

## BEST PRACTICES COURSE – WEEK 23 – Layout Book Drawing Options, Printing and Publishing – Part 4 – Placing Internal and External Drawings

Welcome everyone to the ArchiCAD Best Practices Course training lesson. Today we will be continuing week 23 where we've been focusing on the Layout Book and Drawing Settings. And we're going to be looking at some of the basics, and maybe some more advanced options for bringing in drawings into the layout book from within your project as well as from outside. [0:00:26]

Let's take a look at the layout book here. We'll look at the floor plan sheet. These particular drawings, when I select them and go to the information, they come from the ArchiCAD current file. They are internal to this project file. And there's a reference here if I expand this out to a particular view. So the most basic usage of the layout book, starting from the real basics but very quickly going through them, is to place views from the project into the layout book. So how do we do that? [0:01:08]

If I go and create a new layout by right clicking here on any layout and say "New layout", or I can right click in a subset or in the layout book, it will allow me to create the new layout. We'll just call this "Additional layout" here. So now it's a blank layout. To bring a view in, going back to the basics, we go to the View Map. And any view in general can be dragged in from the view map onto the sheet. So here we have the first floor plan view which has its settings for layers and model view options, etc. placed onto the sheet. [0:01:52]

It turns out that we can have not only construction document views, but we can also have 3D views. For example, this 3D perspective view, which is a saved viewpoint on the project, can be dragged in just as well. And this view is actually updateable just like the floor plan. So what does that mean? If I right click and say "Open source view", it will go to the 3D window with that particular setting. If the building has changed – and let me draw a box of walls around this tree here just for fun. And maybe let's undo that. Let's make sure that the walls are set up. I will eyedrop – I guess they were floating in space at the same height as these walls. [0:02:43]

Let me try something here as a quick test. I'm going to gravitate to the mesh. That will make the walls that I'm starting to draw here fit based on the mesh, so they'll be sitting at the height of the mesh at that point. No, actually that's not. Let's not get distracted here. We're getting a little distracted here in terms of the idea of this. I just wanted to make a change to the building. Let's just drag this tree. I will drag this tree over here, and drag it back that way. [0:03:33]

So now the design has changed. Obviously it didn't change the building, but I changed the model. And if I go back to that sheet and I do an update, we're going to see this update just like the plan view would update. So within a few seconds, we'll see this 3D view get regenerated. So we can have 3D views as well as sections, elevations, etc. placed onto the sheet. We've already gone through the basics and the



settings for Titles. Obviously these drawings can have titles or not, and they can have the scale displayed. [0:04:17]

In this case we would have the scale in perspective. Now if I go to the Project Map and take something like the first floor and drag this on, ArchiCAD will actually put a view of the first floor onto the sheet. But you see that the layer combination here is not very controlled. In other words, it looks like a mess. Why does it look like a mess? If you are experienced with ArchiCAD, you may realize that the last layer combination that was active was when I opened the source view for the 3D. That source view for the 3D had a layer combination turned on all of the building including the roofs and site work and landscaping. [0:05:07]

So that's actually the layer combination that was active when I dragged it in from the project map. In general, it's not a good idea to drag from the project map because the settings for this are not easily controlled and updated. So if we go in here and look at the drawing selection settings, the drawing itself is set at a certain scale and certain pens. But what is the view? It says that it's from the project map, and what layer combinations are used here? Let's just take a look. If I say "Modify source view settings", you'll see that the Source View Settings is from the project map here. [0:06:04]

It's certain layer combinations and certain things that happened be in effect. so the preliminary layer design combination, for example, was the one that is setup for some quick 3D views with most layers turned on for the modeling for example. So this layer combination here or all of these settings here are not designed for construction documents because they're designed essentially for the 3D. I guess the point I wanted to make is that you can drag things in from the project map, but your settings may be whatever was last thing you had set. [0:06:45]

