TIP Sheet

ArchiCAD 11
Campbell Yule
Graphisoft New Zealand
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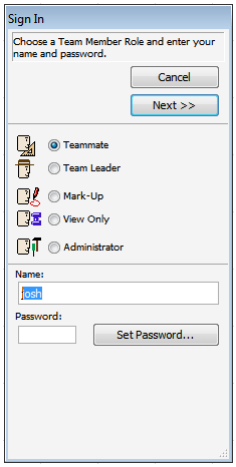
Teamwork – Quick Start Guide

This tip is intended to explain the basics of Teamwork along with a few suggestions on how to use it successfully in your business.

What is Teamwork?

Teamwork allows multiple ArchiCAD Users to access and work on the same project at the same time.
The ArchiCAD Teamwork functionality is extremely versatile and powerful. It allows a high level of security and 'process related' items (eg Reviewing of changes before updating the main project.) The purpose of this Tip Sheet is to share the essentials and give suggestions to make the use of Teamwork easy and efficient. For this reason we suggest keeping things as open and loose as possible. Using all the security and process related features may simply add an overhead to the work that isn't justified or receives no benefit.

Teamwork Roles



The Teamwork working environment allows five different User Types to Sign In. The different User Types or Roles have different uses and functions. It is important to understand all these roles.
The main 'working' roles, ie the people who actually do the work, are the Teammate and Team Leader. The other three roles don't allow any changes or additions to the actual model.

1.1 Teammate

A Teammate is a working member of the team who will work on a specific, reserved area of the project set by layers or space eg: stories and marqueed portions of the project.

1.2 Team Leader

Any team member can sign in as the Team Leader, provided that he or she knows the Team Leader's password set by the **Administrator**. Normally the **Team Leader** is the user who made the initial settings in the Project before it was shared.
The **Team Leader** is similar to a **Teammate** but:

- In addition to his or her own optional password, the person signing in as the **Team Leader** needs to enter the **Team Leader** password defined by **Administrator**.
- Can reserve the whole project with **Exclusive Access** to it, meaning that no one may sign in as long as the **Team Leader** is working on the project.
- Only the **Team Leader** has the right to perform certain important changes to the shared project's structure, including the modification of Layers, Stories, Views and Attributes. For most changes (changing the drawing scale or the dimensioning options, creating, modifying or deleting Stories, deleting Layers or other attributes), the **Team Leader** needs to sign in with Exclusive Access.

1.3 Mark-up

Anyone can access the shared Team Project and add corrections to the elements created by other team members. In this case there are no reservation options, only the **Sign In** button is active. While in this mode, you cannot create, modify or delete elements. You can, however, add Mark-Up Entries that can include suggestions in the form of corrections or highlights.

1.4 View Only

Anyone able to access the shared project through the network can open a copy of the project and browse the file as a **Viewer**. If required they can even save it as a Solo project to their own computer and work on this copy. Modifications made to this copy by the **Viewer** do not appear in the Teamwork Project.

1.5 Administrator

The **Administrator** is the person who coordinates the team and initially shares the project. Only the **Administrator** can:

- Allow the signing in of other Team Members (this applies when **Registered Members Only** is selected as an option at the sharing time)
- Force the Sign Out of Team Members (this results in the Team members work being lost so use with caution!)
- Alter other Team Members' passwords
- Modify the Administrator and Team Leader passwords
- Define or modify backup options

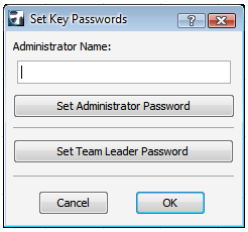
There can only be one **Administrator** for a project, but he or she can reach the project from any computer, provided that the proper name and password are used.

Important: When signed in as the Administrator, it is not possible to undertake any work on the project. The sign in is simply used to perform administrative tasks – these are outlined below.

