



BEST PRACTICES COURSE – WEEK 26 In-Office Project Management - Part 4 - Data Safety and Project Migration

Welcome everyone to the Best Practices Course ArchiCAD training lesson. Today we will be continuing with week 26, which has been focused on In-Office Project Management. We spent a lot of time last session, which was number three, looking at how you would keep a project safe over time in terms of naming strategies. My basic suggestion was to keep the project with the same name for extended periods of time, perhaps for the whole life of the project, without putting suffixes like the name, the date or other things. [0:00:39]

Another alternative would be to have the name stay constant for a phase, like for the initial design, and then for design development and later phases. You could possibly change the name there, but make copies of the files for record purposes or for possible review. You could pick up old versions or alternate versions of design schemes; naming something each day as a copy. It could be for certain milestones, like when they are submitted or before or after client meetings and things like that. The idea is that instead of relying on just one file and possibly being vulnerable to corruption, you'll have backup files from different dates without having confusion about which file is which. And the whole perennial putting things saying, "Smith Project final version" "Smith Project most complete version" "Smith Project to be printed" and things like that. I've seen that many times in the office. [0:01:44]

That was a quick review of the concept of what I covered in the last one. I did mention a little bit about auto save. I'm going to go into that a little bit more. I think we've already talked about this backup-sensible redundancy, because that's essentially what I've been discussing, maybe a little bit more on that. Then I think we will be able to spend the bulk of our session on migration and project management over the longer term. So I think I will be able to wrap up these either in this session or possibly with one more session. I think next week we will be able to move on to Teamwork and collaborative work both inside the office with multiple team members as well as with consultants. [0:02:32]

So Leka from Tanzania joining in, welcome. You are our first one from Africa today. That's great. I hope your bandwidth is good for this. So we're going to talk a little bit about auto save vs. manual save. As we went through this before, I will create a file. I'll create the most basic file again here, and I save it here, we'll give it a name. "BPC Best Practices Course 26-4 project." So I have a project name here, and then I'll do some additional work. Of course I'm just doing the simplest work to get this done quickly. I'll take this and extend it to meet that there. [0:03:37]

So I now have a little more work done. I go here and say save. As a quick review, if I go back to where this is stored here in week 26, we can see that date is modified here. So here is our current active project. Here is the .lck file that locks it to make sure that anyone else who tries to open it will know



that it's in use. And here is that .bpn that was just from one minute before. Now as we work in ArchiCAD, ArchiCAD is creating backup versions and automatically saving them. This is controlled under the Options menu, Work Environment. And we have Data Safety and Integrity. And I went through this a little bit last time. Before version 13 or 14, it would have two options. Either a certain number of steps, usually ten steps were the default, or a certain number of minutes, like every five or ten minutes or once an hour. [0:04:50]

Now in those days, the auto save file would change your cursor to a little tiny bulldozer, and it would take anywhere from a half second to several seconds or even sometimes half a minute or longer to do saves. Now if that was happening every ten steps, and you had a big file and it took thirty seconds, that would be pretty annoying. You are doing two minutes of work and then you'd have to wait. So the temptation was to either turn it off or reduce the number steps, both of which are okay, but certainly it will reduce your safety there. [0:05:31]

Now with later versions of ArchiCAD, the tools were improved so that ArchiCAD could literally save every step very quickly in a tiny, temporary file. Essentially it was a record of you clicked here and moved from here to there. And these were the elements that were affected. So much like Teamwork it was recording the delta or the change that you just made in each step in a little separate file. And if you have ever had a crash, it could reconstruct it from that file. Now with the later versions you do have this Ultra Safe or Safer Minimum which means you can have it back up. In the case of a large file, you might save every so many minutes. [0:06:17]

One of the things that you need to think about is how much time can you afford to lose? If once a year you had a crash and you lost twenty minutes, usually that's not going to be a problem. Now if it was once a month or once a week or daily because you're having problems with your computer, then that could be a bigger deal. And if you're on deadline, and you're saying "I hope we can get this printed out before the meeting," then losing twenty minutes could be deadly and make you miss your deadline. So generally, you want to go towards the safer side. [0:06:54]

In the old days, before ArchiCAD 13 or 14 - and of course I've been around for 25 years, so there were a lot of old days before those, which was more than five years ago - I would occasionally get a call from someone saying, "Eric, I have a problem. My file crashed. I'm trying to open up the auto save file and it's not working." Or, "I can't find it, what do I do. I've been working all day and here it is 4:00 PM, have I lost all my work?" And we go through different things. But basically I always emphasized, you should do a manual save. Hit Command+S or Ctrl+S frequently. That doesn't mean every five minutes, but at least a few times a day. And if you're on a deadline and you are concerned, then I generally might hit save every ten minutes or whenever I think of it to stop to look at my notes or figure out what to do. [0:07:59]