So why would you do this? If you just wanted to print out something on a title block that you're working on on the floor plan. So if I go back to the floor plan here, we're going to see this is a rather cluttered view because it has the trees, roofs and things like that. So possibly we would want to print this, but certainly most of the time we'd want to have the layers set to some layer combination that was appropriate for construction documents. Let's just say if I put it into floor plan here, this will immediately clean this up and give me a view for the floor plan. [0:07:30]

If I go into any of the other ones, let's say for a site possibly – that's what I want to do here where we are seeing the site information. Now whenever we've got active at the point that we drag it onto the sheet – let me go back in here and let's drag now from the project map. You can see that this is a slightly different setting than what was set up here. It just happens to be whatever was active from the floor plan. In general, if you are working on something and you want to print something out on a title block you can drag the project map entry onto the sheet. But in general it's better to have that set up in the view map. [0:08:25]



And I don't think I need to emphasize that anymore. I'm just going to go ahead and delete these guys here. Now in terms of bringing things in from parts of the project, in general you're going to have your view map set up in a hierarchy and the views here have particular names that help you to understand and find them more easily. When you drag a view onto a sheet, let's say that I put the second floor plan on here, if I look at the settings of that view, it will say that it's in the project. This is actually this information up here. And it's in the construction document views, which I guess if I switch to the view map, we'll see that. [0:09:30]

We're the construction document views, and here is the sequence. So that is what you'll be able to check to see what view it came from. Sometimes it can be a little bit confusing. Where did this come from, this particular drawing? Now one nice shortcut here is if I right click on this view, of course, I can say "Open Source View" and that will take me to the actual view for working on it. But in the view map you'll also see that it gets highlighted here. So that is a way to see what view it came from. [0:10:06]

Now also if I go back to the sheet and right click on this, we have some options to modify the source view settings, which will go directly to the view settings from the view map. so we don't have to actually switch back to the view map to maybe change some of the settings of this. We also have here options for relinking the drawing or updating the drawing. So update we've already gone over here. Let's look at "Link Drawing to". So what does that do? It allows you to actually change the link of this drawing. Let me pick a different one. So this is a totally different view, this is a first floor view with interior designs. So it would have furniture turned on. [0:10:58]

I say "Link it" and what we'll see is it's now a totally different view. So why would you ever want to do that? Occasionally you'll have views that you place onto a layout she and the view has gotten deleted. You may get a warning when you delete a view that says something like, "Deleting views is not undoable" and you may say, well, I don't really need this view. Then later on you find out on a sheet that the drawing says it has no source view. So let's just see. [0:11:31]

This particular view, if I go and say "Open Source View" and we look here, this is the source view here. I'm going to just delete this view as a training example. So here if I delete a view, this is just an individual view in a folder. It's not part of a clone folder, so I can delete it. You can see that it goes away. I didn't delete the model, the model is still there. All of the settings for this particular context are still active. But if I now go to the layout sheet here and I right click on it, you'll see that there is nothing that says "Open Source View", because there is no longer a source view; it's been orphaned. [0:12:26]

If I open up the drawing settings, you can see that it had a name for that. Remember the interior design is what it was called, but is says it's missing. so that particular view is missing and that means that it can't be updated in the normal way. Now if you have something that is let's say an elevation or section it actually literally can't be updated. I believe this can be updated if I right click on it. It still allows me to



update, because it still remembers the basic reference, that it's on the first story and that it has certain layers, etc. [0:13:04]

But if this were a section, an elevation, a detail drawing or something like that, then "Update" would be missing and you would be limited. The view is an orphan; I'll just call it that. The drawing is an orphan. So sometimes you may need to go and say "Link Drawing to" and choose which view is appropriate. I don't have one here that matches, so what I'll do is just go back to the floor plan and create a new view. Remember I didn't actually move from this view, so it has the same settings as it did before. So I will go here and say "Save Current View" and we'll give it a custom name. We'll call it "Interior Design 2" just so we can see that it's different. [0:13:50]