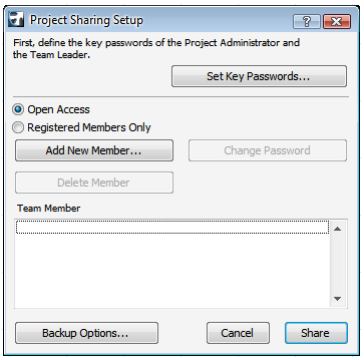
How to Share a Project

To Share a project you need to undertake the following steps.

1. Open the project you want to Share
2. Select the **Teamwork\Share this Project…** menu item and you will be presented with the following dialog:



3. Firstly you need to Set Key Passwords. Both the **Team Leader** and **Administrator** require passwords and the Administrator also requires a name.

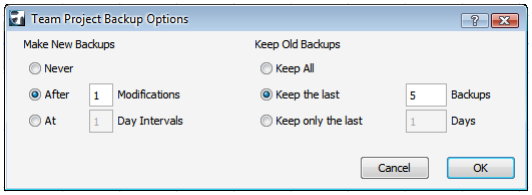


> *Unless you have a major requirement for security reasons, we suggest being open with passwords and use the same passwords for all projects.*
>
> *Passwords must be a minimum of two characters.*

4. You need to enter and confirm both passwords before you will be able to share the project.
5. You now need to decide whether you want **Open Access** or **Registered Members Only**.
   - The first option is exactly as it sounds – any one can Sign into the Project
   - The second option requires the **Administrator** to define all the required Users. If in the future a new user was required, the **Administrator** would have to **Sign In** and add the required Member. This can just be a frustrating delay during a **Sign In** process.

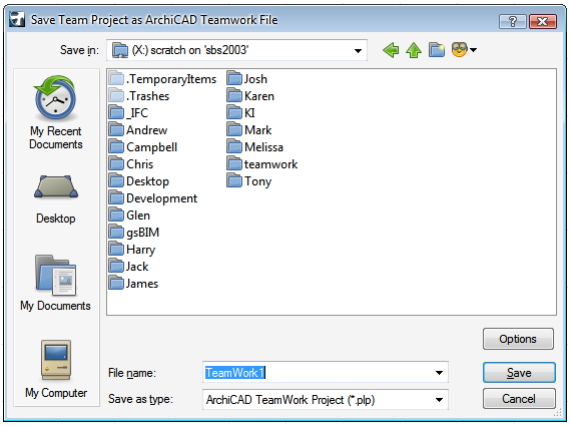
> *Unless you have a very good reason not to, we suggest using the Open Access Method. While this means anyone can sign in, it also means that there isn't a large set-up time required, or continual interruptions as new sign-ins need to be created.*

6. The Backup Options… button allows you to define Backup frequency.
   - A modification is any Sign In, Sign Out or Send & Receive process



> *The default Backup Options are usually all that are required unless you plan to make major design changes and may want to step back several versions – we would suggest if this was the case you'd probably be best to Save the project back to a Solo Project to explore new Design Options (this is explained later.)*

7. Once you have set the required passwords, member access and Backup Options, click **Share…** to share the Project.
8. You will be prompted for a File name and Location to save the Shared Project.
   - The project is saved as an **Archicad TeamWork Project *.PLP**

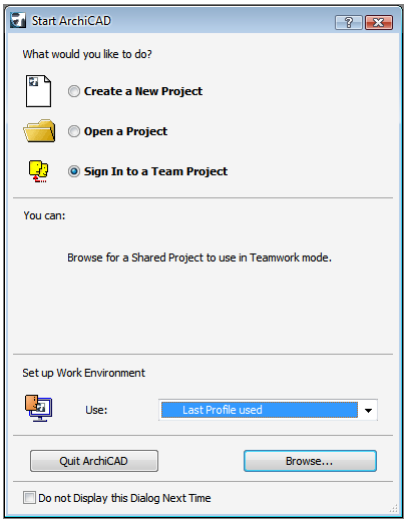


We suggest that the Teamwork project be stored on a network file server. It is not advisable to Save the Teamwork project on one of the workstations that is being used with Archicad.

