Tip Sheet

ArchiCAD 12
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June 2009

Archiving and Migration

Project Migration & Archiving

Creating regular archives of projects is good business practice as well as an essential office task.
Archiving of projects should take place monthly or at critical stages throughout the projects timeline; sketch design; developed design; Resource consent, etc. These backups are in addition to your regular .pln files and your office IT backup systems (tape drive, DVD, external hard drive etc).

The migration of projects between different versions of ArchiCAD can be an ongoing process, whether it be a returning client, or moving an ongoing project to the latest version of ArchiCAD. This tip covers migration of projects from as far back as ArchiCAD 4.1 to the current version, ArchiCAD 12. Projects from before AC9 were typically broken into two files; the Layout Book (.lbk) and the Model file (.pln). ArchiCAD 10 allowed for these two files to be combined together as a single .pln.

This tip is not a hard and fast single process ArchiCAD files, like the people that create them and the projects they describe, are extremely varied. This tip provides a number of different methodologies based on current best practice; it assumes a good knowledge of ArchiCAD and how ArchiCAD works. If you are in need of specific assistance please don't hesitate to get in contact with the team at ARCHICADselect.com.

Cadimage Tools

The suite of Cadimage Tools has been designed to migrate to the latest version with the least amount of disruption. Typically all that is needed to be done is load the correct tools for the version that you are working in. By the default installation the Cadimage Tools are automatically installed in your ArchiCAD Library, so loading the ArchiCAD Library for the version you are working in (ArchiCAD Library 12) will automatically load these.

Door and Window Builder will automatically upgrade doors and windows between the previous and the latest version of ArchiCAD. Doors & windows placed prior to ArchiCAD 10 must be updated in a two-step process. First, open the project in ArchiCAD 11 and run the **Update door and window objects to AC11** (found in the **Cadimage** Menu, under **Door and Window**). Then open the project directly in ArchiCAD 12.
Cadimage **Object Tools** has been discontinued since ArchiCAD version 11. The major component of this tool was the Grid object; ArchiCAD 12 now has an inbuilt Grid Element Tool.

Additional Reading

There are a number of documents that are referred to and should be read in conjunction to this Tip Sheet.

Tip Sheets from ARCHICADselect.com

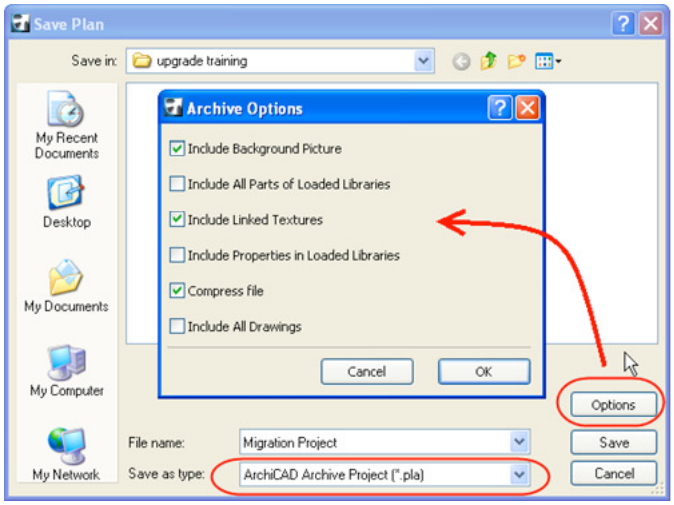
ArchiCAD Library Management
Alterations and Additions
Migrating AC11 Projects to AC12
Migrating AC10 to AC11
Migrating AC9 to AC11

Web Resources *(these are hyperlinks in the pdf)*

ArchiCAD File Convertors
Conversion of old ArchiCAD project files into ArchiCAD 9
Converting old ArchiCAD project files 4.1 and previous versions
Update library parts with missing GUID

Archiving a Project > Creating a PLA file

Archive (.pla) file format is the recommended method for Archiving projects. An Archive contains all the necessary data for a project to display correctly. It is essentially a snap shot in time of the project and its components (library parts, texture images, etc).

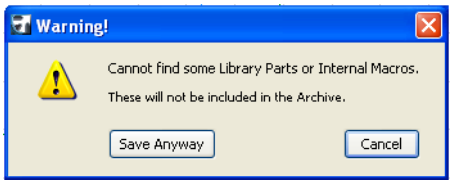


- Before creating an archive you need to ensure that the project is up to date ie; check there are no missing library parts (check the Library Loading Report ***Window*** > ***Palettes*** > ***Library Loading Report***), ensure all linked files and hotlinks are updated.

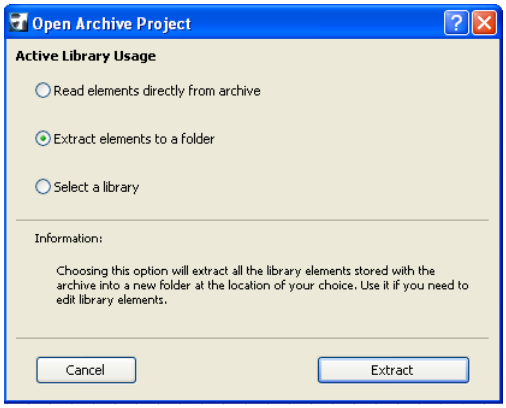
- From the File menu choose **Save As** and choose **PLA** file format.