So it actually went down to the bottom here. Let me just drag this. Here's something interesting I forgot to mention when I dragged those project map items onto the sheet, ArchiCAD actually created a view from the project map with the current settings. Now the interesting thing here is that it took the name of the project map item. In other words, the first floor. The second time I did it with slightly different settings in terms of layers, it just kept the same name but it added a suffix or in parentheses with the number one. And it will keep doing this no matter how many times you create new drawings on the sheet that you drag from the project map. [0:14:40]

What is confusing is that all of these will say something similar like first floor, first floor, first floor with 1, 2, 3 etc. so it's hard to tell what these views are about. We don't have a name. Is this the site plan, floor plan, ceiling plan? So in general this is considered a bad practice. At least it's prone to causing some confusion and some loss of time as you maybe don't know which of these views are in use or which ones you should be using. [0:15:12]

Now the interior design one, remember I just created that. so that showed up at the bottom here. I can drag this up into let's say — I think I had it here. So now it's in the original position. if I don't want to give a number here because it's really not something that is relevant then I can just delete the ID number there. If I go back to that sheet, I can right click and say "Link Drawing to". And now I've created a comparable view for this and I can link it, and of course it hasn't changed here. [0:15:51]

Now in terms of linking and placing drawings, let's start looking at some of the things that we need when you're bringing in something from outside of ArchiCAD. I can go and place drawings onto the sheet by going to the File menu, External Content, Place External Drawing. Earlier we were placing a drawing onto a sheet by dragging it from the view map preferably or the project map as an alternate. And then it show up showed up on the layout and referred back inside the file to a particular view. Placing external drawing allows me to bring in things from outside. [0:16:37]

Now what types of drawings can we bring in? We can bring in a lot of different CAD drawing and graphic types. So let's look at some of the ones that are simple from outside and then we'll look at some things related to other ArchiCAD projects. So from outside, one of the things that we might want to do is bring



in a PDF file. And we've been able to do this since maybe version 11 or 12; I can't remember when it was introduced. So we choose PDF file, I will go and find a document here. Here's an article that I wrote a while ago. This is a PDF that I can open up. And when we have a PDF, if it has multiple pages, we can choose which page we're going to be placing it on. [0:17:39]

So I chose page one, click to place it, and this is going to be a very clean representation, as PDF always are. This PDF is linked to a particular location on the hard drive. It can be updated whenever that PDF changes. So in week five of the course, I go over how you can use this strategy for bringing in pages of notes or specifications that are maybe maintained in Word or Pages and then saved as a PDF. So this is obviously a real convenience. You can also bring in PDFs of surveys or of manufacturer details, cut sheets, reports like energy analysis reports. In California, Title 24 is an energy certification for the project. [0:18:43]

So these are all things see you can bring in as a PDF. If this source moves around, if the actual PDF file is move to a different place or deleted, then it will end up saying that it's "Missing". But as long as the drawing is stored in the project file, then you'll have a copy of it and essentially be able to work with it. you just may not be able to update it. That's true for any external drawing that you place. Now the scale of drawings that you bring in from outside has a natural size, and then of course we can change the magnification. So if I change this to 50%, then what's going to happen is it will be smaller on paper here. [0:19:31]

And you can see what's happened here, it's gotten smaller. Let me just undo that. Now if it's a PDF file and you're bringing it in, then what it does is it looks at the natural size. So this particular PDF file is letter size here in the U.S., 8.5×11 inches. I forget what the designation is in metric units, I think A5. But it's a standard sheet of paper you would put into a desktop printer. So this is the size, and when the PDF is brought in, ArchiCAD knows the paper size that it was intended for, just like when you go to print it, it has a natural size. [0:20:22]

Now for something like a report or diagram or things like that, this can be adjusted easily to any convenient size. You can make it fit onto a sheet as needed. But if it is something that has a scale – let's say that it was a survey that you have in PDF form or some other technical drawing – then bringing it in at its natural size, it's likely if things were saved properly that it will scale properly. if it's set for 1 inch equals 20 feet or 1:240 for certain types of site plans or 1:500 metric or 1:200 or something like that, then when you bring it in at the 100% scale it should be scalable. [0:21:14]