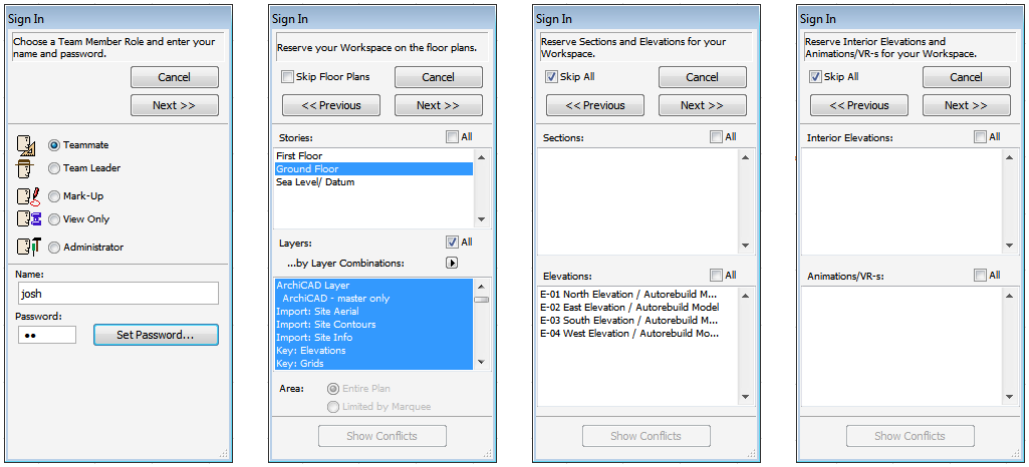
9. Having shared the project you will be prompted with the **Sign In** Dialog.

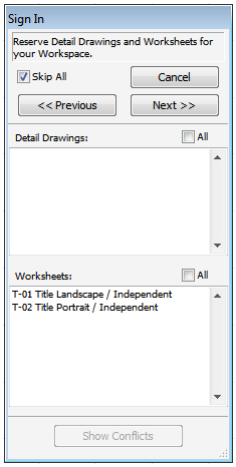
Sign-in Suggestions

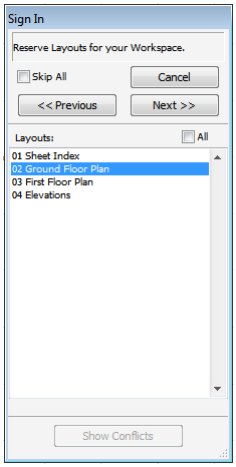
The **Sign In** Process can be launched directly from the Teamwork Menu or when you first start Archicad.

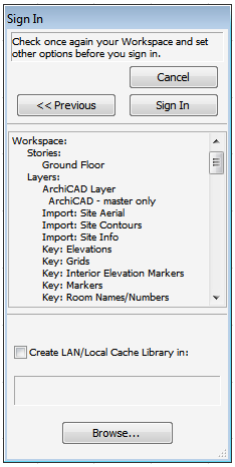


If you are signing in as a Teammate or Team Leader you have to progress through 7 steps. These steps allow you to define the area/s you are going to have full access to.

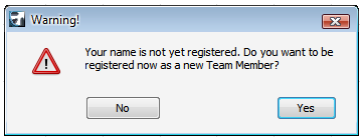








1. Firstly you need to decide the Role and enter a Name
   - If the project has been set up with Registered Members Only you have to insert a pre-determined name
   - If the project has been set up with Open Access you can type any name you want. If the name has not been used previously the following prompt will appear:



> *We suggest rather than using the operators name, you use a name that describes the login. For example, Reflected Ceiling, Electrical, Detailing etc.*
> *If you use a name that has been used previously ArchiCAD will remember all the 'Sign In' settings (layers, sections etc) associated with that name.*

2. Once you have decided your name and role you can start to define the required Workspace. The 5 steps to define your Workspace include:
   - Stories & Layers (Layer Combinations)
   - Sections & Elevations
   - Interior Elevations & Animations
   - Details & Worksheets
   - Layouts