When you hit save, you have a little bit more enduring record of your work. Now the other consideration, as you saw, there is the .pln and the .bnp file. So that .bnp is the one that was the previous .pln. It was the last time you saved, whether it was one minute or twenty minutes before or last night. Now if you start working on a file and make some changes and then hit save, just because you're used to doing that, and then realize, *oops, I was just experimenting. I should've saved this under a new name because it's scheme two.* Or any other reason that you really didn't want to overwrite the earlier file and you say oops. Well, at this point, it's not a problem because I can literally go in here and say "Project Original" and just give a slightly different name, and then change this to .pln. [0:09:04]

Because .bnp and .pln are identical as far as ArchiCAD is concerned, aside from the fact that it knows that one of them was an older version than the corresponding .pln. But basically you can feel free to change the ending here to .pln. Or you can even go in ArchiCAD and open the .bnp and work with it. And then when you hit save, it will change the name to .pln. [0:09:31]

If you did that and there was a file with the exact same name with .pln it would ask if you want to overwrite it. But here, this is perfectly legitimate. Now if you were to do some work and hit save and do some more work and hit save and then go "oops," you wouldn't be able to go back two versions, because there is only one past version that's in the .bnp position. Every time you do a save, it throws out the previous .bnp and replaces it with the .pln that was from a little while earlier. So there is one previous version, one .bnp. [0:10:11]

So it is something you need to keep aware of. Generally I don't rely on the .bnp for anything other than the "oops" factor. Or if a file is corrupted, if somebody says, "Hey Eric, I tried to open my file and I got so errors, there's something wrong with it." Then the first thing I will say is, "Can you try opening the backup file, the .bnp?" Sometimes the .bnp will be just fine, and hooray, you only lost a certain amount of work. Occasionally, there's an issue that has affected both of them. Then you're definitely in danger of losing work. Now in the extreme case, you can't open the file. ArchiCAD crashes when it opens the file and you don't have access to your work. [0:11:00]

That's when having the previous versions - here's the archive from the previous week's stuff. The previous versions might have date stamps or names, the revision type here. That archive would be useful, because hopefully you'll be able to go back to some fairly recent versions and open it up and it will work; the damage will not be there. Now how often does this happen? I would say it's pretty darn rare, but there are occasionally times when there are hard drive corruptions or other hardware issues. Maybe there are some very rare cases where ArchiCAD just messes up due to a bug and you can't get the file open. [0:11:47]

Earlier this year I had a problem with creating MasterTemplate from the ArchiCAD 17 version of MasterTemplate. In the international variation of MasterTemplate, I found that if I open the 17 file in 18, it crashed. What's going on here? It turned out it had to do with some complex profiles which were



quite legitimate in 17 but had some issues in 18. It took me awhile to figure it out but fortunately I had the 17 version. I hadn't overwritten it or lost it. So I was able to go back to an earlier version and figure it out. [0:12:24]

So these are the unlikely eventualities that insurance companies will always tell you about, "If you get sick, you don't expect to get sick, but what would happen to your family?" And in this case, if your project got messed up, what would happen to the project if that got messed up? In any event, having other versions of this previous ones, having redundancy, and using the save option rather than the auto save, generally will give you more security, a better insurance policy here. Now this auto save here in recent versions has gotten better, so it's certainly not something that I tend to think about too much. [0:13:13]

Note that the auto save location can be changed. Right now it's in a certain Graphisoft folder inside the library location. SSD by the way is my solid state drive instead of my hard drive. So I'm running my computer with a flash memory, and I do highly recommend it. My computer restarts much more quickly and applications start and close out much more quickly. Solid state drives are a little bit more expensive compared to hard drives, but I have a terabyte drive. It's 1000 GB solid state drive. It's the biggest you can put in a laptop these days. And I think the price was around \$650. Compared to a similar sized hard drive of maybe 100 or 150. So it's a lot more expensive, but 650 is now within the range where it really wasn't a big deal to have that speed. [0:14:14]

The main point here is that the location can be changed. You can put this auto save on a server. Frankly, I don't recommend that, because you want this auto save to be very fast. I don't know why you would change it, but maybe there are some reasons depending on your operating system configuration. You could want it in a different location. Now if you go in here, if I actually go copy this, how can we find it here? If I do this, will it find that particular folder? No, it's not going to find that. But I will look in here. It's on my SSD, user is Eric Bobrow. So here's my SSD. And here's users, and my name. So this is my home folder here, and these are all of my documents. [0:15:17]

Now the library folder on the Mac usually is not visible. You'll notice I have a bunch of things that are light colored. These are hidden files. On windows you have the option under Folder Options or View Options to show hidden files. I have a free plug in that I put into my system that allows me to see these. So the library is something that we can go in here and maybe it's under Applications Support and then Graphisoft. And you can see here's the ArchiCAD auto save folder, and here is some stuff here, 1:11 PM. So that was the last thing. It's 1:23, but that's the last thing that I did. You'll notice these do not say .pln. These are database files that are very quick for ArchiCAD to write to, and they do save the data. [0:16:11]