Before ArchiCAD 18, the PDFs couldn't actually snap to anything you would bring in. But in ArchiCAD 18 a brand new feature is the ability to have the PDFs explode into drawings. And I actually haven't checked, I think maybe you can snap to the line work within it. So we'll be checking that out next month when I go over ArchiCAD 18 new features. I just wanted to go over the basics here in terms of scaling for a PDF. [0:21:50]



Now in terms of the output resolution here, if we were to change this to 600 does that do anything? No, it doesn't. The scaling here, I think this is the natural scaling. Let me back up a moment. When you bring in PDFs that are vector based, such as what we see here which was just a Word document, then there is actually no native resolution. The text could be enlarged to any amount and it would look clean. Pictures that were embedded in here, like this screen capture, had a natural resolution. This would affect the resolution that it's going to attempt to display or print it at. [0:22:45]

If you type in a larger value like 1200 DPI, ArchiCAD would spend more time trying to create a more accurate representation, but it can't really create more resolution than what was in the original file. But this is something that potentially you could use I believe if you had a picture or a scan. Sometimes you might have a scan of an old historic drawing, and you could potentially tell it to use a lower resolution when it was outputting, maybe to make it a little bit easier to send an output file to a printer. So I haven't really experimented with this, but you may find that useful to refer to. [0:23:28]

So let's take a look at what other files we can bring in. I will go to External Content, Place External Drawing. In addition to PDFs, we can say "All images". Then it should actually allow us to – All images, Place Drawing. Here you can see this JPG. If I go into images here, I can say I would like to put in a Van Gogh painting that I use for a tutorial image. So let's place this. So we can bring in just a JPEG or other type of image file. When I went to that command of external drawing, I switched between PDF and all images. Basically this is just filtering the results. [0:24:27]

So if I go to PDF file, then it's only, if I go to any particular file here, it will only show only PDFs, it will restrict it. So sometimes if you're going to a folder and you want to find just a certain type of file, restricting it here is good. If I change this to "All images" then the next time I go back into that folder we'll see that it is allowing me to select these. Let's go down now to DWG. DWG would be AutoCAD files or other CAD programs exporting as DWG format. So I need to go find something there. Do I have DWG in here? I have a tutorial about importing DWG, but I don't have any DWGs there. Let me just find a DWG on my hard drive here. [0:25:40]

Alright, here's a basin, here's a site plan. A site plan could be interesting to bring in. now when I'm bringing in a DWG, we have a choice of scaling it. And so I will be having a larger section on import and export of DWG files in a later lesson in the course, but I'll give you the real basics here. The scaling inside of DWG is not – let's say the measurement unit or drawing unit here is something that does not relate to the scale. If it's a 1/8 inch to a foot or 1:100, that is the scale factor, but the size of the drawing unit inside an AutoCAD file is generally specified independent of that. [0:26:51]

It's based on the unit that people are working in. so in the U.S. architects typically are working with feet and inches. And so the value of a drawing unit inside AutoCAD itself would be set as inches and then it would display it as feet and inches. On the other hand, surveyors in the U.S. typically work in decimal feet, so then when they are saving out a survey or working on a survey internally to their program, they



are working with a foot. There saying this is 85.68' long, and that is the unit that you would use. If you're in metric, then you would be either doing it with meters or millimeters in terms of the sizing. [0:27:41]

And when you're placing an AutoCAD drawing or DWG file, the general rule of thumb is to make a guess based on inches for architects in the U.S., feet for surveyors in the U.S., and then I'm just going to guess millimeters might be good as a guess for metric. Until you understand or have had some experience, and then you know when you get files from a certain source which one to use. If you place it in with the wrong setting, like 1 inch, then what will happen is it will look fine but will scale improperly. It will be 12 times too big or too small in the U.S. If you have inches and feet transposed. Or possibly 10 or 1000 times different for the metric units. [0:28:33]

