1.- In the **"GstarCAD Collaboration Administration"** interface, under **"Project"** tab, click **"New"** button to create a new project.
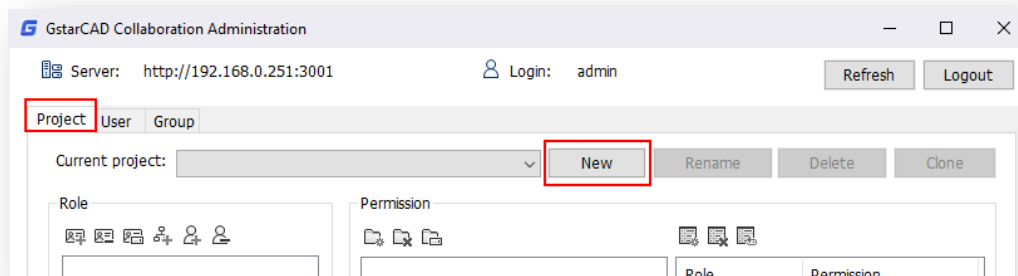
2.- Enter a proper name for the new project and press **"OK"** button to confirm.

3.- The created project will be displayed as current project, which is ready to be added groups or users under **"Role"** list and creating project folder and subfolder structures with a specific permission for each folder under **"Permission"** list.
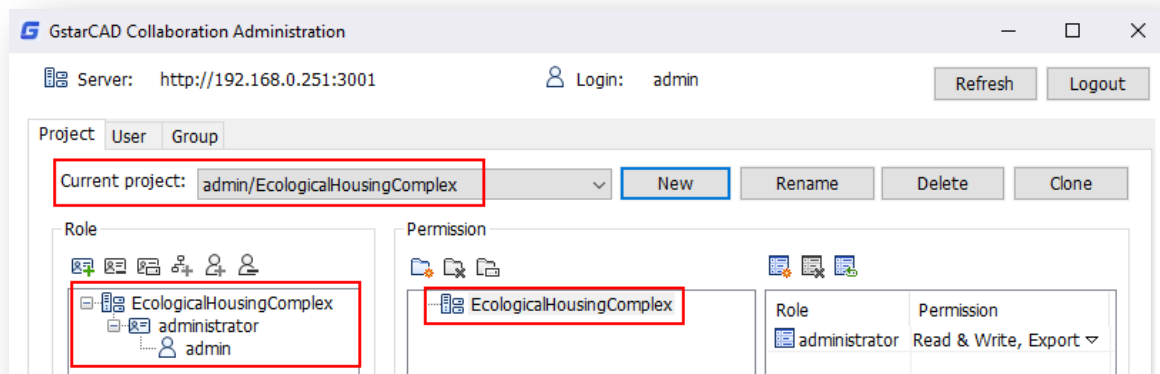
5.2. Adding Users to Project

The project administrator (as power user) can add all users or participant members at will prior to build the project structure, so later the users or members will be defined by multidisciplinary groups with roles and permissions.
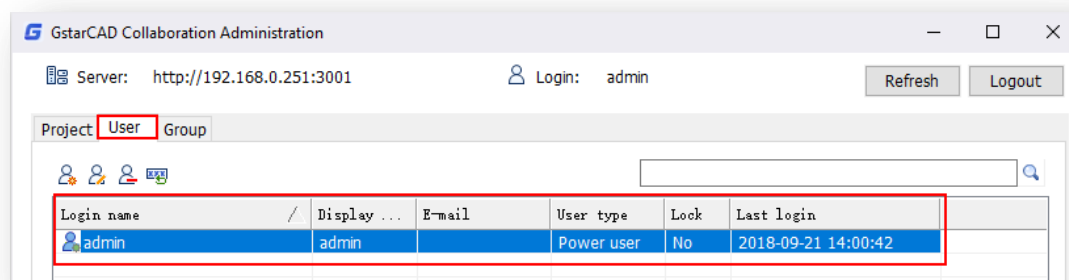
At glance, the **"User"** tab interface shows by default the project administrator information like login name, display name, e-mail, user type, lock, and last login session. To add users to project, follow the below instructions.

1.- In the **"GstarCAD Collaboration Administration"** interface, under **"User"** tab, click **"New User"** icon to open the **"New User"** dialog box.
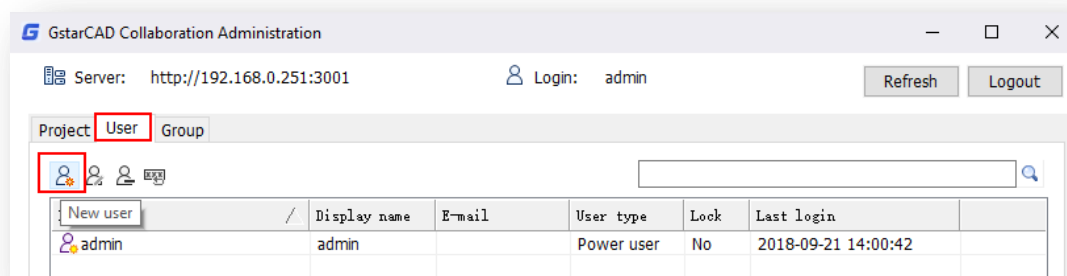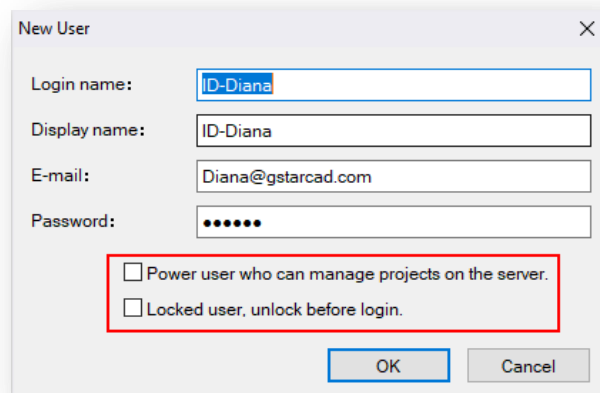
2.- In the **"New User"** dialog box, the project administrator can fill user's information account.