- In the options menu choose **Include Background Picture**, **Include Linked Textures**, and **Compress File**.

- You will receive a couple of warning messages. These are related to use of Add-On Tools such as Cadimage Tools. Choose **Save Anyway**; you have now saved an archive of your project.

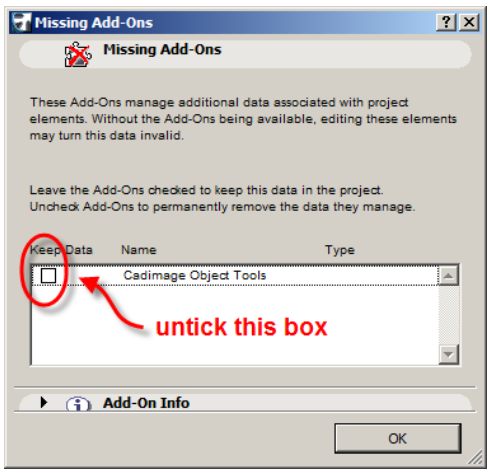


Migrating a project > Opening an Archive File .PLA



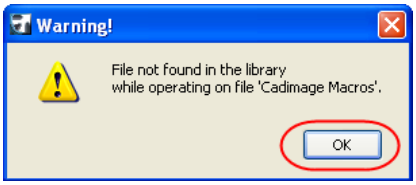
- Make a **copy** (backup) of the file you are going to migrate!
- Open the ArchiCAD .pla project in the appropriate version of ArchiCAD. This may be one of the **file convertor** versions of ArchiCAD, **ArchiCAD 11** if you have Cadimage Door and Window Builder objects to update, or ultimately **ArchiCAD 12**.

- The Open Archive Project dialog will appear. **Choose Extract elements to a folder,** then hit **Extract**. This will create a folder containing the contents of the pla file. You should create this folder in your Project / Job Folder. Give it your job name and "Archive Library".



- You may receive a **Missing Add-Ons** warning message.
  NOTE: The **Cadimage Object Tools** Add-On / tool has been withdrawn from general distribution due to advancements in base ArchiCAD – Grid Tool. However if you require it, contact support@graphisoft.co.nz. If you have not used it or do not wish to keep any of the data, untick ***Keep Data*** and click **OK**. This will stop the message from appearing again.

- You will now get a **'missing macros'** warning. Click **OK**.



- At this point your project should be displaying using all of the old file attributes, library parts etc. You should be able to view and print the file as it was archived.

- At this point it is recommended to create worksheets of the various views or pdfs so you can check any Library parts changes.

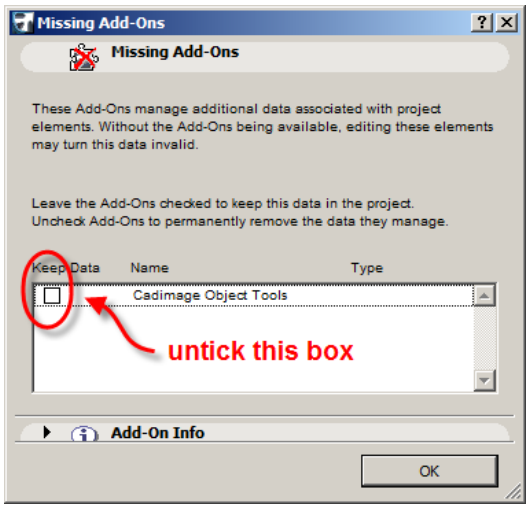
- Also remember you many not need much of the information in the file if it is an alteration project. The walls opening size and position and other primary ArchiCAD elements are all that is realistically needed. Refer to the tip sheet ***Alterations and Additions***.

- If you are going to continue working on the file you have a couple of options with regard to the Libraries that you wish to use.

- The easiest option if you have used mostly Cadimage Tools and standard ArchiCAD objects is to load the appropriate Library for the version of ArchiCAD you are working in eg **ArchiCAD Library 12**.

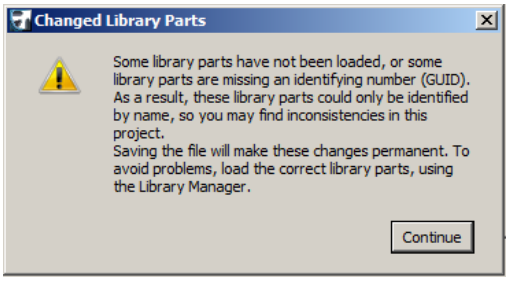
- You may get missing library parts depending on the objects you have used and the version of ArchiCAD the file was saved. In the next section we cover the different methodologies for resolving missing Library parts.

Migration Warnings



During the project migration process you may receive the following warning dialogs.

- **Missing Add-Ons** This Warning is due to Cadimage Tools discontinuing the Object Tools. Unticking the Keep Data box will stop this Warning from appearing. If you were using Cadimage Tools Grid Object, which was the main Tool in the Add-On, they will still be visible, but not updated. It is recommended that you upgrade these grids to the new ArchiCAD 12 Grid Tool.