> *If you regularly use Teamwork on your projects you may like to define particular Layer Combinations specifically to aid the Sign In process and have these in your Project Template.*
> *For example, you may have a **Reflected Ceiling Plan** Layer Combination that shows all the required information, but also have a **Reflected Ceiling Plan:Working** Layer Combination that contains only the actual layers required when working on a Reflected Ceiling Plan.*

3. Where an option clashes with someone else's sign in you will see a warning symbol. You can not proceed to Sign In when you have a clash.
4. If there are Clashes, the Show Conflicts button will become active allowing you to quickly find out what is causing the problem

> *As a general rule we suggest signing in to the bare minimum of layers required. Remember you can see all layers so you only need access the layers you are actually working on.*
> *For example, you may want to see the walls and columns when you are working on a reflected ceiling plan but you don't need access to those layers, you only need the layers that you are using to Model and Annotate your reflected ceiling plan.*

5. The final step in the Sign In process gives an overview of all the settings. It also gives the option to **Show My Workspace Only** (ie only show the elements you 'own') and **Create LAN/Local Cache Library as:**
   - The Library option is for when you load libraries over the network. If this option is checked you can have a copy of the library made locally. This is useful (virtually essential) if you are planning to work off-site.

Teamwork Menu Functions

The following section covers all the functions contained within the Teamwork menu. Most of these are self-explanatory, but some

have slightly different functionality depending on the Role you have used to Sign In with.

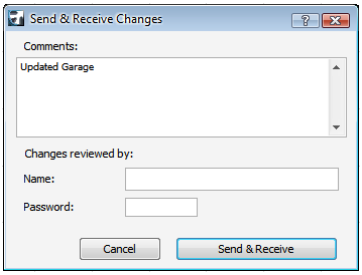
1.6 Sign In…

Initiates the Sign In process described above.

1.7 Send & Receive Changes…

Allows you to update the PLP file with changes you have made and update your local copy with changes that have been made by others.

Whenever you send changes you can add comments that are visible to all users (see below.)



You can also have a registered user review the changes – we suggest you ignore this.

1.8 Receive Changes…

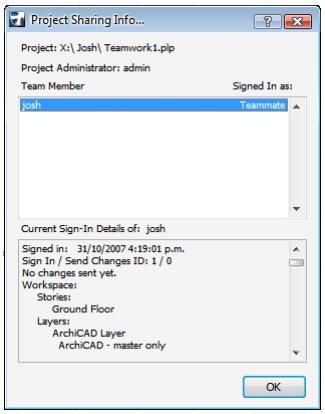
Similar to the Send & Receive Changes… except that your changes aren't sent but your local copy is updated with changes made by other users. This is useful when your work is still 'in progress' but you need updated information from others.

1.9 Sign Out…

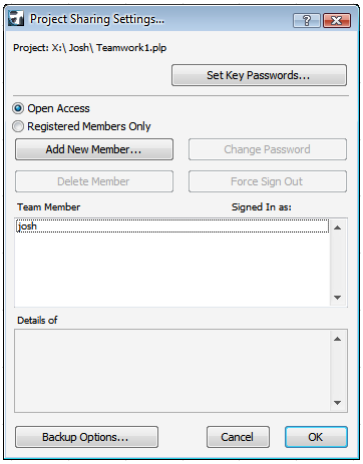
This Signs you out of the project and releases your workspace for others to use. If you have made changes you will be prompted to Send Changes before Signing out or to discard your changes.

1.10 Project Sharing Info…

The Project Sharing Info… allows anyone to see who else is currently registered and/or Signed In to the project.



If you are Signed In as the **Administrator** the Dialog provides important functionality.



The dialog is similar to the initial dialog used when the project was shared.

The dialog provides the ability to reset passwords and change Backup Options.

It also provides a list of all users who are currently signed in and gives the **Administrator** the ability to **Force Sign Out**. This can be required if someone is Signed In with particular settings and then is away from the office.