I've had a few people e-mail me saying, "Hey, I tried to find the auto save file, but it doesn't look like an ArchiCAD file." You're right. In order to do it so fast, Graphisoft makes it in a different format and then



compiles it into the .pln file that we're used to whenever we hit save there. So anyway, this is where it is located. Potentially, if you did have a crash and you tried to start ArchiCAD and you couldn't open up the file, then you may want to save a copy of this auto save and send it to Graphisoft. Not unannounced, but you may want to make a copy of it like if I go and say "Duplicate." So here's a copy of that. And potentially that could be useful if you had a crash and you couldn't open up the auto save, even though it said there was an auto save available. So this would be a way of keeping it in case you accidentally said "Let me continue work and delete the auto save" this would be a reference. [0:17:16]

I don't need that, so I am going to get rid of it. I think I have covered most of the stuff about auto save vs. manual save and sensible redundancy. I guess the other thing about redundancy, and this is not the meaning of redundancy, like when someone has let go or no longer is going to be working because there's redundant employees or too many employees, so not that meaning. But redundancy, in terms of Computer Technology, is often referred to as when you have more than one place where data or a resource is available. So if you think about the fact that you could have your project file on your hard drive and a copy in your Time Machine back up or other type of backup, or maybe you just manually copy it to a thumb drive or a USB external drive, that's redundancy. [0:18:19]

If one file has a physical or digital problem, the other problem may not. And of course, the chances of a problem extending beyond one place to a second or third get smaller and smaller. So the insurance policy is to have more than one place where the data is available. And as I mentioned in the last one, I use a tool called Back Blaze, its \$50.00 a year and covers all my files even though I have four or five terabytes, so that's 4000 GB, and it covers that. And I know Carbonite - there are other ones out there. So the basic idea is make sure you are not relying on one hard drive that could go down having all of your data. And this is particularly important when you're talking about all of your project files that could potentially vanish in the blink an eye if your computer were stolen or your hard drive broke. So you'll want to make sure that you don't ever have to face that type of situation. [0:19:39]

Ken writes, "My backup drive filled up, which made it useless." So here is my backup drive. "My Book," that is the brand name or the product name for a Western Digital hard drive. I buy these routinely, they are 3TB each. They are very inexpensive, roughly \$150 each. I have them here and you can see this one is the Time Machine back up. And I have a few other things that are stuck on there. And then I have other 3TB ones that are filled up with different amounts of things and different stuff. So you may need to get another backup drive. Please don't say, "Well, it's useless," and move on, because you're vulnerable then. Either clean up or remove stuff you don't need or get another bigger drive. [0:20:53]

These are 3TB for \$150. If you can't afford \$150 then that's another issue. And there are some larger ones as well. So anyway, not to criticize Ken anyone else, but just a warning, this is not something that you should take lightly. And certainly having the online backup for \$50.00 a year or, what did someone say? Carbonite was \$69.00 or something, which is well worth it.



So Dave Norman says, "How do we recover auto save work since it is not saved in a .pln file?" I demonstrated this last time, but I will show it again. Right now, let me do a little bit more work here.

[0:21:46]

Okay, I'm going to force ArchiCAD to quit. So essentially a simulated crash. I'm going to use Command+Option+Esc on the Mac or Ctrl+Alt+Del on Windows, and hit Force Quit. It will say, "You will lose any unsaved changes." I just did this, and didn't save any changes, so it's doing that there. Now let's go back and ArchiCAD now - actually it appears when ArchiCAD is forced to quit instead of doing it normally. This has triggered the bug reporter. And of course if it hung or wasn't paying attention, if it was just frozen and you forced it to quit, it says, "If you've done so because of a deadlock or freeze please give a description and send the bug report." I don't want to do it, because I'm just doing this for demonstration, so I'm going to quit the bug reporter and not send this. [0:22:34]

It again asks me, "Do you really not want to send it?" Yes, I still want to quit. Okay, so now I'm going to go back into ArchiCAD. So if I start up ArchiCAD after a crash, ArchiCAD has not finished its work cleanly, because I forced it to quit, I crashed it essentially. And it's going to bring up a message saying, "There's a temporary folder." So this is essentially the only way to open up the auto save file is to start up ArchiCAD and see if it sees the auto save folder. Now that auto save folder said that there was some stuff as of 1:29, which was 1 minute ago. And I will say "Open the selected project" and let's see what it has. [0:23:23]

So it didn't lose any work at all. That is the way to do it. Now if you open up ArchiCAD and it does not say there's an auto save file or there's a temporary file waiting like I just showed you, then you are in bad shape. Essentially, there's no straightforward way or possibly no way it all to get that work. So we're talking about the rare case where ArchiCAD crashes, and the even rarer case where it crashes and there wasn't an auto save or it could open the auto save. So in that case, my sympathy is with you, and hopefully you have a backup from yesterday or earlier in the day of the .bpt file. Or it could be the last .pln, which maybe you saved half an hour before, so you would lose just a little bit of work in that very rare case. [0:24:23]

Okay, Dave says, "Great, thanks."