- **Changed Library Parts** This Warning may appear if you have old Objects with no GUID numbers. ArchiCAD 12 identifies all objects by the GUID, not the Object name. This will typically only occur if you are loading old objects. If these objects are important you should read the *Update library parts with missing GUID* Tip on ArchiWiki referred to at the start of this document *or* don't load and remove these old objects.

Migrating very old projects > Version 4.1 to Version 8.1

Projects from version 4.1 (1992) to Version 8.1 (2003) are typically old jobs requiring alterations and additions. Depending on the quality of the working methodologies this old data may seem more valuable than it really is. ArchiCAD and especially its use, has made great advances in that last 5 to 10 years; what is modelled today may have been lines and fills back then!

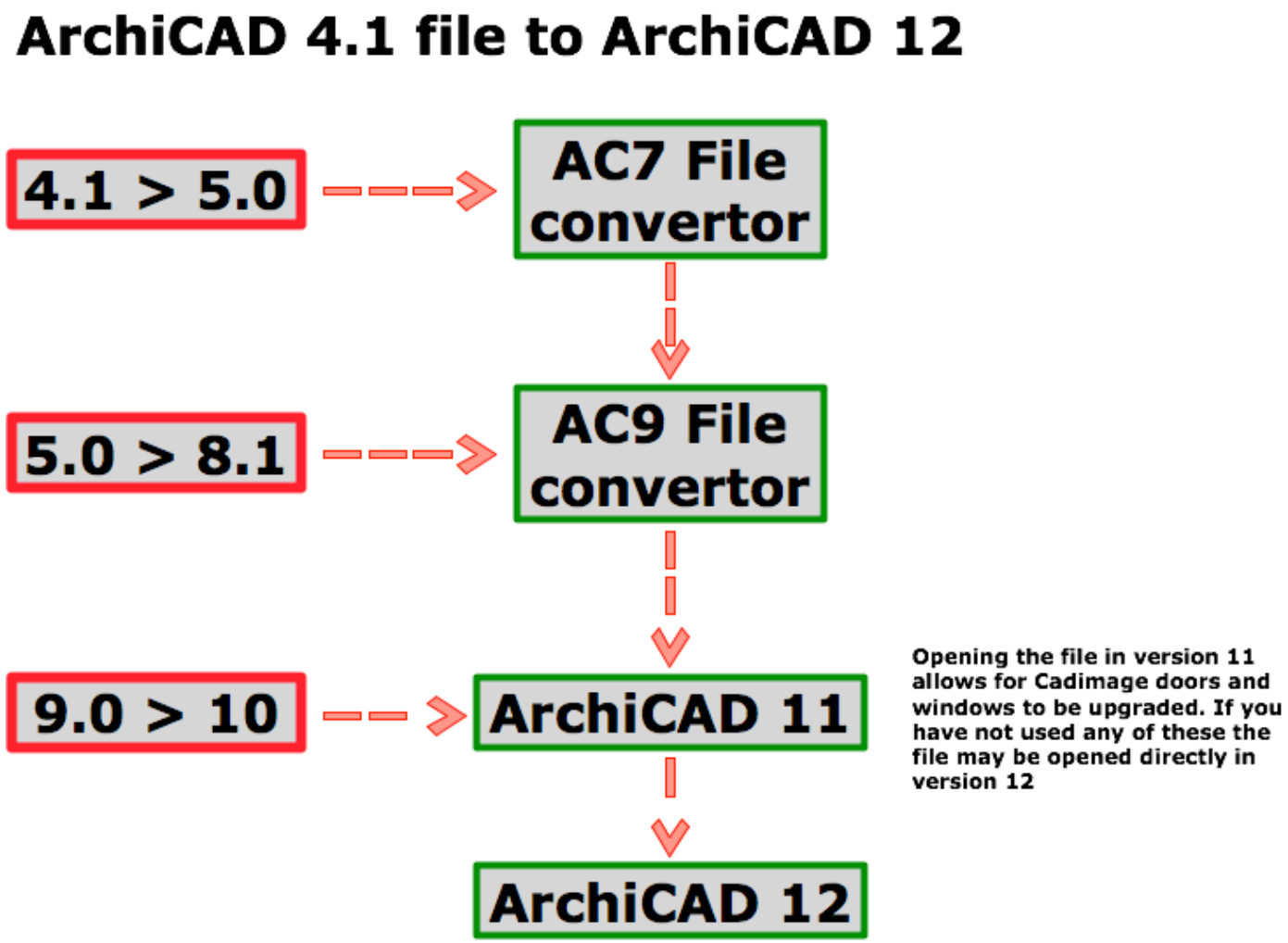
A list of all of the versions of ArchiCAD and their compatibility is available here: http://www.archicadwiki.com/ArchiCAD versions
With the advent of Windows Vista and Intel based Mac's, running old versions of ArchiCAD has become a complex operation. With this in mind, Graphisoft has developed file convertors that allow old ArchiCAD files as far back as version 4.1 to be upgraded and

converted into ArchiCAD 12 files. These file convertors are versions of ArchiCAD 7.0 and ArchiCAD 9.0 that run on the latest Windows and Macintosh operating systems. A current WIBU Dongle is necessary to run these. These file convertors are essentially stepping stones that allow resurrection of files to the current version; they are not to be used as working versions of ArchiCAD.