Use the Force Sign Out Sparingly as all work undertaken by that user that has not been Sent to the PLP file will be lost and irrecoverable.

1.11 Show My Workspace Only

This option will hide all the information that you don't have access to. It is not needed very frequently but is sometimes useful to 'hide' all non-editable information so you can clearly see what you can edit.

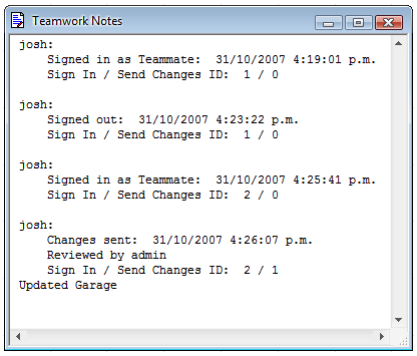
1.12 Change My Workspace…

This is essentially the Sign Out and Sign In processes combined in a single process. It allows you to change what items (eg stories, layers, sections, details etc) you currently have in your workspace.

1.13 Teamwork Notes

The Teamwork Notes keep track of all actions that take place (Sign In, Sign Out, Send & Receive Changes etc.)

If comments are entered during a **Send & Receive Changes…** process these are visible in the notes file as well.



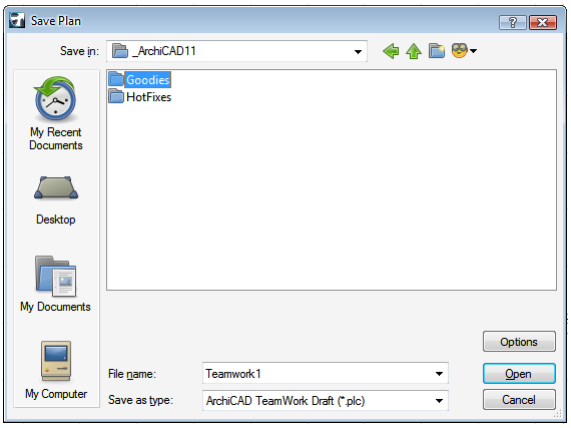
1.14 Add Comments…

This function allows you to add comments that appear in the Teamwork Notes. They record who added the comment, at what time and the comment. This is a useful mechanism to add comments that relate to why things may have been done in a particular fashion.

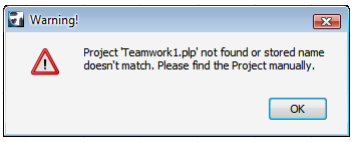
Working Off-site

It is possible to Sign-in to a Teamwork project and then take a 'local copy' off-site to continue working. To do this:

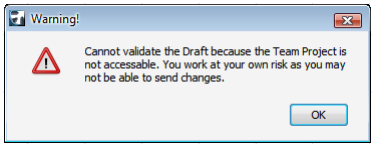
1. Sign in to the project with the required settings
2. Select **File\Save As…**
3. Make sure you are saving an **Archicad TeamWork Draft *.plc**



4. You can now send the PLC file to some one off-site or take your computer away from the main network.
5. When you Open the PLC file it will try to find the PLP Project.
6. If working away from the main network it will not be able to be found so you will be given the following warning:



7. You are then able to Browse to locate the PLP file. Click Cancel and you will be given a final warning:

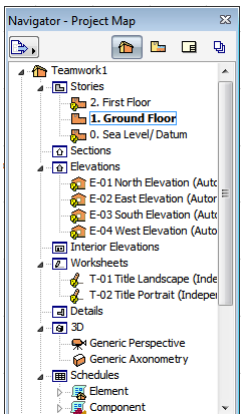


8. This basically says that because it can't find the main PLP file it can't validate the file and any work is done at your own risk.

If you were away and in the interim someone in the office needed some of your workspace, the administrator could Force Sign Out on your Sign In meaning you wouldn't be able to Send Changes once you rejoined the network.

9. Once you get back to the main network you can open up the PLC and so long as you haven't been Forced Out of the project, the file will validate itself and you will be able to Send your changes to the PLP.