So let's move on then from redundancy and strategies where you are saving things in multiple places to what happens to a project when you move forward from an old project. So in the simple case, we just open it up in the latest version of ArchiCAD. So let me take my sample project from MasterTemplate. I'm going to open it up and show how you would migrate it from different versions. I will go here and say I want to open up an older file. Here we have MasterTemplate overall here, and let's go back here. Now I'm going back through - I have MasterTemplate for 17. So let's open up MasterTemplate 17 sample project and see what happens. Then we will do the 16 and jump all the way back maybe to 12 or something like that. [0:25:31]



So I'm going to go and open up the sample project here. I don't need to save this thing I was playing around with. Let's take a look at this. Now the basic idea when you have a project that you're moving forward say from 17 to 18 is that you want to have a backup copy of the 17 or earlier version. Then save a new version in the latest version of ArchiCAD. The reason why a backup copy is important is because occasionally when you do this there might be something that changes or doesn't work. You may have a question about it, and you want to be able to go back and open it up in ArchiCAD 17 for example and look at it. Or you may want to open up the original file again to see if maybe you should do something a little differently in the migration. [0:26:28]

So never overwrite your earlier file. If necessary, just make a copy saying, "Smith house ArchiCAD 17 Final Version" or something like that. And then of course, continue with "SmithHouse.pln," in that case, for your active project. In recent versions of ArchiCAD there is a migration assistant. When it detects that you are opening up an older file, this dialog will come up. It may have changed a little bit in 18 versus 17 or 16, but essentially it will offer to do some things such as migrating the ArchiCAD libraries. Now if you simply want to open it up and maybe print, you don't want to make any changes, then you might want to skip the library migration. Generally migrating the libraries is pretty safe, but note that once you do that, any work you do is going to be saved in the ArchiCAD 18 version because it's going to use the 18 library or whatever is your current version of ArchiCAD. [0:27:36]

In general, this is what you want, but occasionally if you are just opening it up and taking a quick look to maybe print something and close it up, then you can skip it and say, "I want to see it with the old libraries." Now when we migrate ArchiCAD libraries, what happens is it adds in the current library. And I just want to double check that it is setup in my standard U.S. version because I also have the international version of ArchiCAD installed. It will also load in a folder for migration libraries, which are support for earlier versions of ArchiCAD back to version 12 or something like that. These migration libraries within here, there are folders for individual versions of ArchiCAD. Generally it's pretty safe and not a big deal to load the entire migration library folder, but in some rare cases I might just load the 17 migration library alone. [0:28:30]

That would be inside here. I'm just going to load the whole thing, which is the simplest thing. Now here it's saying it can't find "AMT Library." So this is an office-specific library for ArchiCAD MasterTemplate libraries. It last found it here, and it's not quite sure where it is. So if you're doing this and it can't find it, you may want to go and add in where it finds this. Let's go into MasterTemplate. In this case, I should be able to - I have a version of the AMT - my office - libraries that are set up for 18 use. So it should work nicely. I can also go back and find one that was used before, but this will bring everything up to date. So I will say choose. [0:27:16]

It said, OK, there is the AMT Library, you have shown me where it was listed. I will use that. Occasionally you will see if you either change the name or for some other reason it doesn't recognize it, you will see it get loaded and you'll still have something missing. You could then highlight the one that was missing



and click the X and say "Skip loading it." Now, whatever you do you can always undo. You can always essentially load different variations of libraries. This doesn't change your actual data inside the project, it just says, "When there is a window or an object on the plan or in a file, where is it going to get its information?" It's going to look in these libraries. [0:29:58]

Now anything that was inside the project, like the project library here - these are some stairs that are specific to that project that are embedded, or textures or things like that - these will come along when you migrate it directly in the Library Manager. Now I'm going to go ahead and say OK, and it's going to open up the sample project which was from last year. It's interesting; it said the project was created in 2004. I don't believe that. We started MasterTemplate in 2007 I believe, so that's a little bit odd. But maybe when I was doing that, we were creating it from a template file from Graphisoft that had a date back there; I'm not quite sure. Now it's giving me another warning about accessories, so if you work with accessories, you'll know that they're an add-on to ArchiCAD. A free "Goody" as it's called, and they allow you to do some more things. [0:31:02]

Accessories in this case allowed us to do some roof framing as an addition to the roof. Leaving the data intact is a good idea, and then later going and getting that particular add-on so that it's fully functional will work. Leave the data, all the model elements will be there, then when you load the add-on then you can do more work. For example, roof framing in this case. So I'll say OK, keep the data here. It is also giving me a warning about hotlinked modules missing. This is general file management. When you have a file that refers to other files that are hotlinked in - it could be modules, it could be DWG files or PDFs - ArchiCAD will attempt to find those files in the location that you indicated. [0:32:01]