These file converters are available for download from: http://www.graphisoft.com/support/archicad/downloads/Fileconverter.html

In addition to these, we have made available in the **Local Resources** section of **ARCHICADselect.com**, **ArchiCAD NZE Library** versions from as far back as version 6.0. So even if you didn't save your projects as a PLA you can still view them in their original form by loading the appropriate version. Loading old Libraries is not recommended for anything except viewing a project. NOTE: Loading ArchiCAD Libraries from multiple versions slows ArchiCAD dramatically and gives errors as well as possible inconsistencies in the project. This is not recommended for anything except viewing projects. For tips on replacing old objects with new versions, refer to the Redefining (upgrading) existing objects at the end of this document. If the project is an alteration of an old job you may also want to look at the ARCHICADselect.com Tip ***Additions and Alterations***.

NOTE: For projects older than version 4.1 refer to the Web Resource: *Converting old ArchiCAD project files 4.1 and previous versions*



Missing Library parts / Managing old library parts

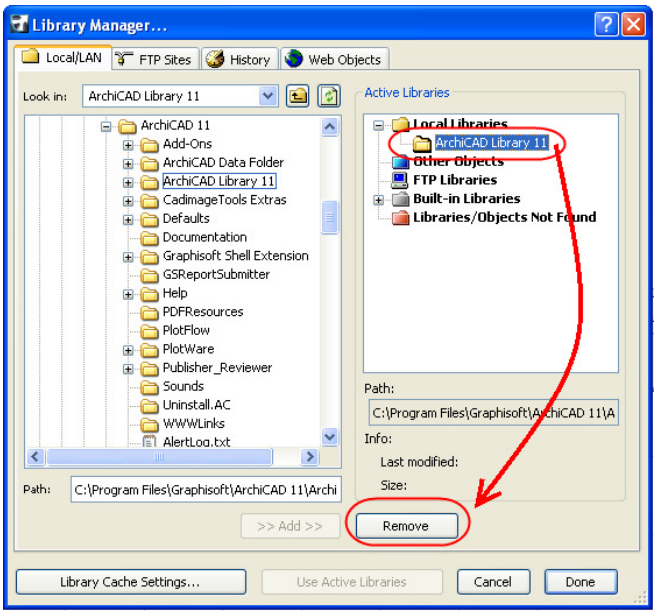
Depending on the version of ArchiCAD the original file was created in and the Library Parts used (and whether you actually need those old Library parts!) will determine the best of the following methodologies for each situation.

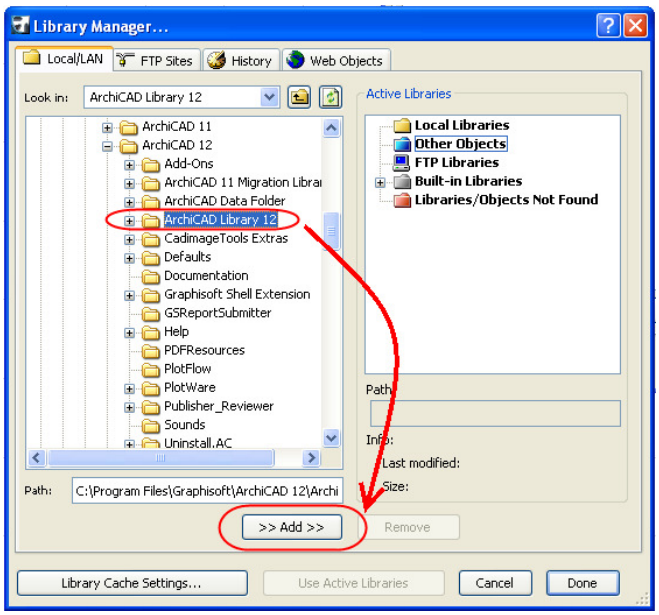
Methodologies

1. Load the ArchiCAD Library 12 library, delete or explode any missing library parts – *simplest option*
2. Load the ArchiCAD Library 12, and the ArchiCAD 11 Migration Library – *use this if the project has come from ArchiCAD 11*
3. Load the ArchiCAD Library 12, and the ArchiCAD Library 10 Subset – *use this if the project has come from ArchiCAD 10*
4. Load the ArchiCAD Library 12, and redefine missing / old objects with their replacements in ArchiCAD 12 – *best practice but may take time if there are lots (over 50>100) of old objects. NOTE: Can be used for files from any version of ArchiCAD.*
5. Load the ArchiCAD 12 Library and create a Custom Project Library using a PLA file format.

1. Load the ArchiCAD Library 12

- Open **ArchiCAD 12**.
- Browse and Open the project you wish to migrate.
- Open your Library Manager, **File**>**Libraries and Objects**>**Library Manager**. You will notice that your Loaded Library has defaulted to the ArchiCAD Library that was last loaded eg **ArchiCAD Library 11**.