Let me just place this here, and put it off screen or off sheet. When you're bringing in something from a DWG file, again I will be going into more of this detail in a later lesson, but there some shape files or .shx files that, in this case, are used for fonts. We don't really need to worry about that. So we're just going to skip that so we can just bring this in. And it's rather large. So this is a huge site plan. The site plan here is a DWG, and it looks like it came in quite cleanly, but it would never fit on a sheet at this scale. Let's take a look at the scaling right now. [0:29:19]

Right now its magnification is 100% percent and it's set to 1:1 scale. So obviously it was not intended to be placed at 1:1. So let's just do 1 inch equals 20 feet just as a guess and say OK. And we'll see now it's much smaller. That's maybe too small. Let's go in and change that to 1/8" to a foot. That is now something that would fit on a sheet if it was 1/8" to a foot. Remember I chose inches, so this is actually maybe too small. If we were to measure from this – do we have any scaling across? I don't see any dimensions horizontally. I just see point elevations here. [0:30:23]

But if I were to measure, if I hit the M key and measure from this point to this point, it says that it is a third of an inch. So clearly that is not going to work. In fact, actually I just realized here – and some of you may have caught this issue – that is that placing a survey directly onto a layout sheet is not necessarily the best way to go. You can do it, and you can certainly get it to some scale, but it's better to bring in that survey into a worksheet where you can set a scale. [0:31:08]

Right now we are at 1:1 because we're basically looking at an image of a sheet, and placing this directly onto the sheet. What we ideally want to do is place it into a worksheet where it has a scale like 1/8":1' or 1":20' or 1:500 or whatever is appropriate. And then get this to scale properly and then place that worksheet at the proper scale onto the layout. So the mechanics I just showed of placing a DWG will work here, but you have some limitations. So let's look at the better way that we would bring in a survey here. [0:31:51]

I'm going to go and right click on the worksheet section of the project map and say "New independent worksheet". And we'll call this "Survey test" here let's call this the "DWG-01". I'm giving it an ID and a name that will allow me to work with it. So now what scale do I think this is? If I know about it, I should



set it to match. I will guess 1 inch equals 20 feet here, 1:240, and then go and bring in the external drawing. Here's the DWG and open it. And again it will ask me for what scale. I am going to say 1 foot because I think it is a survey. [0:32:40]

We'll place it here, and when I do that again it brought it in here. So now let's just see if this might scale properly. We don't really know because I don't have any dimensions across here. So the lines look clean but the text looks way out of scale here. Let's just see if there actually happens to be a scale factor drawn on the sheet. I don't see anything placed that indicates that we do have a north arrow here. If we were to look at this – unfortunately I don't see anything that I can really decide its scale. It looks like this maybe a roadway and this might be a dimension that would make sense, but let's just see if I can make a guess as I go up to the building area. [0:33:47]

So if I measure from here to here, this is 17 '6". So actually that could be a size given that I don't know what this property is. I will undo this and let's change our scale to something different. Let's say 1 inch equals 10 feet, and bring that in.

Ken Brooks suggests 1 inch equals 100 foot would be something to try. We can certainly try that. One thing that we'll see is that as I bring it in, if I get it to the right scale, then you can see the text starts to look more correct. When I match the scale, the text fits into the context. So 1 inch equals 10 feet is 1:120. This is certainly looking a little more reasonable for a drawing. The other one looked terrible. This one looks like it could be the right one. Of course it could be 1/8 inch to a foot. Let's just go with this. [0:35:10]

Frequently we would have a graphic scale on a drawing or we would have some linear dimensions to indicate so that we could check on the scale. Let's just assume that this is correct here. And then how would we place that onto a sheet? Remember, this is a worksheet in the project map. If I go to the view map, we can either create a view or we can, if we have a clone folder for the worksheets, then that view has already been created for us. We can verify or make sure that the scale of the view is set properly. The scale here, by default the worksheets are set at some arbitrary scale, quarter inch to a foot. I'm going to go to the drawing settings or the view settings and just say, no really 1 inch equals 10 feet is more appropriate. [0:36:12]

