AutoCAD Plant 3D in the Autodesk Construction Cloud (ACC) - 1-20230705_151149-Meeting Recording

0:02
So Safe Harbor, as you know, if I'm talking about future developments, don't take it too serious because plans can change and I'm I can just rely on what I hear and I usually try to avoid future plan to mention future plans.

0:24
Accelerators, as you know we can have on many topics. We can have these presentations. You can interrupt me okay. So here yeah this is meant to be a so we have two sets of slides actually session two and session three is 2 for administrators and three for users, so.

0:43
If you starting with a user group, you can still come back to me and say OK, can you please also explain them how this works and yeah if if you like. So that's that's what we, I think once we've we've figured out ourselves between myself and Khalil and we're all out to the wider team that's when we might do the session three which would be good. Yeah so.

1:09
Yeah, the the slides of course. How to create, manage projects in ACC or docs or bips 216. Understand the users, user management, how to share plans with project. You know this already. Then things like backup, archiving, drawing versions, collaboration, tips and tricks do's and don'ts now.

1:35
I don't think the slides are like totally complete. So they are always things I will mention that are potentially not in the slides. Yeah, Yeah, just I mean is it, is it maybe worthwhile, I mean are you able to send us this slide pack, I mean maybe if we, if we, if we, if we do a sort of fast run through of the slides.

2:02
Yeah, yeah. Maybe demonstrating it is maybe of more use in terms of showing how the admin and things like that work, if that's possible. I don't know. Yeah, yeah, we can do it. Yeah. Let's just rush through the slides. So here just it's good to know that well.

2:20
The the reason for this solution is really multi of correction. I just mentioned it. Yeah so that's when you use it. If you are on a local network and you stay on a local network, you will never work with other people from outside the local network. We don't recommend the solution because it's just adding some you know, check out, check in times and so on. That's might be just seconds but it's still better not to wait seconds, even seconds so.

2:45
That's why if you are like, yeah, if you never, but okay, that's what we already clarified. So you don't have database server requirements because that's working with a hidden database on the cloud and the local copy is working with the standard SQL databases because it's locally, it might be better than yeah, as you said, you tried VPN and it will be clearly better because you're working locally.

3:10

By locking check in, check out. That's key and that's working very well. So if somebody has checked out the drawing, there's no way for others to to work on it, or actually they can't work on it. But what they could work on a on a copy if they but they cannot check it in. So that's and that's one of the key aspects of it is the check in check out, but also the version control data.

3:34

Yeah, Martin, one question. If we example, James and I are working on the same project and he's working on the pipe work and I'm working on something else, but we can still save the work, right? It should not be a problem. Yeah. So actually, so you're typically working with xrefs on the plans to project if you check out the file that has xrefs.

3:57

Yeah, attached to this file they anyway they will download automatically so you don't have to take care like what is attached and and they will download automatically. They will not be checked out because if somebody's working on it already or because typically you you you don't need them to check them out right. If you just open a file, yeah a touch file say we just download it and read only and yeah and then you will even get notified if so you're.

4:25

Your colleague has checked, just checked in a drawing into the cloud, so there's a new version available. You will get notified if you are currently working with this drawing as an xref. So then you will you can reload it. There's a button just popping up, it pops up, it pops up the bottom right your screen, and it says your xref needs reloading. OK, yeah, exactly so.

4:48

Good thing is if you want, I mean of course we recommend you finish your project setup and then you start your project. But as we know that's not always the case or sometimes you need to work on the project settings. You can do that while you are.

5:02

While the users are working on the project on a network project you cannot do that. You need to call everyone say OK, please step out of project. I want to do some update on the on the project. Yeah setup. So that's the reality. If you know plans with it and you know this. Yeah, on the on the coronation solution you just do it. They will get notified by a symbol. If they go with the mouse over the symbol they will see OK there have there have been changes on the setup and you can sync them so then.

5:29

In terms of the, you know, the, you know with specifications and catalogs in plant 3D when you're working in the 3D environment and yeah, ID environment. Obviously what I'm very keen if I make sure we have is 1 common catalog that is that is built upon. So for example, let's say we get a new valve supplier.

5:52

So we get their, we get their geometry from the valves put into the system, we port them up, we put the information on the catalog editor, we add it to the spec and then can we, I mean is it very much in

a project or project basis, like if you're working locally, IE you just have to update each project with the new spec from your master, from your content or can you put?