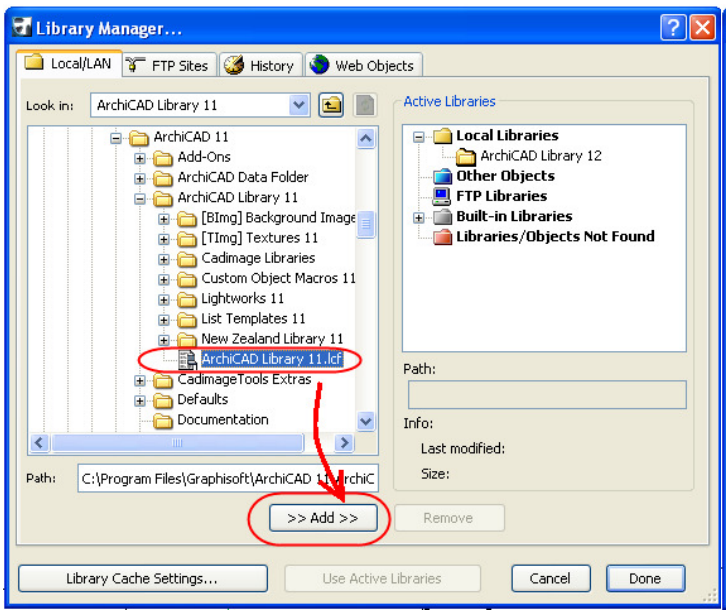


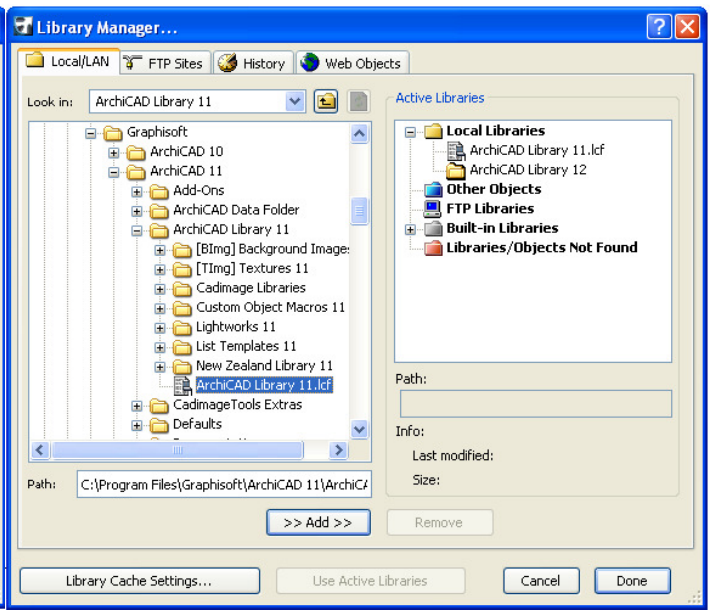
- Select this and Remove it.
- Select your **ArchiCAD Library 12** in your computer, click > **Add** >, click **Done**.
- If you have missing library parts you can either delete them or explode them into 2D if they are unimportant, or use one of the following methods.

2. Load the ArchiCAD Library 12, and the ArchiCAD 11 Migration Library or ArchiCAD Library 11.lcf

Use this method if you have ArchiCAD 11 Objects that are showing as missing in your Library Loading report or the automatic migration of some ArchiCAD Library 11 objects has not been satisfactory.

- Open **ArchiCAD 12**.
- Browse and Open the project you wish to migrate.
- Open your **Library Manager**. You will notice that your Loaded Library has defaulted to **ArchiCAD Library 11**; remove this and Add the **ArchiCAD Library 12**
- Search within the **ArchiCAD 11** folder and locate the **ArchiCAD Library 11.lcf** file, click > **Add** >, then click **Done**

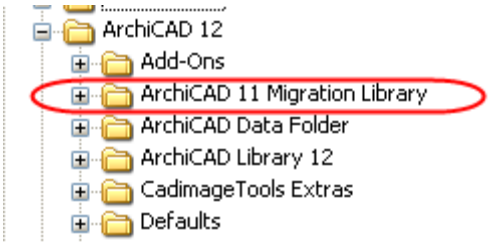




- You will not need to do any more to your objects BUT they will remain as ArchiCAD 11 objects.

NOTE:

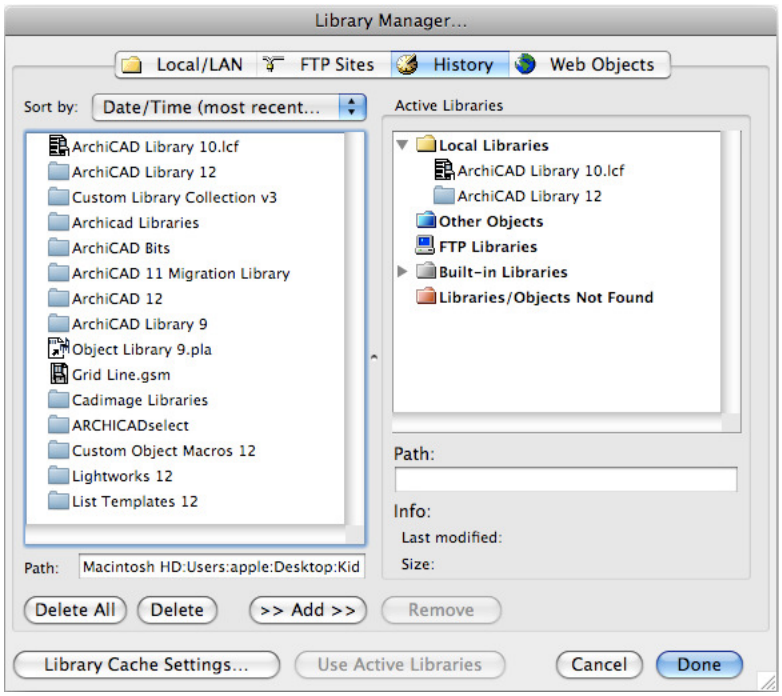
You may notice there is an **ArchiCAD 11 Migration Library** in the **ArchiCAD 12** Directory. This contains the objects that have changed between ArchiCAD 11 and ArchiCAD 12; you may wish to use this instead of the ArchiCAD 11 .lcf as it is a smaller file.