Remark: The project administrator can assign two types of users (power and common) according to project restrictions as follow:

Power User Type: As a power user type, you can create and delete projects, configure the project's directory structure, and assign role permissions.
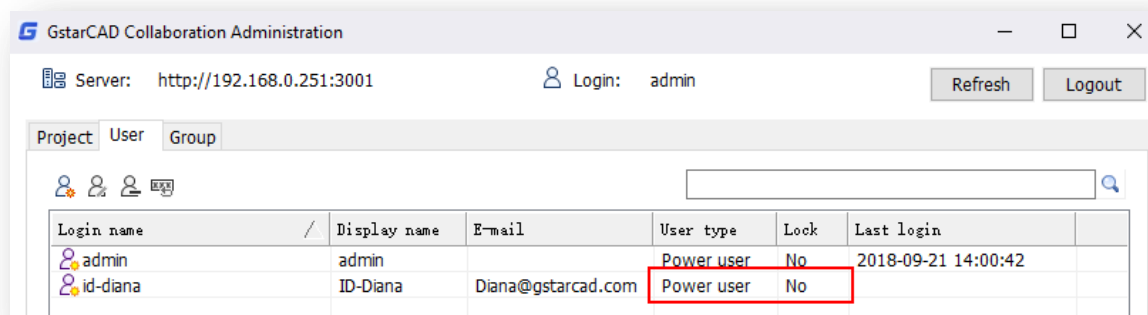
Common User Type: As common user type, you can access to the project's directory or file based on the permissions that administrator had set and does not have the right to configure participant members and project structure.

-If the **"Power user who can manage projects in the server"** option is checked, the user is allowed access to **"GstarCAD Collaboration Administration"** interface without login restriction and could manage and setup project options. The user will be a **"Power user"** type with **"No"** lock condition as shown below.
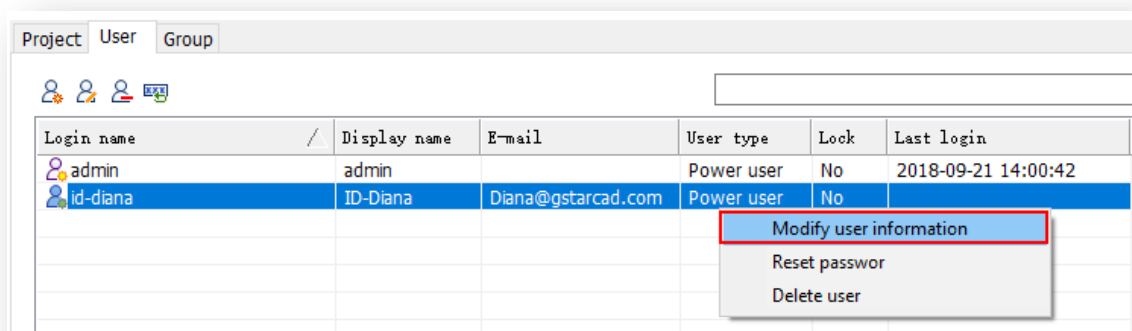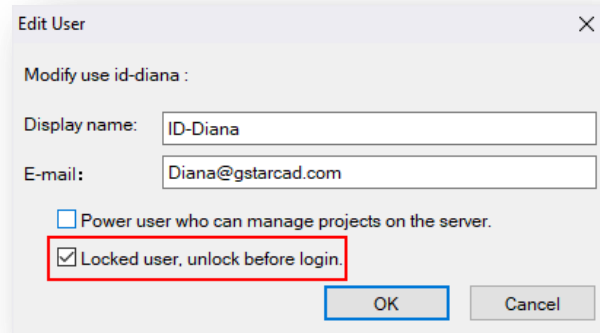

The project administrator can modify user information, reset password and delete a user by doing right-click on a selected user and selecting **"Modify user information"** option from context menu.

-If **"Locked user, unlock before login"** option is checked, the user will be account locked, so it cannot login to participate on the project for different circumstances, so when the user is available to participate back into the project, the administrator can unlock user's account before login.
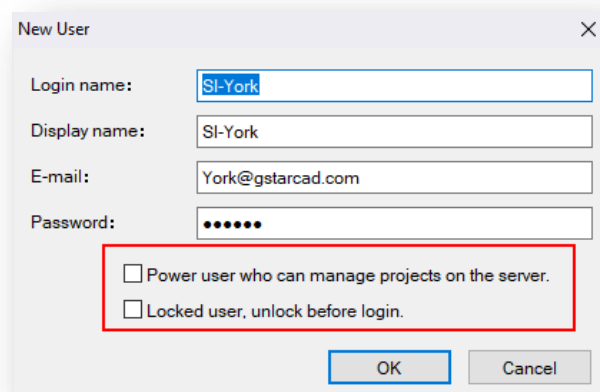

The user will be a **"Common user"** type with **"Yes"** lock condition which means user can't login to participate in the project and is not allowed access to **"GstarCAD Collaboration Administration"** interface either as shown below.
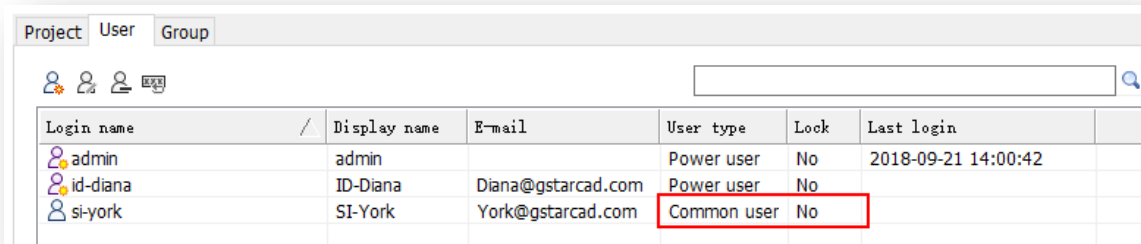