So I have set this view to be the right size. And now if I go to the sheet and then drag the view on, we should see something. Now at that scale, this is way bigger than what we could include on a sheet, although it's not as crazy as the first time I brought it in when it was just 100x bigger than the sheet. At this point we would basically want to take this view here and possibly print it in several sections or possibly print just the area around the building. So we would just essentially crop to put it on a sheet. or in some cases we might then say this view is set at 1 inch equals 10 feet, but to fit it onto the sheet, we're going to just reduce it just so we can see the whole thing. [0:37:12]



So one option here – there's a magnification here. There is "Fits to Layout". This is a nice one. This will just be arbitrary here. It's going to be at 15.91%. It's going to be at this rather odd scale, 1:754, etc. But this particular scale would make it fit on to the layout. So if you just wanted something for carrying to a meeting, then you might use this. You could also tweak it. You could say it looks like the main information stops here is some additional stuff that we don't need to see. So perhaps I could go in here and change this to 1:754, 1 inch equals 50 feet would be a little bit bigger, that would be 1:600, and say OK. And you can see now this perhaps would fit on a sheet. [0:38:15]

Let's just drag this down. Drag it down a little bit here. It's taking a while to refresh my screen. Take it down something like this. So we've got the idea basically of how we can bring in PDF, JPEG and DWG files. By the way, let's just go back. Since we are in ArchiCAD 18, what happens if we select the drawing here and right click? This is a DWG – I'm sorry. I was thinking of the PDF. Next month we'll be going through some of the options for PDF that are new in ArchiCAD 18. [0:39:23]

So we have brought in a few different things from outside as well as inside. It made a little mess here, but let's see what other things we can bring in when we place an external drawing. Potentially you could bring in something from Microstation. It's very rare that I see people requesting that. Or DXF. DXF is essentially a variation of DWG. And occasionally other people using other CAD programs will save out as DXF instead of DWG. Essentially it's the same process. DXF is another variation created by AutoDesk for drawings that have less information than DWG. [0:40:11]

I think it may not have line weight or different pens. So it's a lighter weight format and originally intended for the web. I'm not sure how much it's used for the web right now. Now here's an interesting one, HPGL. It stands for Hewlett Packard Graphic Language, which is a format that was used for a very long time for plot files. So if you were sending a plot file to a service bureau, or even if you were sending a file for plotting on your own internal plotter, the file that you'd be sending would be often in this format. Even if it wasn't made by Hewlett Packard many of the other manufacturers of plotters would read the HPGL format. [0:41:04]

Now why would you ever want to place an HPGL file? Occasionally, you may have a file that is a plot file from an early version of ArchiCAD. You have a record of it that was saved as maybe an archive. You can place these plot files directly onto a sheet, and they'll be nice and crisp, just like any CAD file. They will in fact have all of the line weights indicated. I don't know if any of you need that, but if you did, the ending would often be .plt, so a plot file. It could also be .hpgl. So you could bring that in. I don't have any samples, so I'm not going to try to demonstrate it, but that would be what you would use it for. [0:41:52]

In fact here you see plotter file probably would be a very similar format coming directly from ArchiCAD. And .pmk is an old ArchiCAD format. So those of you who used ArchiCAD from version 9 backwards or earlier, remember Plotmaker, which was what we used for the layout book, and .pmk was the format for



saving out drawings from ArchiCAD that could be placed onto a sheet. Occasionally people do still use .pmk drawings as a workflow method from within ArchiCAD, even in recent versions. The reason why this can be used is that if you have a very large project file, you are working on a large project, sometimes it can be effective to separate out the layout book file from the source ArchiCAD project file. [0:42:52]

And to save out the views from the ArchiCAD file as .pmk drawings, and have them referenced into the layout. it's essentially what ArchiCAD did before version 10. The reason why I understand people do this sometimes is that updating from a very large file can be time consuming and can have some coordination issues when you're working with large teamwork files. So there are at least some advanced reasons why you might go back to this more primitive method of having an intermediate file that is representing various views from the project. So I will leave that with just that very brief explanation and say that if you did need to bring this in, you could follow the same steps we've been going through. [0:43:49]