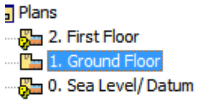
Views and Teamwork



All views that were present in the project prior to it being shared are available for all users to access; however, these Views cannot be **Redefined**.

All Teammates can create their own Views to help with their day-to-day work.

Views that are Shared and accessible by everyone and have a little 'two headed' icon indicating this. All Views created by a Teammate do not have this icon – for example '1. Ground Floor' below is not shared.



For Views and View Sets created by a Teammate to be available to other Teammates, the following process is required:

10. 1. The Teammate selects the required View Set
11. From the View Menu the Teammate selects **Share My Views** a little hand indicates that the View Set is now available for Sharing
12. The Teammate Sends their Changes and then Signs Out

At this point the View Set and Views have been shared. The owner of the View Set is still the initial Teammate who created it and no other Teammate can make any changes to the View Set or Views within it.

A Team Leader signed in with Exclusive Access has full control of all View Sets and Views no matter who created them initially.

Returning to a Solo Project

At any time while you are Signed In to a Teamwork project you can do a **Save As...** and select to save the file as an **Archicad Solo Project *.PLN**.

This can be useful when design options want to be explored without the additional overheads of Teamwork.
Also once a project is complete it is preferable to Save and Store the project as a Solo project or Solo Project Archive because it is easier to archive, but also easier to access in the future if/when required.

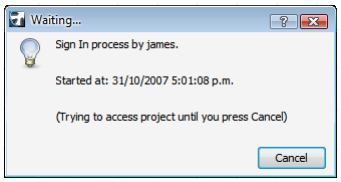
General Tips

1.15 Teamwork Files

When you create a Teamwork Project you will see the following three files are created:

The **PLP** file is the main Archicad Project File.
The **ADM** file contains information regarding all the users and current status (signed in/out etc)
The **TXT** file is a copy of the Teamwork Notes that can be accessed outside of Archicad.
You may also see an **LCK** file. This file is created whenever someone has started to access the Teamwork project and it prevents someone else trying to access at the same time.

If you do try to access the project at the same time as someone else you will be presented with the following dialog:



You can wait for the file to be released or click Cancel if you want to continue with something else.

1.16 Save Local Drafts

We suggest that you regularly save Local Draft files the same way as you regularly save a solo project. After you have first Signed in use the **File\Save As...** menu to save an **Archicad TeamWork Draft *.plc.** Save the Draft file locally and then use the Ctrl-S to regularly save your file.
Depending on the nature of the project you may only need to Send & Receive changes every few hours or even daily.

It is probably advisable to Send & Receive changes at least daily unless you are working off site.

1.17 Sign Out / Sign In process

It isn't necessary to do a Sign out at the end of the day, you can Send & Receive your changes to ensure the main project is updated but if you will be continuing the same work the next day simply save a PLC draft file and then you can close Archicad.
Signing Out at the end of the day and then Signing In to an identical workspace the next day is unnecessary and on a large project with a number of users just wastes time.

1.18 Lock Files

Sometimes it happens – yes Archicad may crash during a Send & Receive function or during Sign In.
The main side effect of this happening at one of these times is that the LCK file explained above is not cleaned up. This means you will then try to Sign In or someone tries to Send & Receives Changes and they'll be informed that 'Someone' is currently accessing the project file and that you will have to wait.
If you know that the person in question is not accessing the project, navigate to the location the PLP file is stored, locate the LCK file (it has the same name as the project – just a different extension) and delete the LCK file.
Users will now be free to undertake whatever they need to.
In some cases the project may think someone is still signed in. For example you try to **Sign In** using a particular name and it says 'Sorry you are already Signed In.' Again if you know this is not the case you will have to **Sign In** to the project as the **Administrator** and use the **Force Sign Out** function to remove the user from the project. You can then proceed to Sign In as that user.

Troubleshooting techniques

The following section covers some warnings and error messages that crop up from time-to-time. Outlined are 'What Happened' and 'What to do.'