-If project administrator does not check both **"Power user who can manage projects in the server"** and **"Locked user, unlock before login"** option, the user will be a **"Common user"** type with **"No"** lock condition which means user can login without restriction to participate in the project and is not allowed access to **"GstarCAD Collaboration Administration"** interface.
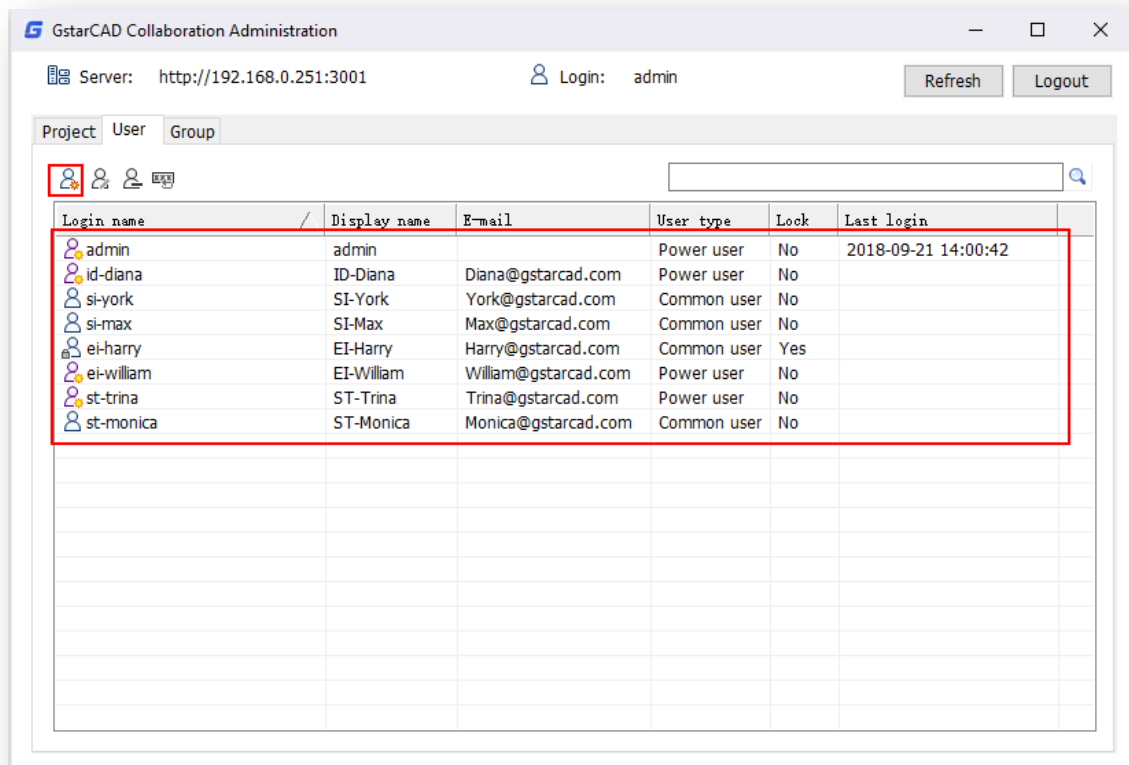
Notice **"Power user"** and **"Common user"** icons are distinguished by different colors.

-In a case, the project administrator assigns both **"Power user"** type with **"Yes"** lock condition to a user, it cannot access to project or **"GstarCAD Collaboration Administrator"** interface either until the administrator unlock users account before login.

3.- You can keep adding, deleting or modifying user's information according to project structure needs.

5.3. Adding Multidisciplinary Groups

In this architectural project sample there will be some multidisciplinary groups or contractors such as sanitary and electrical installation, structuring, interior design, etc., composed by users or members specialized on such disciplines. To create groups just follow the steps:
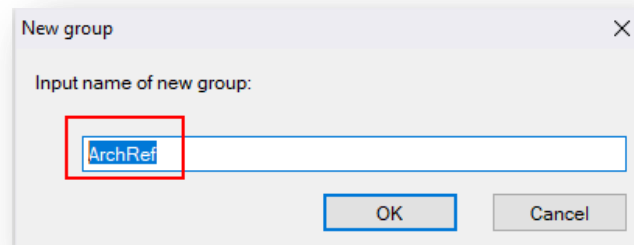
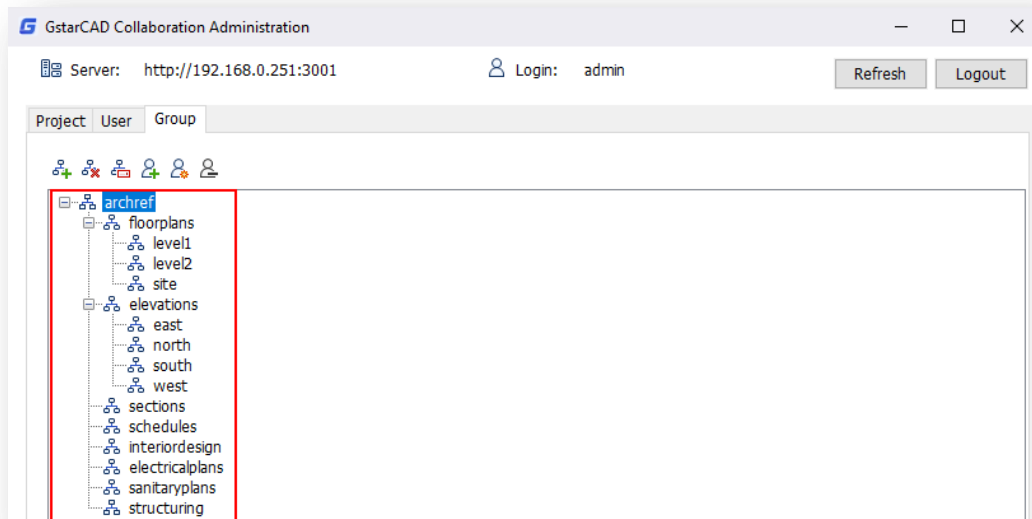1.- In the **"GstarCAD Collaboration Administration"** interface, under **"Group"** tab, click **"New group"** button to open the **"New group"** dialog box.
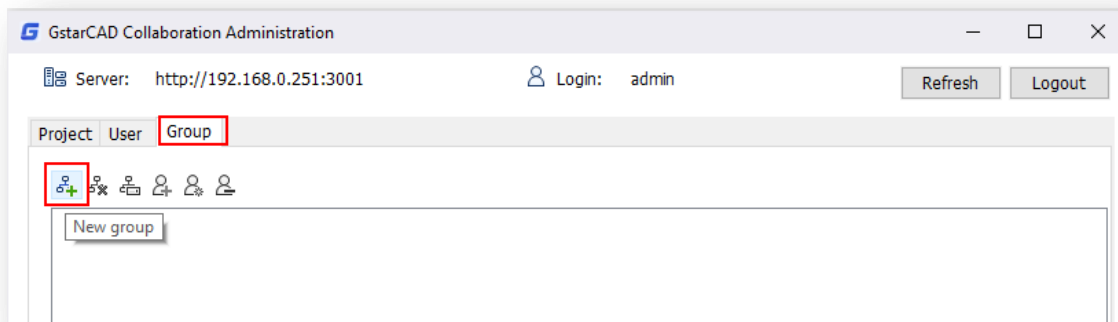
2.- In the **"New group"** dialog box, input a proper name for participant group according to team discipline and press **"OK"** button.