If it can find it, it will generally try to update them to make sure that you have the latest version. If it can't find them, it will give you this morning. Now as it says, "Elements of these modules are visible in this project, but you cannot update them." Why? Because it says the source is missing, or maybe it's coming from a BIM server and it can't connect to the BIM server. So basically the contents are there, but it can't get the contents updated. So if you are concerned about whether or not they're up to date, you will have to help ArchiCAD and tell it where they are. So you can say "OK, I've got the message." [0:32:40]

There is a similar message here saying that this Logo file is missing. It was in a certain location before, and I can again say "Skip All" or I can tell ArchiCAD to find all of these logos in a certain folder. And by the way, with the hotlinks, you can't update all of the hotlinks at once. It would be nice if you could, but you can in terms of drawings, which would be these graphic files or I think PDFs and probably also DWG files that are placed in as drawings. You can tell ArchiCAD to read all of these from a certain location. So it's now saying "Select a folder." In this case, I'll go to "MasterTemplate 18," and I think it's under "MasterTemplate 18 Linked Files". So I will select this folder and say, go ahead and try to find the files with the appropriate names within this folder. [0:33:41]



As long as they haven't changed names, it will find them. I will say "Choose." This is the standard message that says "Hey, these layouts may not be up to date." I don't need to worry about that ever, unless I'm going straight to printing. So I'll say "Skip All" here. And now after a series of messages, it has brought up the Library Manager where it has loaded everything. And it still says there are some missing live objects. And I can go ahead and try to reconcile this. Now in this case, there were some things in the sample project that we decided to replace. In other words, when I created the actual 18 version, I deleted some things like the auto note. This came from Master Script. [0:34:25]

I decided not to license some of the Master Script components. For ArchiCAD 18 MasterTemplate, they weren't being used much and I felt they were unnecessary. So these things are missing, and I need to go find them and delete them or go load those separately in the library. You can see here there's "Total Zone," that's another one from Master Script. And here is the Total Zone. So there is a message here that basically, we need to clean up the libraries. I have a whole separate section of the course on library management, so I won't spend a lot of time on this, but basically it's a good idea to clean up the library stuff. [0:35:11]

For now, in terms of the migration, let's put that aside. I will close this up so it still available. I can always get it back by going back to Libraries and Objects, Library Manager. Then it will give me a library loading report. So here we have the project file. You will notice it says "AMT 17 Sample Project." That's the name that it was when I opened it. In general, what I want to do immediately after opening it is save it under a new name. Do Save As, make sure when you do Save As that it is saving a solo project as opposed to Save As a DWG or something else. Then give it another name. So I'm going to say "AMT 17 Sample Project imported into AC18." So I'm making it very explicit. [0:36:02]

Now the other possibility is that I can go to that original one here and rename it as such and such a project ArchiCAD 17 version or AC 17 version. Then I would make sure that's retained for future reference for archiving. Possibly I will leave the name. Of course in this case it has the name 17, but in most cases, you will have the name, project number and possibly the client name. So here, I'm going to go and put this into - since I am working on it here - into my Best Practices Course week 26. So here is my sample project and I will say "Save." [0:36:42]

It does warn me that I haven't relinked the hotlinks, so they might be out of date. I'll say OK, but go ahead and save this anyway. By the way, in terms of those hotlinks, those are parts of the project that exist but can't be updated until it finds that we can update these under the File menu, External Content, Hotlink Manager, where we can say "This file here actually says it's missing because it's no longer in this location." I want to relink it to a file in this case. And I will relink it back to the updated version of this file, which would be "linked files" here. This is the legends. I think that's the legend one here. I have to make sure it's in the same order here. It says it's been relocated. I could go on and do these ones as well. [0:37:48]



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Now I'm going to update just the one of them, because I want to demonstrate what happens. There's a little brief dialog on here that says it was loading it. We didn't see any change, it's actually off screen and hidden because of the layer of the hotlink. The master layer is turned off. What I want to point out is occasionally you may want to go under Data Safety and Integrity here and say - where is it? There is something about the warning messages that I saw. I guess it is right here. Hotlink Update" basically says that when you're opening or saving a file, do you want to check the hotlinks and ask for update confirmation? And of course report if it can't find them. [0:39:02]

If it can find them, do you want to just automatically update them every time you open or save the project, or do you want to ignore the hotlinks and say don't ever bring it up unless the user - that's you - says you want to update the hotlinks. So if you get annoyed by that message, you could turn on "Ignore Hotlinks," but in general I would say you want to deal with the message, update the hotlinks, and if it does bring up the question, you can check to see if something happened or the file got moved; something like that. Okay so we have just dealt with the basic transition. The only thing I haven't covered in this basic transition has to do with libraries. [0:39:54]