You may need to set scaling manually for that. Now this brings us to the point where we're going to be looking at bringing in views from other ArchiCAD projects, because this is an important part of what you need to be able to do to deal with certain types of complex situations. Either you have a project divided up in more than one file; maybe there a site with more than one building, and you have the project saved as several .PLNs. And the views from those .plns are being brought into a combined site plan file. [0:44:30]

So that is one possibility that you might have. Another is that you may be bringing in views that are from a special purpose file, such as a file that you use to compile detail drawings. So you could have a file that would have details for roofs or in fact all of your standard company details could be compiled in another project file. Then you can bring in views from that file onto your layout sheet. I'm going to switch over here. I have just a box of walls with one window. We'll go to the layout sheet. And you can see here is that view. [0:45:16]

So if we wanted to bring in some information from another project onto this layout or any layout, let's create a new layout here. How could we bring in something from that sample project? So I will go to File, Eternal Content, Place External Drawing, and then let's go to MasterTemplate and we'll go to the Demonstration file here. That opened up, and you can see immediately it had no problem here. Now the question was are we bringing in things from the project map or the view map? Here is this whole structure for all of the views. [0:46:08]

so the little check boxes make it look a little bit different, but basically if I wanted to bring in the site plan here, I can say I'd like that one. And maybe let's bring in an elevation here. So I'm just bringing in two drawings that are unrelated onto the current layout. And I will place this. And you can see now it's generating the drawings very quickly. And in a moment we'll have those two drawings on the sheet. And



of course once they're placed we can move them around. So let's see. Here's the site plan. Why didn't it bring in the elevation? I'm not quite sure. I see, it thought that there wasn't enough space to fit the elevation on there, so it put it on another layout. It created another layout. And here is this drawing. [0:47:09]

So basically we can bring in views from another project file into this project file. If I open up the settings for it, we'll see that it says that it's from this other file, it's not internal. Remember all the other ones said "Internal" and it says that it's looking at a particular view. So it's very similar, except that the reference is from outside this file. All the rest of the things match. Now if we wanted to do this frequently or reference a bunch of things, then what we might want to use is what's called the "Project Chooser". [0:47:50]

Project Chooser here allows us to switch between projects in the navigator so that we can reference and place drawings. You'll notice that it says "Untitled, Active". Remember this is just a blank file that I just started. And here is the sample project which says that it's running in another copy of ArchiCAD. And we can also browse for a project or a teamwork project. And we have a few other menu choices here. In fact, Organizer is a great tool to use for this purpose. For those of you who haven't worked with Organizer, it's a very powerful option to essentially take the navigator and make something that has a left and right side where we can drag drawings onto a sheet or do other manipulations become simplified here. [0:48:48]

Now this button here that I use to bring this up exists in the Organizer as well. It's exactly the same settings. And you can see if I switch to "AMT 17 Sample Project" here, you'll notice that the views here show up just like as if we were in that project. So this is the other project that is currently running, and I can go and say I'd like to take the ceiling plan. I can drag a right onto the sheet here. And you'll see that it's showing up in the background right now, and it's about to be updated. Or we can literally go and take an electrical plan here and just drag this right onto the sheet. [0:49:35]

What happens is when I drag it onto the sheet you'll notice that it actually was added to the layout structure here. And in fact, you can see that it's also in the navigator. So the information that we see in the organizer is identical to what we see in the navigator, because essentially they are just two different ways of looking at it; just like in ArchiCAD looking at the plan or the elevation. There are two different ways of looking at the model possibly with some different settings, but it's the same file. [0:50:09]

So this Project Chooser here is very powerful. I can go and browse any other project and get it set up in the left side. So instead of saying I want to place an external drawing and picking just once what I want, I can go find – let's just see if I can find a file that's a little bit simpler here. So I know that "Jack Schafer Residence" was one that was in a recent coaching call. And I don't think it's as big. This is in an education version, so I can't do that. Let's browse projects and see if I can find another one that's not too big. [0:51:09]