3.- You can keep adding groups and subgroups according to project needs, just repeat the steps 1 and 2.

4.- When you finished defining all participant groups, you can start adding user or members to each group as needed. Select a group, right-click it and select **"Add User"** option.
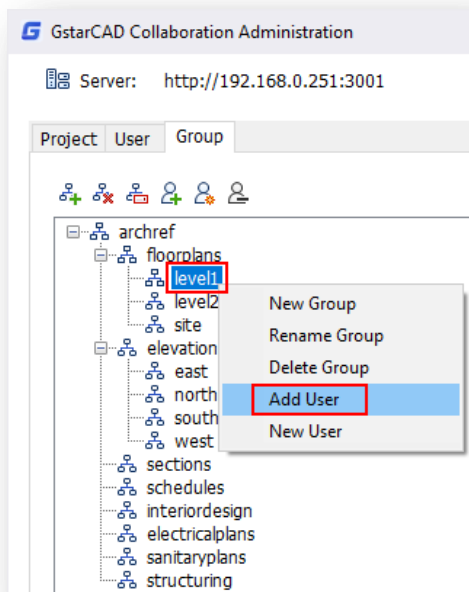
5.- From **"Add Member"** dialog box you can choose what member or members can be included in the group. Select one member by doing click or multiple selections by pressing CTRL click, then press **"OK"** button.
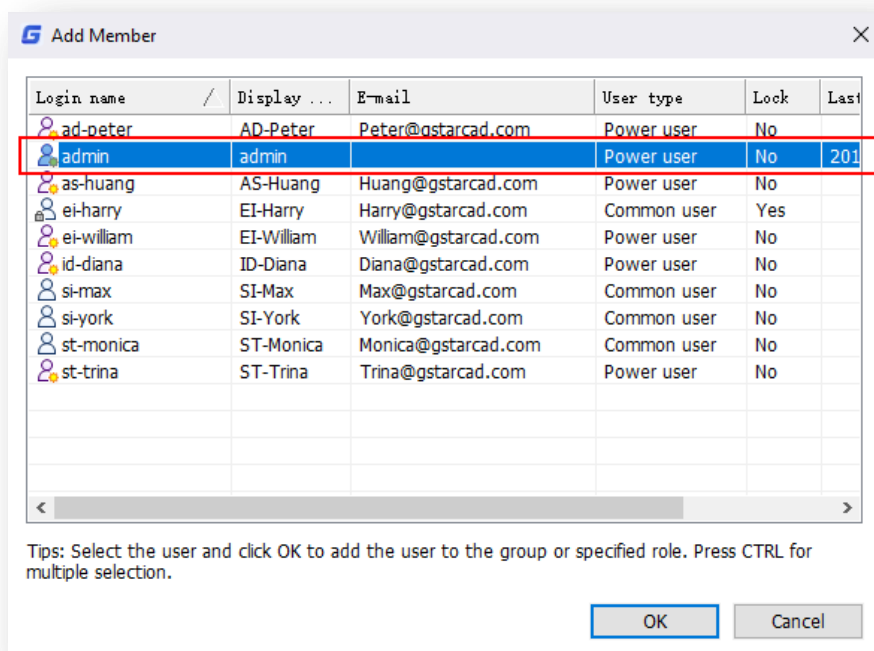
6.- A member has been added successfully under selected group.
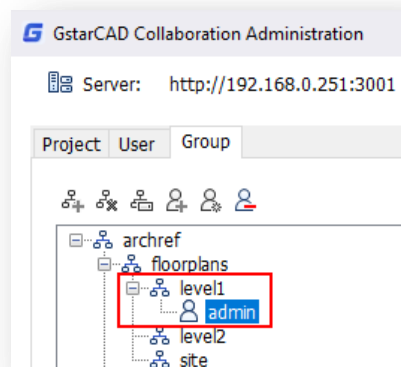
7.- You can keep assigning users or members to groups according to project organization.
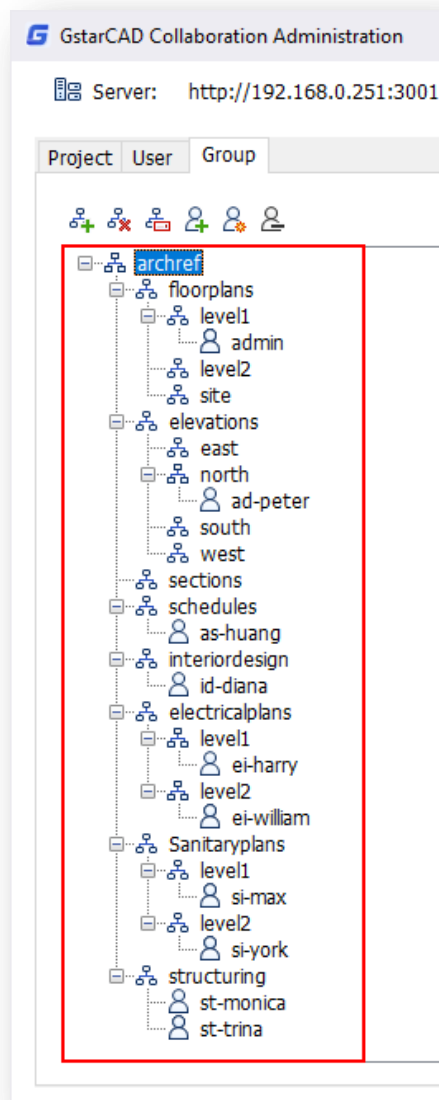
5.4.   Creating Roles for Groups

The project administrator, after defining project's groups and members, must create roles and add members to them. As architecture project sample, it can be divided into different roles according to multidisciplinary teams like electrical, HVAC, water supply, drainage, etc. You can assign which designers belong to a specific role, just follow the steps below.