For example, one of the issues with missing objects had to do with AMT Total Zone. So in the attributes, some zones are referencing this particular object or zone stamp, and we don't have that. Let me go into the Options, Element Attributes, Zone Categories, and we will see "AMT Total Zone stamp" is referring to a zone stamp that's not loaded because I no longer have that loaded. I could say let's just use this other zone stamp, one of the standard Graphisoft ones or one of the other ones that we supply with MasterTemplate. There's that. I think that's the only one that refers to it, because all these were set up there. [0:40:43]

But now this "GS Zone Stamp" is also referring to something missing. Let's refer it to one of the standard ones, maybe this one here. Now I just updated that. I have at least tried to deal with this missing object here. Let's go and refresh the element list, and you'll see it's gotten smaller. And you can see the one that said "Attributes" is gone. So I have basically cleaned that up. Now for AMT libraries it says "Inclination Annotation." Now where is this element? How can I find it? That's a good question. I happen to know where to look, so I will point it out, but I will show you how you can find things like this. [0:41:39]

So let's say that something is missing from a library that you lost track of or it's just missing and you want to find so you can see if you still need it. Sometimes you may have put in something and you don't need it. Let's take a look. One is, look for red dots. So these dots here. If I zoom in, you'll notice it stays the same size onscreen, it doesn't get any bigger. If I zoom out it gets more prominent because everything gets smaller and it is still the same size. If I click on it to select it, it says "Auto Note," and that was the one here, "Auto Note." So Auto Note is a nice little graphic for putting in notes and in mini-table, and it was something that we included in MasterTemplate 17. I don't think it's needed anymore, it was just an example. [0:42:30]



So I'm going to delete it. That's the only place I think it was placed. Let me refresh the element list, and now we don't see Auto Note. So if we have an object with a different version that we want to put in or just don't need it anymore, you can just delete it. Now what about this "Inclination Annotation" and the silhouette? We go to the Edit menu, Find and Select - hopefully all of you have used Find and Select at some point. Find and Select is very flexible. We can say I want to select all 3D elements. A lot of stuff got selected. Or I can say select all 2D elements. Different things such as the dimensions and markers and things like that got selected. Or I can say these are built in criteria sets. I can say "Known element type is object," and hit the plus. [0:43:29]

These are all the objects; cabinets, equipment, things like that. So that's an option. If I pick something that has names like objects, then I can also add a criteria that is the name. Now depending on what we select, say I want to select walls, it will not have a name available, because walls don't have names, they are fills that refer to what they are made of, and they have IDs, but they don't have names. Objects do have names, and we could say the object name, and this will be "contains or is", and we see these are all the names that are in the current view. Now I don't see "Inclination Annotation" in here, so it's not there. But if I did want to know, "Where is the gas stove?" I could say OK, it puts in "Gas Stove 18." I hit in the plus sign, and there it highlighted it. [0:44:29]

If you want to see something and possibly replace it, that will help you. Now I know that "Inclination Annotation" was a little tool for putting in a rise over run for a roof. It was put into one or more of the elevation drawings. So if I go to CD East Elevation, you can see here is a dot. That is my clue. I could go in and select it, delete it or change it, but let's just say "Name is" - and I'm pressing down here - and now you can see these are just the objects in this view. And I say let's find that Inclination Annotation and hit the plus and you can see the dot there. In this case I can just delete it, because I don't need it. It might be somewhere else. And by the way, you can see it says 1 and 2. This is basically indicating that this is seen in more than one place. [0:45:30]

Let's refresh the element list, and now it's two here, the other one is not. I don't know what the difference was between them; maybe there were two different versions of the inclination one. So I've reduced it down, and I can go in here and take another one here and hit this plus. It's not in that one here. Let's try the same - that was east elevation, let's try this one here. No, it's not in that. Let's go to the sections, because I think maybe they're in some sections. A, and hit here. No, it's not in that. Let's go to a different section here. No, it's not there. And it's not there. Do we have one here? So this is a little bit of a nuisance, because I don't know where it is. I would have to literally go through every single viewpoint in order to find it, and that's an awkward thing about ArchiCAD. [0:46:41]

I can't highlight this and say "Where is this object found?" I do know that this is actually in the legend itself, which I can't update as easily. So what is a legend? This is our kit of parts that we can eyedrop and bring things into our active project. This is referenced from an external file, and I would need to delete that file in order that it's there. I thought I had updated the legend a minute ago, so I'm not quite



sure, but let's go find the silhouette. Ultimately, in order to clean up the libraries, you would need to go find these. And if you have a hunch that you place something in a particular location, then go for that. But in the worst case scenario, you literally have to turn on all the layers and go through every single viewpoint in the project map. You don't have to go through every single view, but every single viewpoint with all layers turned on and then find where it is. It literally it could be anywhere. And you also need to go through every single layout. [0:47:53]