6:21
All the projects to work off a centralized catalog in spec, well, well first of all the catalogs are not really used in real time. So you what you are talking about is some aspect. So generally pipe specs, they are yeah managed by Plant City as you see but yeah but if you create block based parts, yes in your catalog so then it's getting, then it's getting.

6:50
Critical because as you can see I I'm sure we'll find as you can see there will be DWG files created in this content folder. Correct. Like this and there will be also there will be also some some preview pics and so on. Yes, created in this. Yeah so that's that's why if you're working with we are yeah so we are, we we are we are using block based geometry for yeah the catalogs.

7:19
So you need to make sure that they will be distributed to the users once you do changes. Yeah, so the way that is proved to work is something like OneDrive. So now we have the new desktop connector. I will come to this soon, but OneDrive as you can see here you have this.

7:44
Yeah, where is it? Keep, Always keep, always keep on this device. If you check this, yeah, it will always download latest versions of the files, the same thing, the same thing we have now. Also in the Desktop Connector, yeah, and that should work the same way. So yeah, we could do it through Desktop Connector. And that's what I'm wondering about, because if I if I if I'm the admin and I change a catalog because I'm using a new Valve.

8:14
And I've added that to the catalog. But then I want to make sure everyone has got that Valve to use in their designs. It's how we distribute that to their catalog locally on their machine. I if I have my catalog and then that synchronizes to ACC does that then or through Desktop connector will that then download onto their machines automatically to update their catalog?

8:41
Yeah, well, first of all, the catalog is not the key thing because the catalog, sorry, the specification. The specification, yeah, yeah, exactly. But you know what I mean? It needs to find that that block based geometry within the catalog itself, etc. Yeah. So if you, as you can see here we are on a collaboration project. If I open a spec, yeah. So that's what you would do if you if you create new parts, yeah. And then if you find your catalog.

9:08
Yeah, and open it. Let's open your catalog then. Yeah. Well, well, first of all, the, the work is done of course here and and the. Yeah, so I I've been in Catalog editor, I've created a new component, I've added that to the catalog. I've then added it to the spec. Exactly everyone else is using or you updated? Yeah, yeah. So I've checked for update.

9:34
I've updated the catalog, It's updated, it's added, and I've put the hierarchy on it, etc. You get rid of the little exclamations. You check it in, you check it in. That's something you shouldn't forget. You

need to check it in, otherwise it will not be updated. So. So when I do that, all the pertinent data for that spec, including the the part itself from the catalog is actually inside that spec. Is that correct? So once you have the spec.

10:01
You don't need the catalog, etc. You just need to spell. Well, you. You don't need the catalog, but you need, etc. You definitely need, etc. And that's important. And that's the, that's the C But I mean the. I mean, if you look at C drive, you've got the Autodesk content folder. That's the one that we need. You then synchronize, Yeah. Do you do you see my screen?

10:23
Yeah, yeah, exactly. So that that's where, yeah, you will find these. These will be created when you're working with block past parts. And these need to be, yeah, shared. And and these need to be in the same place for every user. So you cannot just put them exactly. Yeah, anywhere. They need to be in the same place. Exactly, Yeah. So that's why the. So we need to be able to synchronize that content folder and as long as we can automatically synchronize that across everybody, then when we check in the spec update.

10:53
And that will automatically synchronize somehow through desktop connector or something to update the content folder. Yeah, so when you check in a spec, that's half of the job because you only have but you have specs and there are references to your content folder, so that means everyone needs to have same version.

11:19
Same version. So yeah, I mean, of course you could have some manual solution also would also work, yeah, but ideally or or I mean automatically. The automatic solution would be to use either OneDrive because that's what usually customers have. But yeah, important, always keep on this device if this is not enabled by the user. The user has to enable this, yeah, then they might still get some problems like preview pics not showing up, but we tested it so it's not.

11:47
So even fix will not show up, but the part will be actually synchronized. Yeah, once you're required from the tool palette. So it's not that critical, but they should do it because otherwise there will be questions. There will be. I get that. I get that. So in terms of your OneDrive Autodesk folder that you've got expanded just now within the within that we need to add the OneDrive link to C drive content folder, yeah.