1.- Go to **"Project"** tab, under Role space, right-click the project name previously created and select **"New role"** option, or press **"New role"** button located at top-left of the project name.
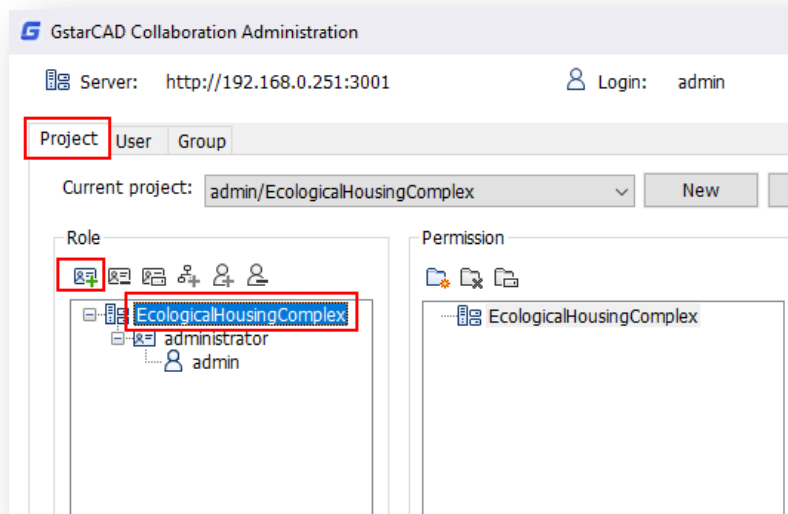
2.- Enter name of new role, enter a proper name for role according to multidisciplinary groups participant on the project.
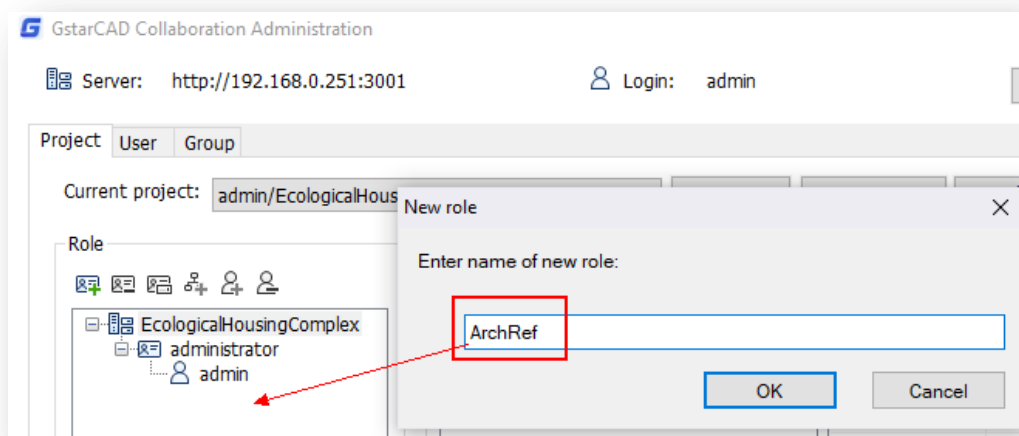
3.- At first instance, you can keep creating roles for multidisciplinary groups. Later we can add users or members for each role created.
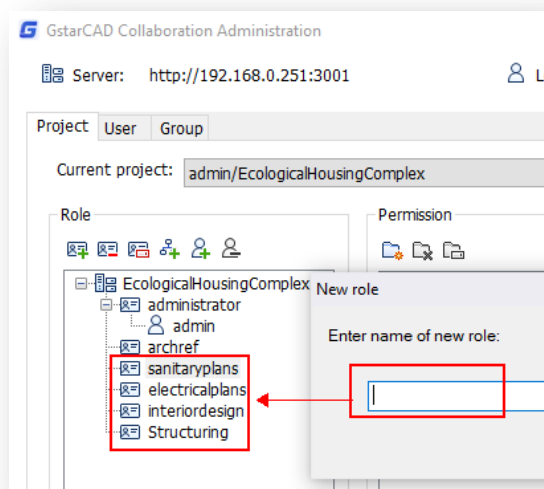
4.- To add members for each role created, right-click a role and select **"Add User"** option or select **"Add user to role"** button.
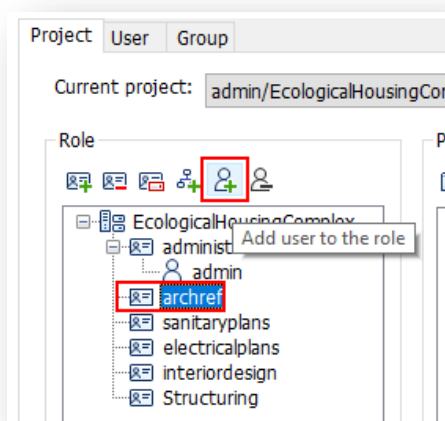

5.- From **"Add Member"** dialog box you can choose what member or members can be included in the group. Select one member by doing click or multiple selections by pressing CTRL click, then press **"OK"** button.
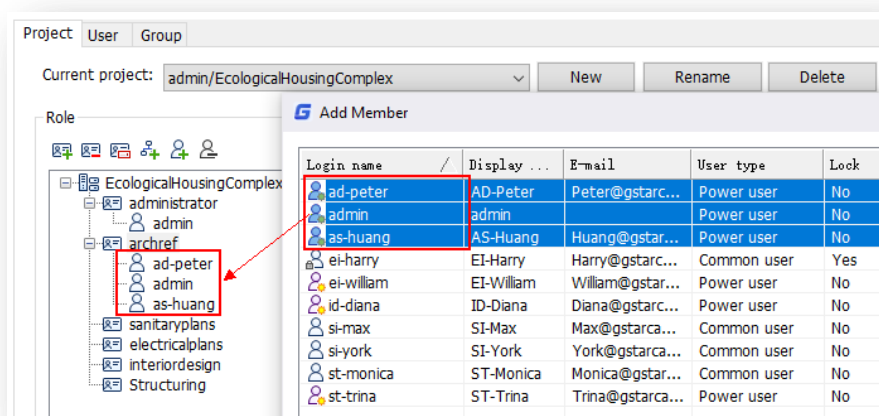
6.- You can keep adding members to each role according to project organization.
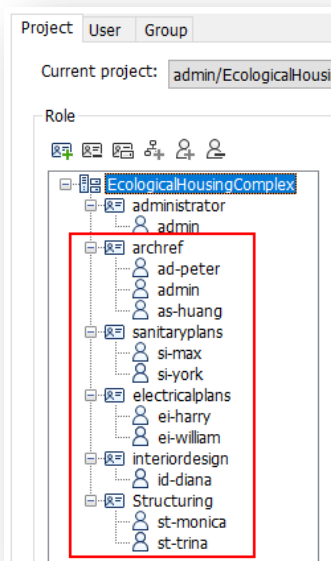
5.5.   Assigning Permissions for Folders