Now of course once you find it, you can stop. You don't have to go through every single one. I'll tell you in one case where I had a problem with MasterTemplate. We were loading the north arrow on a couple of layouts, and the north arrow was an out of date one, it came from an earlier library. And for the life of me, I couldn't figure out where the north arrow was. Finally, I realized it wasn't in one of the plan views, it was on a layout sheet. So once I figured that out, I guess it was probably on the title sheet here, and you'll see here is the north arrow. This is an object here. If I press down on the name, you can see here's the north symbol. It says it's the only object on the entire layout. And of course it's version 18, because we switched to that library. [0:48:50]

Okay, so that's a little bit about cleaning up your library references in the case of going from 17 to 18. Now it would be the same if I opened up something from an earlier version. So let's talk about that. We'll return in the next lesson on Thursday to looking at attribute management. As you move projects up from one version of ArchiCAD to another, particularly going from 16 to 17 and then again from 17 to 18, there were some changes in the attribute structure and the ways that building materials were introduced. And surfaces, which used to be called materials, were introduced as well as the new surfaces for ArchiCAD 18 CineRender. [0:49:40]

So we'll do that next time. Let's look at another migration for this. By the way, Scott asked, "Could you type in "inclination annotation" when in the plan view?" You could use find and select and type in something, absolutely. I just find it frequently easier to go look at that little popup that allows you to choose, and then select the right one or just see if it's there. So if it's not listed, then it's actually not currently visible. Now it could be on a hidden layer, that's why in the worst case scenario you are searching everywhere to find it. You need to turn on all layers and go to every single viewpoint and just see if it's there. [0:50:28]

Ken asked a question going back a ways, "Just to clarify, when the backup drive fills, unplug, plug in a new one, and keep going." So that could be a complex question, but you could do that. Let's say that your backup drive filled up and you have a new one, and you just said "back up my drive," and it's a bigger one and then is able to handle it. Then you're okay. You have this older version as backups going up to a certain point, and now you have a current one. And you can even unplug the old one and take it home and just put it in the attic or something like that for storage. Or you could leave it around, and of course, maybe there are some files that were on there from last year that you deleted, but you decide



you really need. That's one of the subtle things about backups is that you can go find deleted files, depending on your backup system. [0:51:27]

Time Machine allows you to go find the contents of a folder at a certain date, like in that folder in March, there were some versions of the file and you say, "Oh, there's that version of that project! Thank god I found it, because we deleted it, we thought we didn't need it, but there it is." Now getting a new drive is certainly not a bad solution at all. But does that backup drive have anything else on it? I originally had a backup drives with the backups plus some other files, and I realized that I was running out of space so I took those other files off to give the full amount of space to the backup. [0:52:15]

Now with Time Machine, there is an option in here. I will open up Time Machine preferences here. It says "How frequently is it done?" Oldest backups are deleted when your disk becomes full. So in this case, the oldest backup for me is dating back to April. Now I've had this going for a lot longer than that, but at that point, it ran out of space and it pruned or got rid of the earlier backup. So I can't find files that might've been on the machine in March or last year, and were deleted, because they are no longer available. Since April, if I deleted a file in May, I can go back to May to look at it. I can get that. [0:53:05]

In any event, that's the main thing is that you can clear up space and have a longer audit chain of things that you can audit or go back to. So Windows would have some similar backup options that may be included with Windows or they may be separate. This is the one that is built into the Mac. Hopefully that answers Ken's question a bit. Let's look at the migration of a similar file from an earlier version. Now I have already saved this with my new name, and I'll just save it again here. By the way, let me clean up the hotlinked modules. I canceled it, so it said that it couldn't save it. Let me go in and clean up the other two here. So we will say "Relink from File" and go - which one is that? That is "Office Favorites," I want to link it to the same one. [0:54:12]

And I like this one, "Relink File." This would be "Project Favorites" here. I will say OK. It updates that, and now if I hit Save it doesn't give any error message. So now it says the hotlinks are up to date. Let me go and open another version. So I'll go way back to MasterTemplate 12 Sample Project.pln. I will open that, and again, Migration Assistant comes up. I will tell it to migrate ArchiCAD libraries. So it started with the ArchiCAD 12 library because it was done in 12. You can see that it was last worked on in 2010, so that was four years ago. This would put it back at 14. So I must've done some work on it after it was created. [0:55:30]

Again it says that hotlinked modules are missing. Again it says some drawings have been changed since the last update. I'll skip that. And the Library Manager says that I have some issues here. This one seems to have a lot of issues. It says that there are 18 and 66. What does that mean? 18 objects placed 66 times. That's what these numbers mean. Missing objects from unknown library. Okay, so here are some things that have the number 12 here. This is an old library, and for some reason it's not finding them. Let's go to the Library Manager. We're loading Library 18 and Migration Libraries here. The