What would be one that would not be too bad here? This one I think will be interesting, let's just try this. So when I do select it, you can see that it shows all of the structure here. So I can bring in drawings if I wanted to bring in the structural plan for this file onto here. So I'm being rather arbitrary and just opening up random project files, but again, I'll just reiterate why would you want to do this? If you were working with a multi-building project, then you may want to have your site plan file have views from the floor plans and sections and elevations and things like that of the actual .plns that have the individual buildings. [0:52:12]

These views can be updated just the same way that they would be updated in the standard ArchiCAD green "Update" button. It will tell them to update, or right click on the drawing will update. Right now in the upper right it's saying that it's generating that view, so it has to open up the whole file. And I guess this is a little larger file, so it's going to take a little longer. It says there was an error while generating this; I'm not sure why that is. Let's close this. So for some reason it had an issue. I'm not sure why. But in general, you should be able to see the structure and either drag things onto the sheets in the navigator or drag them directly onto a sheet that you're looking at. [0:53:03]

Now Colin Healy asked, "How can you have two ArchiCAD files running at the same time? When I open a new .pln file, the other one closes." That is a very simple option that was introduced in ArchiCAD 10, so it's been around for a very long time. Go to the File menu, and instead of just opening a recent file, you can say Open, and say "Launch a new instance of ArchiCAD". So you pick something and tell it to launch a new instance and it will bring up another instance of ArchiCAD. That's the way that you can do that. And you can of three or four or five open at a time; I've certainly had several open and been working quite happily. [0:53:50]

That also means that you can copy and paste from one project to another directly. And just as a side note, it will show up in this list of running projects. So you can import views from the other projects that are running without having to go browse for them here. So other questions? Dave Norman says, "On the drawing selection settings for your PDF example, the "Store drawing in the project file" was grayed out. What would cause this?" Okay, so that was from a while ago. If we look at where we have that – it's trying to get this file updated, it's trying again. Let me just stop it because it seems to be having problems here. [0:54:44]

In terms of the PDF. Let's switch over to the other file here, this is the PDF. If we go to the drawing settings here, "Store drawing in the project file" is grey. So I have mentioned this in a previous lesson. Let me just briefly answer that question again. If we say that we want to automatically update a file, like this PDF, then ArchiCAD gives you the option of either storing it in the project file or saying, no I want to just the project file lightweight and not have the information in the project file, and every time I open the file and every time I bring up that sheet, then it will go read the PDF or whatever external file it is and get it. [0:55:43]



The issue is that if this ever goes missing, then if you don't have it stored in the project file, the area where you have the PDF will show as a blank. It won't be able to find it and say it's missing; I don't have a copy of it in the drawing file. So I would virtually always recommend storing drawing in the project file to be checked. Now if you say "Manual", then it essentially forces that, because manual says that it will not update unless you tell it to, so therefore it has to have the stuff in the project file for it to be sensible. If you said manual and don't store it, then you have a blank space. So they just force that to be checked. Hopefully that answers that question from Dave Norman. [0:56:33]

Okay, so we have looked at the basics of bringing in drawings of different types. Obviously views from within the file, including 3D views. We have looked at bringing in PDF and other graphic files. We've looked at bringing in DWG and similar files. These would be outside the project of course. And then we looked at how we can use the Organizer to choose another file that we would like to refer to. And that allows us to go and browse its view map and drag views directly onto the sheet or onto the layouts here. So we've covered quite a bit of ground today. [0:57:26]

Some of it is quite basic and some of it is a little bit more intermediate level. Now what we'll be doing next time I think is looking at some additional options and applications for this type of drawing management. And we'll be also probably in a position to look at Publisher and printing. So we're going to be moving on to output from the ArchiCAD file, assuming you have things on your sheets that you're ready to print or plot. I'm sure that most of you have been doing this and the basics are familiar, but we'll go quickly through the basics and then cover some more interesting and complex options as we go. Please add your comments and questions to the page down below the recorded video. This has been Eric Bobrow. Thanks for watching.

[END OF AUDIO 0:58:25]