The project administrator, after defining roles for groups, must create and assign related permissions to project folders structure to granting security, avoiding multidisciplinary group conflicts in terms of drawing data access, writing and updating. Different roles have different permissions for different directories of the project.
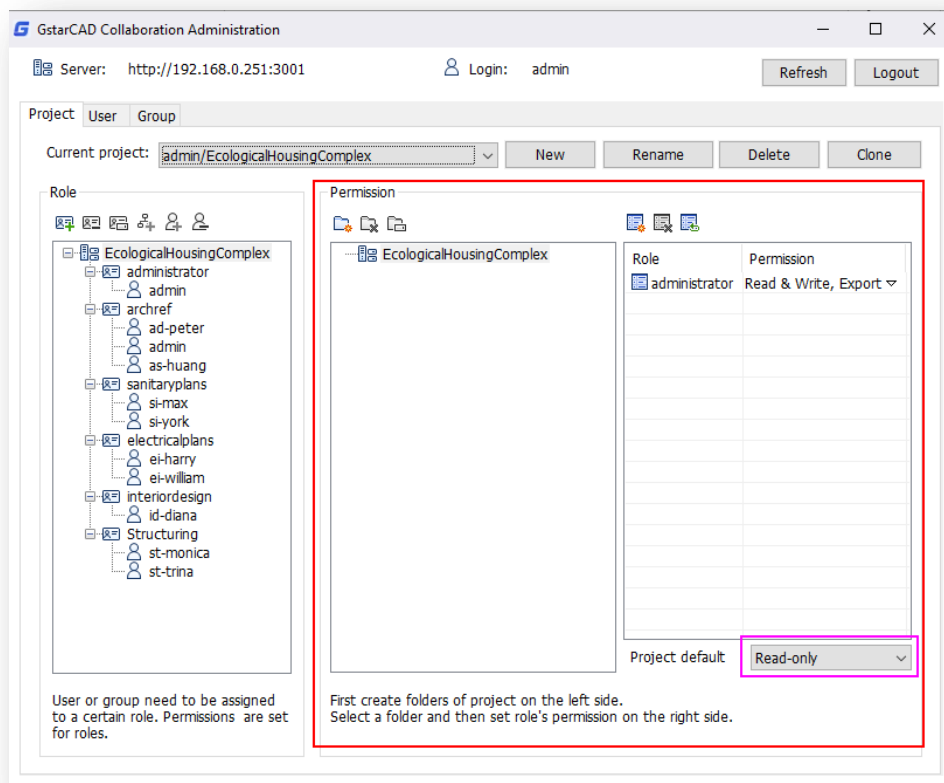
You can choose between different permission options for specific project folder:

Read-only: This permission protects files with a read-only attribute that prevents end users from changing them in any way. Users can open and view any file format (DWX, DWG, Images, PDF, Microsoft Office Files) added or referenced into the project itself but writing to the files (e.g. saving changes to it) won't be possible. In other words, the file can only be read from, not written to.

Read-only & Export: This permission allows open and view any file format added or referenced into the project but writing to the file won't be possible. Instead of writing, DWX files can be exported to DWG format.

Read & Write: This permission allows open, view and modify file formats added or referenced into the project itself.

Read & Write & Export: This permission besides to open, view and modify file formats allows to export DWX files to DWG format.

Deny all: This permission denies all permissions to a specific folder or subfolder created into the project structure.

Right now, let's set the appropriate permissions based on the operator's duties, profession, and tasks undertaken for multidisciplinary teams. Just follow the steps below.