Migration Libraries include some stuff, and here's the MasterTemplate stuff, but what does this include? [0:56:28]

Let's take a look at whether it includes the 12 files. So I'm going to switch over to my finder and go to MasterTemplate here, and we'll go to - actually, no. I want to go to ArchiCAD 18 into the migration libraries. So we're loading that. What does it include? It includes support for 17, 16, 15, 14 and 13. It does not include the 12 library. So that's why it can't find these things, because it doesn't support that. Now I happen to have ArchiCAD 12 on my computer, so I can load that. And there would also be - oh, here's "Old ArchiCAD migration libraries" so let's look here. Here we have it. So I didn't create this. This was actually installed in ArchiCAD 18 by Graphisoft. So I need to basically load the 12 migration library. Why didn't they put it in here? [0:57:34]

Maybe because it's less frequently needed, they are larger, and if you have an old file these are available but it won't routinely load them within this one. So this is something that you want to be able to know where it is. If you're not in 18, then maybe it would be in a different place. Maybe you might even have to download it from Graphisoft to get it. But you do need to find that if you're going back to 12. Let's go in here to the Library Manager, and we're going to add in from the ArchiCAD 18 folder, Older Migration Libraries, we're going to add this in. Now I don't need to go back to 11 or 10. This file was working in 12. So I just need to add that in. [0:58:23]

Now I do I need to keep the other ones that have the 13 through 17? Probably. Let's check and see whether we need that. So I'm going to go here and say "Reload libraries and apply all the changes." And now it says there are duplicate objects, but it doesn't appear that there are any missing here. So if I say OK, you can see it says "0" right there. So the project looks good in the background here. Let's go the Library Manager again and say, in the 12 migration library there are 60 objects placed a whole bunch of times. In these migration libraries there are 22 objects placed this many times. In the ArchiCAD Library 18 there are 151. [0:59:13]

This was an old project. Why does it say that it's using 151 things from the ArchiCAD 18 library? Because there were parts that existed in 12 that haven't changed, and it's now using those parts in the ArchiCAD library 18. So that's perfect. In general, Graphisoft does a good job. These ones are the same files, they are just put into a different folder and maybe they have a different name like "Desk 18" instead of "Desk 12" or something like that. So we're good to go here. It does say that there are some duplicates. We could see what the duplicates are here. These are some texture files that are somehow being loaded in twice. [1:00:03]

Generally that is not going to get in the way. Generally if there are two or more copies of blue carpet, they are all the same, so we don't have to worry about that. But if you were to really want to clean that up, then you would want to go into the migration libraries and find where those are and remove them. But in this case, it's coming from the migration library itself, so I'm not going to worry about that. We



have now added, in addition to the standard migration libraries, this one special from the old migration libraries here. We now have access to everything; there are no missing ones here. If I go back to here, the project looks much like the one we were looking at before. If I go in here and look at the first floor plan, now looks more like it because we are seeing all of the layers for the dimensioning and things like that. [1:01:06]

So I've now migrated this. Of course it still has the old name, so I would want to go and save this as, not save and overwrite, with a new name. Now if I hit save here, in recent versions of ArchiCAD it will warn me. It says first of all that sources of these things are missing. And then, "This project was made with an earlier version of ArchiCAD. If you save it now, you won't be able to use it with earlier versions." So it suggests that I save it under a new name. If I click "Overwrite" it will go ahead and overwrite it. Do not do this. [1:01:42]

Now if you're an expert and you wanted to do it because you understand, that's fine with me, but I recommend you click Save As or just do a Save As to begin with and give it a new name. Possibly put it into the new location that you want to store it. The one case where you may want to keep the same name is if you've already backed up the file and copied it as "such and such project ArchiCAD 15 version" or something, and now you're opening it in 18. If you just want to save the file with the same name, you can do the overwrite, but always make sure you have a copy of the original version. So I will just go into Week 26 and save this "AC 18" here. [1:02:38]

Again, it's missing the hotlinked modules here. Now we'll get into some more of the details about hotlinked modules and migration, things that affect that, in the next session when we go into the attribute management. But that's the basic strategy for migrating projects is keep an old copy, open it up in the new version of ArchiCAD, allow it to do the migration either manually or automatically with the Migration Manager by loading in the current library plus the migration libraries. Verify that you can see all the parts. If there are some things that are missing, go find them and change them or go find the library parts somewhere on your hard drive and load them in. Make sure your file looks good, and then continue work. So let's see if we have any questions before we finish up the session. [1:03:39]

We will be back on Thursday with a little bit more about migrating projects in terms of attribute management, going into 17 and 18 particularly. And we will look at some other little complications, for example, updating hotlinked modules and things related to Teamwork. Next week, we will dig into Teamwork and focus on that. I see another thanks from Jim and Dave. If you have any follow-up questions, please post them on the page down below the recorded video. This has been Eric Bobrow, thanks for watching.

[END OF AUDIO 1:04:32]