3. Load the ArchiCAD Library 12, and the ArchiCAD Library 10 Subset or the ArchiCAD Library 10.lcf

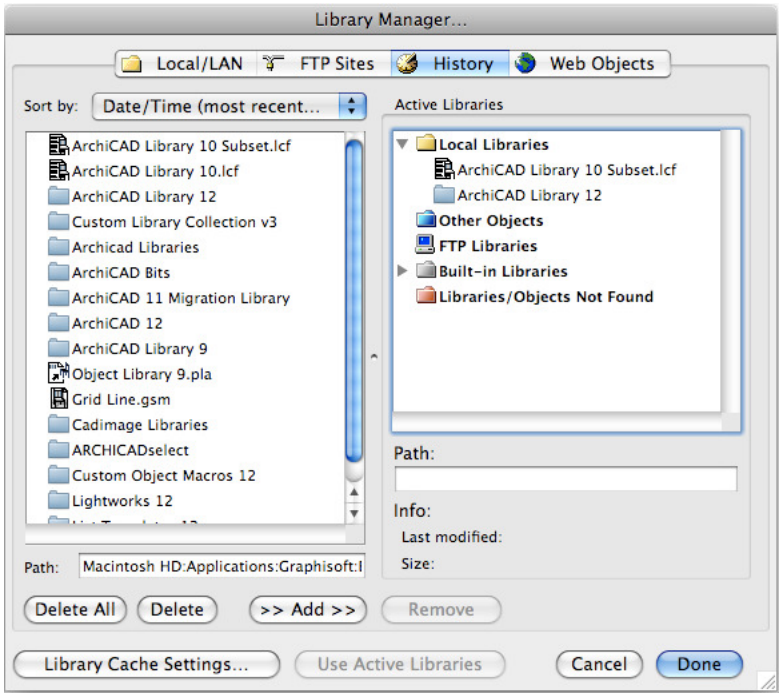
Use this method if you have ArchiCAD 10 Objects that are showing as missing in your Library Loading report.

- Open **ArchiCAD 12**.
- Browse and Open the project you wish to migrate.
- Open your Library Manager. You will notice that your Loaded Library has defaulted to **ArchiCAD Library 10**; remove this and Add the **ArchiCAD Library 12**
- Search within the ArchiCAD 10 folder and locate the **ArchiCAD Library 10.lcf** file, click > **Add** >, then click **Done**
- You will not need to do any more to your objects BUT they will remain as ArchiCAD 10 objects.



NOTE:

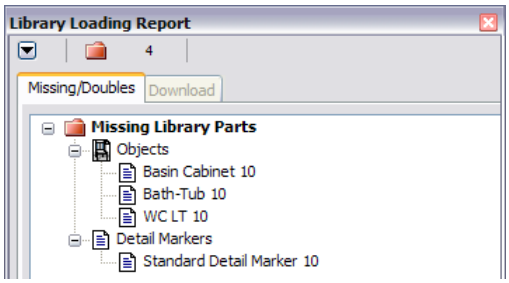
- The **ArchiCAD Library 10 Subset** is available from http://www.graphisoft.com/support/archicad/downloads/goodies11/NZE.html
- Use the ArchiCAD Library 10 Subset to ensure smooth transition between ArchiCAD 10 and 11. The subset library contains all ArchiCAD 10 objects that changed in ArchiCAD 11. When you migrate an ArchiCAD 10 project in which you used the standard ArchiCAD Library 10, we recommend loading the ArchiCAD Library 10 subset and the ArchiCAD Library 11. This way you benefit from the new functions of the new ArchiCAD 11 library parts, while keeping full compatibility with the objects already placed in your project.
- To learn more about the Library Subset, please read: http://archicadwiki.com/Library Subset