1.- Go to **"Project"** tab, under **"Permission"** space, select **"New folder"** button to open the **"New folder"** dialog box.
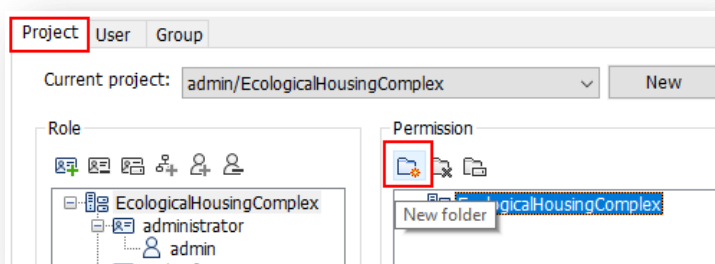
2.- Enter a proper name to create a directory or folder and press **"OK"** button.
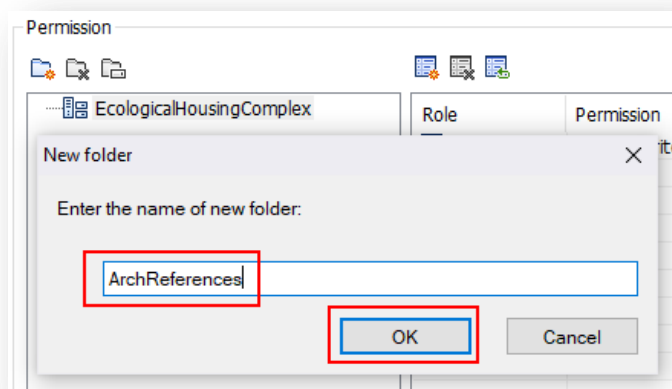
3.- You can rename or delete a created folder by pressing **"Delete folder"** and **"Rename folder"** button located at top of project name.
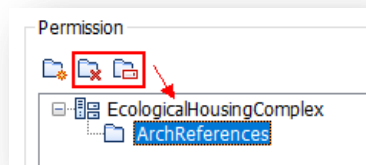
4.- You can add subfolders within a created folder according to project structure. Do right-click to created folder and select **"Add Sub Folder"** option. Then input a proper name and click **"OK"** button.
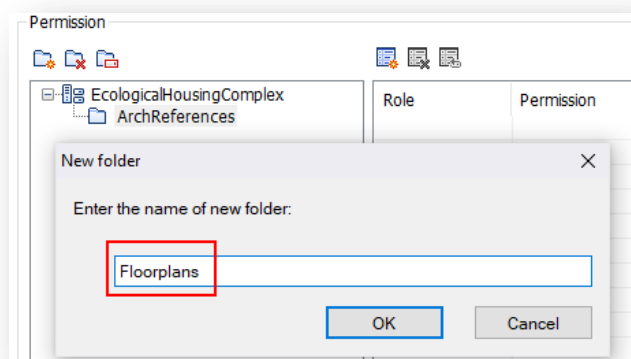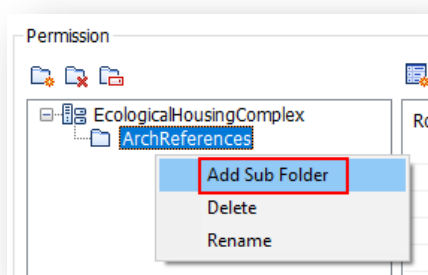
5.- You can keep adding folders and subfolders until complete the whole project structure as shown below.
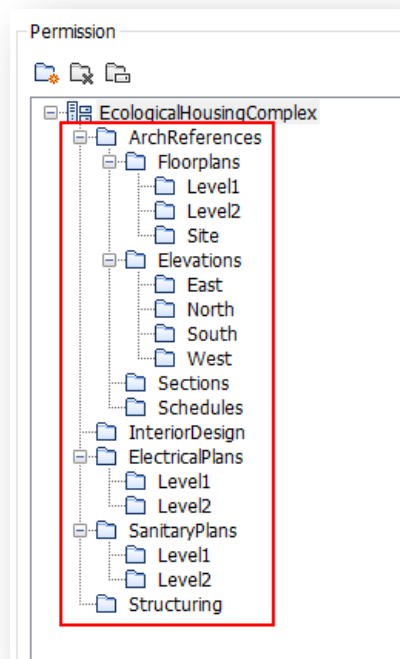
6.- After finishing created whole project directory for multidisciplinary teams, you must set right permissions to each folder or subfolder. Select a folder or subfolder and click **"Add permissions setting"** button.
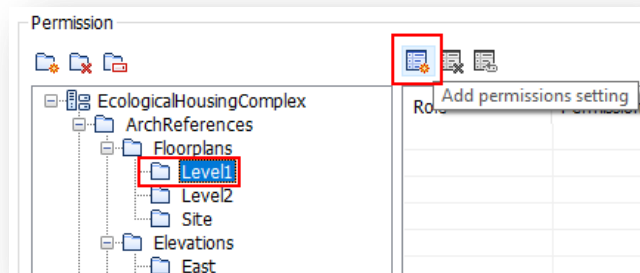
7.- In **"Edit Folder Permission"** dialog box, you must choose a **"Role"** group (created previously) to be assigned into the correspondent folder. Then select a **"Permission"** option according to project restrictions, and press **"OK"** button.
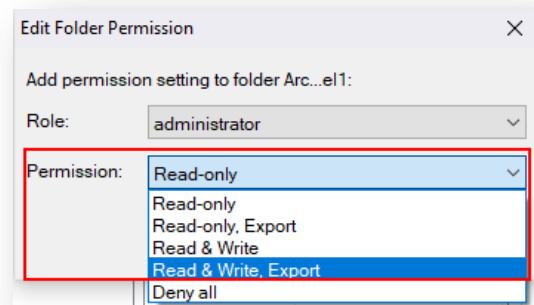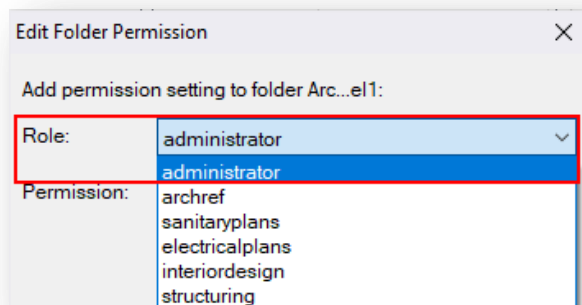
8.- You can assign more than one permission to a folder or subfolder by following the step above.
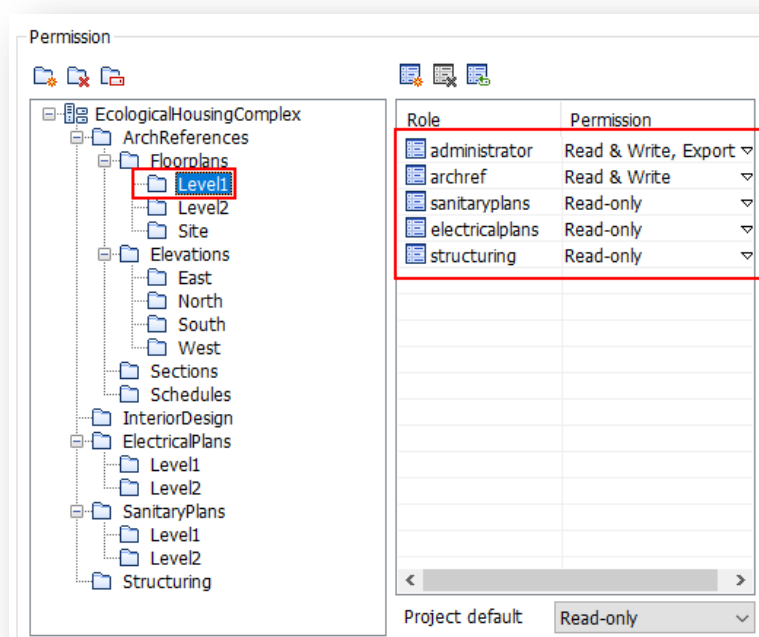
9.- As project administrator, you know that at certain point of project life cycle some roles and permissions need to be changed or no longer will be available due to different circumstances. You can select what role and its permission must be deleted. Select one role or press CTRL key to multiple select, then press **"Delete setting"** button to delete them once. If you want to change a role permission option, select a role and choose a new option from the drop-down list.
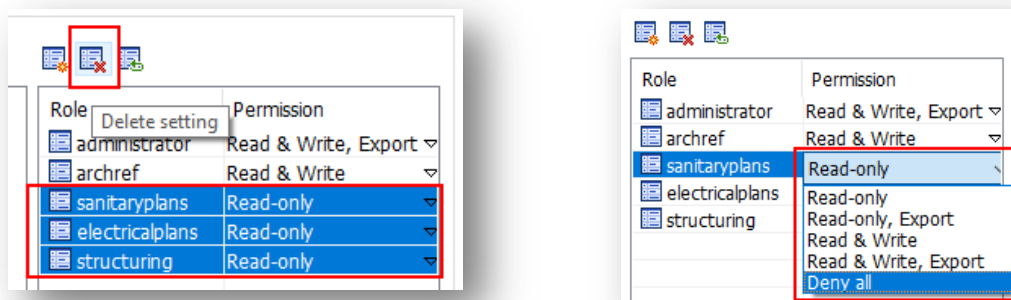
10.- After creating users, groups and setting up project roles and permissions, the project administrator could communicate to participant members from different disciplines, the project is ready to be uploaded to server and to start working into GstarCAD platform as client side.
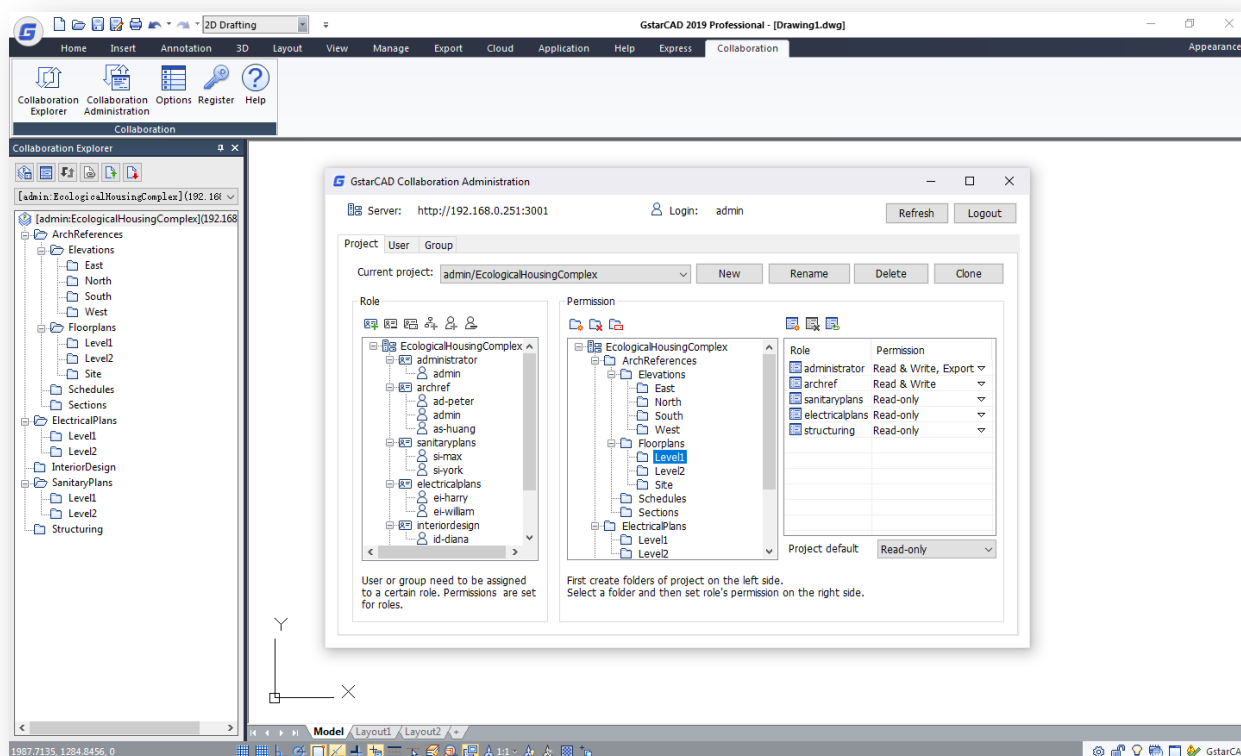
6. Troubleshooting