12:13
Yeah, and again, so OneDrive is just, we know it works, but ordered the new desktop connector. And here I'm talking about the desktop connector. Yeah, yeah, the version docs and we can add that C folder, yeah, but only from version 16. But here and you be careful only from version 16, because only from version 16 you have this and actually it was buggy. Yeah, in the beginning, the version 16. So yeah, you should really take the latest which should be 16.3 already.

12:42
Or something that's that's that's manageable because we can just make sure everyone downloads the specific desktop connector. That's right. And there's another manageable and there's another thing it's it's totally different or it it's different in many ways to the previous desktop connector version 15. So if

you're already if these users in your project already heavily using this desktop connector in some other context then you should. But we're not. Which we're not. We're not. Which is nobody's using it at the moment. So I say everyone will get.

13:12
When we migrate on EEC, EC, EC, everyone will get a set of instructions and it'll be download this link, add the desktop connector, enable this, enable that because we're we need that to enable the Flex token system as well. So we need desktop connector for that purpose. So we can access Flex because we need a drive to then store temporary files and do mesh, EC, that sort of stuff.

13:42
So that will all be going in the desktop connector, but it's good to know we need to get version 16 or yeah, yeah yeah, because that only 16 has this option here to to keep files always on this device. Yeah yeah, and this. Unfortunately the user has to do it. It's you cannot do it centrally. Yeah, that's fine, but OK, you can.

14:03
That's just a mandate that we say do this, do this, do this. And that's in the instruction that we said, yeah, a checklist. Exactly. Yeah. If for the instance, James added some some specifications, will that be reflected also to us? That's the point. Yeah. Yeah, that's what we're just discussing really. That's what we're discussing. But, but, but one thing, I mean, of course you need to wait. Let me and I need to open as an admin.

14:30
You know, you need to make sure the path is set to the right place, Yeah, so that's what you know. Of course. So if I'm opening here, so all these specs probably will be stored in in a cloud, I don't know, but the specs are. The specs are managed by plants, really, so you don't have to care about the specs. The only last thing, and I'm really unhappy that this is still not, you know, part of the whole solution. The last thing is.

15:00
There might be references from the specs into your content folder, references to AutoCAD blocks because you are using, yeah, AutoCAD block based parts and these yeah things. These these blocks and the content. So the content folder needs to be managed by the admin. The admin needs to know about this and then needs to set up something like OneDrive or desktop connector centralized, yeah?

15:25
Content folder, which everyone, that's that's the key to it really is that we want to be able to say right, we can, we can all, you know do our own specs or whatever it is eventually. At the moment I'm the only one that's really using spec editor and creating catalogs and that sort of stuff. But the idea is that if someone gets a new valve supplier, we can say, right, we need to update this into the catalogs and then it can be rolled out.

15:56
Yeah. And in order to, you know, out-of-the-box they they can create a file, they can create a, you know on an Excel base file through the row inspected. They can e-mail that to the admin. The admin just uploads it and the spec editor on the catalog. So you get an automatic upload of you know different sizes or whatever it may be. Yeah, so that.

16:20
Yeah, the of course you need to set the path here correctly for each user. Yeah, so this will then point to OneDrive or or a desktop connector. Yeah, that's one thing. And then, yeah, I mean the specs as I showed you. If you work on a spec, that's easy because you can just open it from here from your cloud project and it will check out automatically. It will open the spec editor here only you need to find your catalogs. Yeah, open the what I showed before. And so that's the whole workflow.

16:50
And if you have it the the content folder on OneDrive slash desktop connector, then why you don't need to care about anything because it with the option keep files on on this device they will then sync down to the users as well. Yes on what they need. Yeah no that's great.

17:12
That's doing what I was hoping it would do and it's just that extra little bit just to use the desktop connector or OneDrive that we need to roll out. Do you know about these permissions that you can control so you can have different roles on your project? We know a little about them as in we know they exist. We don't really know much more about them and that will be one thing that we need to put in place. So basically that, you know, obviously we don't want people editing.

17:42
Certain things, but we want them to be able to access projects etc. So if for instance Khalil is the the lead on a project, he will manage the access to that project potentially. But then if he wants to put our external contractor on it, he can. If he wants to allow another design engineer and the team access it, he can. But the idea is that the lead engineer will manage the access on his project.