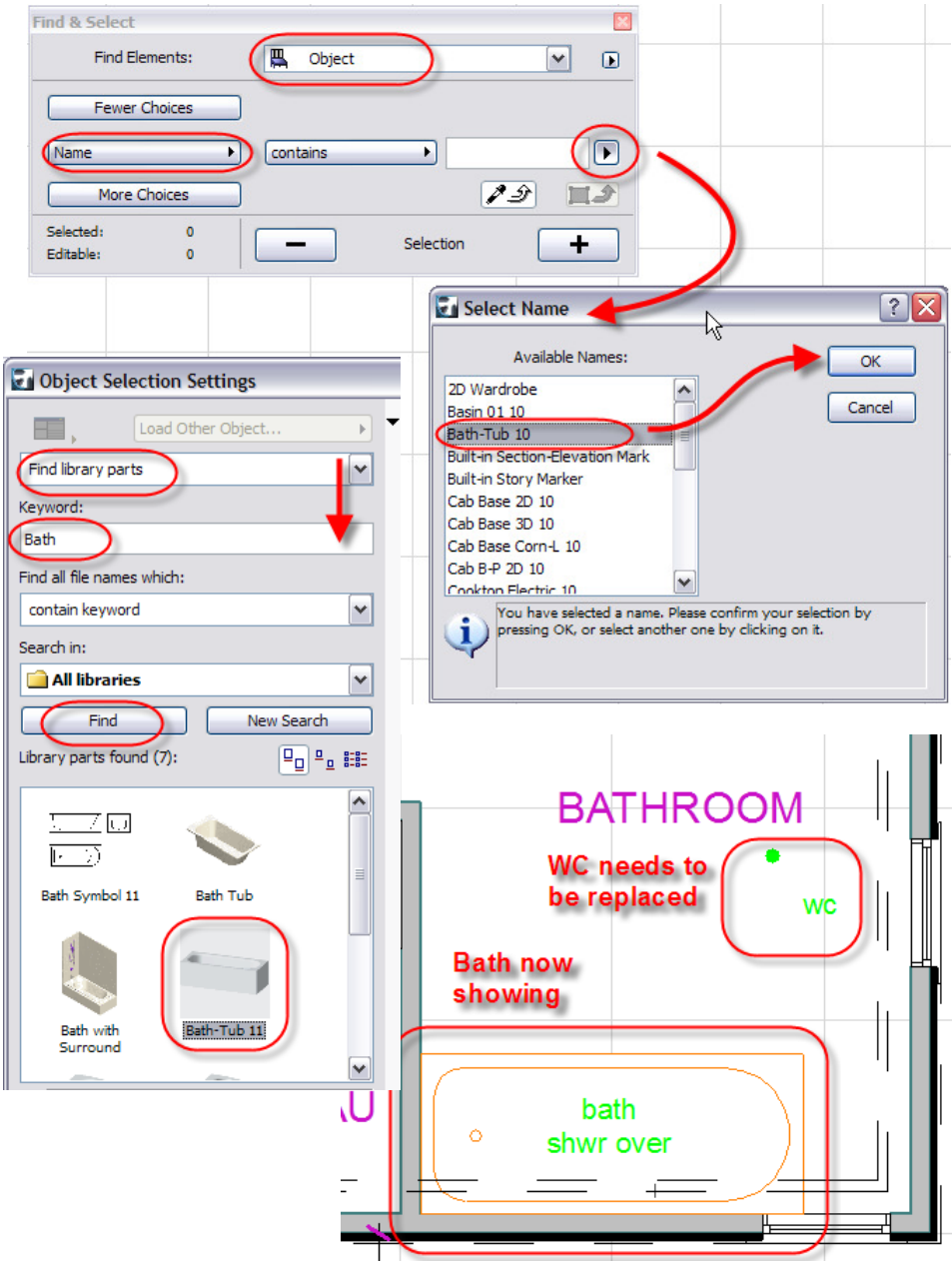
4. Load the ArchiCAD Library 12, and redefine missing / old objects with their replacements in ArchiCAD 12.

This methodology is for use when you have objects from older versions of ArchiCAD. In the following example you have opened an ArchiCAD version 10 project in ArchiCAD version 12. By default the Project will load the library it last had loaded. What you want to load however, is the Library for the version you are working in (eg ArchiCAD Library 12). This methodology can be applied to a project from any version of ArchiCAD.

- Open your current version of ArchiCAD.
- Browse and Open the project you wish to migrate.
- Open your Library Manager; you will notice that your Loaded Library has defaulted to **ArchiCAD Library 10**.
- Select this and remove it
- Replace it with **ArchiCAD Library 12**, click **Done**
- Your Library Loading Report will show missing Objects



- Find these missing objects within your model and redefine with the corresponding version 12 object.
- Using **Find & Select** (Shortcut Key Ctrl+F or CMD/Apple+F) will help to find these objects.
- Select **Object** as 'Find Element' type
- Select **Name** as search category, and choose **Bath-Tub 10**, then click **OK**
- Click the **+** button to find objects
- Once you have the object selected within the model, open its **Object Selection Settings** (Shortcut key Ctrl+T or CMD/Apple+T)
- From the pull-down choose **Find library parts** enter **Bath** as a search **Keyword**, select a suitable replacement i.e. for **Bath-Tub 10**, wilst holding down the ctrl+alt or CMD+Option keys, choose **Bath-Tub 11**

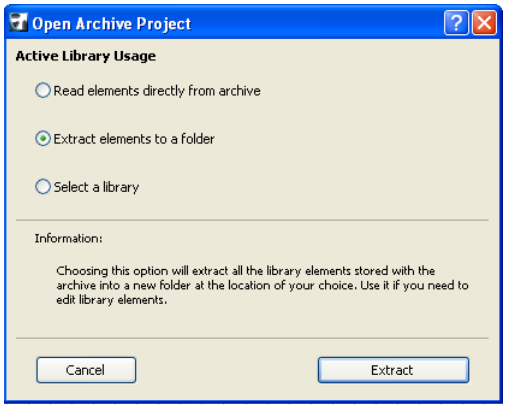


- Click **OK**, and the bath tub will re-appear in the original location
- Repeat for other Objects.