If "**GstarCAD Collaboration Monitor" service couldn't run normally, please follow the steps bellow to debug.**

1.- Press **"Win+R"** keys to open **"Run"** dialog box, input services.msc, click **"OK"** to start **"service"** program, please check the local service list, if there is a service named **"GstarCAD Collaboration Service".** If there is no such service, please run as administrator to start command, then run**"<installation directory>/bin/gdnserve.exe install"** to install it manually.

2.- If the service is already installed, but couldn't start, click **"GstarCAD Collaboration Monitor"** service icon at taskbar, select **"Options"** to open **"GstarCAD Collaboration Server Option"** dialog box to check and adjust the server relevant configurations, ensure the IP address is valid and the port is not being occupied by another program.

3.- Within **"GstarCAD Collaboration Server Option"** dialog box, check the option **"Automatically run the service at Windows startup"** to ensure GstarCAD Collaboration service can be started after restart the computer next time.

If "**GstarCAD Collaboration Monitor" service can start normally, but the client site couldn't connect with the server, please follow the steps bellow to debug.**

1.- Check the internet connection both in server and client side.

2.- Check server and client firewall configuration to ensure service program (**gdnserve.exe**), monitor program (**gdnmonitor.exe**) and client (GstarCAD platform) are allowed by the firewall.

3.- Click **"GstarCAD Collaboration Monitor**" service icon at taskbar, select **"Options"** to open **"Options"** to open **"GstarCAD Collaboration Server Option"** dialog box, check the correctness of service binding HOST IP address and port. If your computer has multiple network card, please ensure the specified IP address is match with the specific network card. what's more, do not binding 127.0.0.1 or localhost, because these two addresses only can be accessed by local computer.

4.- Check the hostname and port in client (GstarCAD platform), ensure the connecting parameters are match the server configuration.

5.- If your client side uses VPN tool to connect with **"GstarCAD Collaboration Monitor"** server, please ensure the VPN is in connection status.

6.- Check the client login user name and password, if forget the password, please ask the administer to reset.

7.- Try to restart **"GstarCAD Collaboration Monitor"** service.

8.- Try to reinstall **"GstarCAD Collaboration Monitor"** server.