To better understand these issues and remedies it is important to understand the standard I/O process when Changes are being sent.

1.19 The I/O process of sending changes:

1. Old .PLP, .TXT and .ADM files are copied (not moved) to the backup folder
2. A scratch file for the admin file is created (scratch_########.SCR)
3. A scratch file for the project file is created (ArchiCAD.SCR)
4. Information is saved into ArchiCAD.SCR
5. If this is successful, the old PLP is deleted
6. ArchiCAD.SCR is renamed to PLP
7. The old ADM is deleted
8. Scratch_########.SCR is renamed to .ADM

1.20 "Cannot create backup!" Warning appears when sending changes

This reflects an error during the backup process. (step 1 of the I/O process)

This means that the old .PLP file could not be moved to the backup folder; however this does not mean that the S/R process was unsuccessful. Please check that user privileges set for the project and backup folder are sufficient to create and delete files and folders. Make sure that the full path of the files in the bottom folder does not exceed 256 characters.

1.21 "Cannot write Teamwork Notes" Warning appears during Teamwork process

Reflects that the <**project>.txt** file cannot be created. Please check that privileges are sufficient to create/modify this file.

1.22 "Cannot write plan file!" Warning appears when sending changes

This reflects that a problem occurred in step 2 to 8 of the I/O process. Check if Archicad.SCR is created or not. If it's present, it could be renamed to plp. We recently identified a problem with certain virus-checking software that quarantine .SCR files (commonly used as an extension for screensavers.) Please make sure that SCR files are allowed.

1.23 Teammate crashes during Send and Receive changes

Check if the .LCK file remained next to the PLP file. If yes, delete LCK. The **Teammate** should restart Archicad. An auto-saved copy of his draft is always created prior to sending changes, so this auto-saved file should be available when restarting Archicad after a crash. The **Teammate** should attempt to send changes again.

1.24 Archicad crashes while working as signed-in Teammate

If it is possible to recover the auto-saved file, procedure is same as above.

If there is no auto-saved file available, the **Administrator** should log into Teamwork file, and cancel the stuck user. Then the **Teammate** is able to sign-in to the Teamwork file again. The **<Project>.ADM** should not be deleted!

1.25 The ADM file gets corrupted or goes missing

In this case, the file has to be re-shared. When attempting to sign-in, the "Can't find the Teamwork Administration file" warning appears. Then the **Teammate** is prompted to locate it manually. If the adm file cannot be located, one has the option to open the plp file as a Solo Project. The **Administrator** should re-share the solo project.

*Note: It is also possible to rename **<Project>.PLP** to <Project>.PLN. After opening this PLN, it should be saved with a different name with the "save as" command.*

1.26 The PLP file gets corrupted or goes missing

In this case the team must revert to a backup copy of the file. Copy the .PLP .ADM and .TXT files from the backup folder into the

project folder. All the **Teammates** should try to send changes to the file. **Teammates** who have not received a new Sign-In ID since the backup was created will be able to send their changes; therefore their work will not be lost. **Teammates** who were not signed in by the time the backup was created will not be able to send changes and have to sign in to continue work. **Teammates** who were signed in the backup, but have since received a new Sign-In ID will be unable to send changes. They have to sign in again also. They will receive a warning 'You are already signed in! If you abandon your current Workspace, you will not be able to send changes from your recent drafts.'

*Note: A **Teammate** receives a new Sign-In ID when signing in, changing workspace, reserving new elements or releasing elements to other **Teammates**. Sending/receiving changes without releasing or reserving elements creates a new Revision ID but does not create a new Sign-In ID.*

1.27 The PLC draft gets corrupted or goes missing

In this case the **Teammate** has to revert to a local draft backup (.pbc) file.

If the user has not received a new Sign-In ID since the local draft was saved, it is possible to send changes from an older local draft. In this case the **Teammate** receives a warning that changes were sent with a newer Revision ID than the current one and sending changes will overwrite the previously sent changes.