NOTE: You may need to further modify these objects as the object default parameters may have changed.

This is where a pdf copy of the original drawings or a worksheet snapshot of the original project is essential.

5. Load the ArchiCAD 12 Library and create a Custom Project Library using a PLA file format.

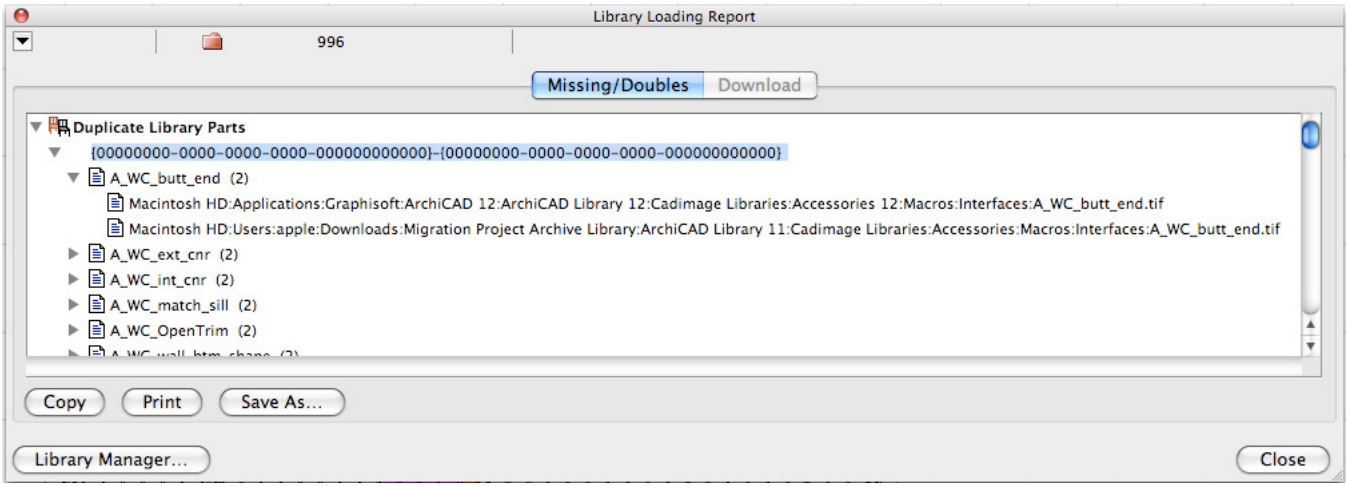


Follow the steps in the section ***Migrating a project > Opening an Archive File .PLA***

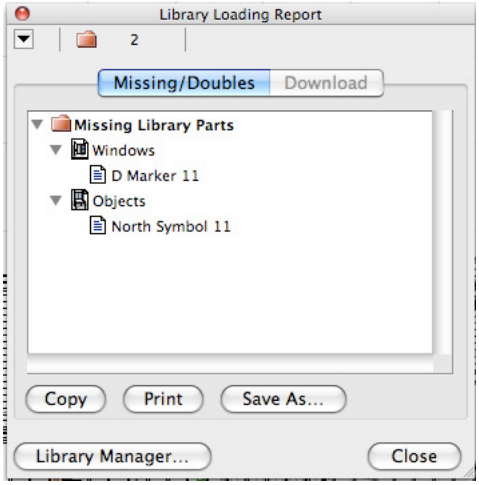
At this point you should have a file loading the standard ArchiCAD Library 12 and also a folder containing the extracted Library from the PLA file.

A **PLA** contains only the library parts and components that are necessary for the project. Thus a PLA Library is much smaller that the whole version Library that the project uses. Loading the standard ArchiCAD Library and the PLA Library will typically give warning messages and / or duplicate Library parts.

- In your file browser (Windows Explorer or Finder) select the folder where you extracted the Project archive. This Library folder will need to be edited so it only contains Library Parts that are not included in AC12. For example, in the screenshot below you can see one of the duplicate objects is a Cadimage Library element. As I have the Cadimage Libraries already loaded as part of my ArchiCAD Library 12, I can delete the respective folders in my "Migration Project Archive Library"



- After removing the ArchiCAD Library 11 folder from my "Migration Project Archive Library" (all of these parts are in my standard ArchiCAD Library 12) I have reduced the Library loading report from 996 items to 2!



- These two objects in particular do not automatically migrate from ArchiCAD 11 to ArchiCAD 12 so I will manually replace them with the version 12 Equivalents. NOTE: You could alternatively refer to the previous steps for instructions on both of these methods if there are a number of objects that did not automatically migrate using the ArchiCAD 11 Migration Library.

- You should not now receive any warning messages. If you do receive warning messages or missing or duplicate library parts, you will need to further modify the Project Archive Library until you no longer have any warnings / reports.

Note: What you are doing here is stripping out the unnecessary data. At each step you should reload your library to check that the integrity of the data has not been compromised. Turn all layers on, check in 2d and 3d, open all views and layouts.