18:12
So he's controlling. You know, if some is, I don't want it that anyone can just go in any project, they need to have the permission of that person. So we'll probably have a lead and a support engineer. So if one person gets hit by a bus, the other person can still access it. But yeah, I mean they'll always be 1 lead engineer per project and they'll be responsible for enabling access, whether that's.

18:38
With any on or with third parties, Yeah. So let me just show you roughly like how this works. I mean, it's fairly simple. Yeah, so.

18:53
If you upload your project from plan City and you know how this works already, so you go, you open the project in question, right? The yeah, local project. And then you you upload it here with the share project. That's the only way how you can upload a project. Yeah, there's no way around it. So yeah, if you just upload it through the browser then it will, you will see files, yeah, but it's not gonna be a functional plan city project. Yeah, so I uploaded for example here this sample project and then it will just show up as a folder.

19:23
With all the subfolders excluding the databases because there is a database in the background on the cloud, so it's not the database files are not you cannot find them here. OK, so the next thing is usually, yeah, I was a bit careful about this, but I think like nearly every customer is doing this, so.

19:47
No, I'm telling you there was the question, can we move this, this project folder into a different place on on docs? Yeah, because that's. So we asked the development, they said, yeah, we think so. Well, yeah, so it wasn't a good answer, but they customers are just doing it. So they typically moving it into a different place.

20:11
And into a subfolder and then let's see, yeah, obviously that works. But yeah, yeah, you want to be very, very, very, very safe. Then you could just leave it here if you if you have the option to leave it here. Yeah, I I think I can understand why because you know ideally, you know if we're, if we've got you know schedules or equipment data sheets and these sort of things, we might not want to save them within the Plant 3D project. It might we might want to have project folder.

20:41
Yeah. And then in that, so we might have project 1234 and five and then within that folder, we then have the Plant 3D project. But we also have some of the project working files like equipment, data sheets and things like this or it might be calculations or things like that. But similarly, if we then have like you've got there a Revit folder, yeah.

21:08
We might have some architectural detailing in Revit or some structural steel and advanced steel or something like that. So we might want to keep the projects individualized for the software, but you know what I mean, all within one project. So it's not, you know, plant 3D, this project name you know or this project name, Dash, Plant 3D.

21:37
Just so so I think I think I can see I can. I think I can I I can see why if I upload the project from Plant 3D using the share it puts it into this format here and these are the project files and an ideal world I would say I would want a project folder there and then the Plant 3D stuff that I've uploaded within that folder.

21:59
No, I mean, you can still move it into into the into another folder and obviously that works. Just one recommendation. So can you create a, can you create a new folder at that level? Yeah, sure. I mean you can just create a folder. So yeah, you can create a folder and then put your plant 3D content into that folder. Yeah. Well, you you, well, you you can move the whole folder. You. We cannot move parts of the folder just to be. No, no, you move the whole folder. Yeah, that's because that that's.

22:29
That that sample project is the outcome of pressing the share button. Exactly. And your plan VD and that's one whole thing. But if I want to make, if I want that in a subfold that I can do that that's and I can manually create that's what nearly. Yeah that's what nearly all the customers are doing and obviously that works. Yeah. So that's how I want to phrase it. So yeah no that's fine. I It's just so we've got an idea of it. I mean we can if you go into that sample that's what we're seeing on the right. Yeah.

22:59
So you know, it might be that, you know, it would be sample project in that right hand column that

you're seeing a project name on it. Yeah, I mean yeah, now I it's it's just the file structures. But this is a file. This is a file to it's possible, yeah. Yeah. So my recommendation is to never upload.

Server on on a ACC project don't upload transfer the projects with the same name. So I mean you can have, you can have, yeah you can have. They all have individual they'll they've all got individualized names because they don't that's the code gate number that's very good. So for example you because we just saw yeah you you can have a files a folder structure and yeah you could theoretically have.

2 sample projects, one here on this level and another one here in this test folder. Yeah as an example but that wouldn't be a good idea because I I think there are issues with the local space. If you if you upload projects with the same name and you don't clean your local space then you could get yes some trouble. But within within the subfolder space. So within your sample project space you get subfolders.

Now if you've got multiple plant projects as you've listed them there, for example, yeah, every folder that plant 3D uploads will have pid dot dwg. Yeah yeah, as long as it's the subfolder that's fine, but obviously not the same name in the project folder structure.

Yeah exactly. Yeah. Of course the subfolders they can have, they can they are always they're always named in the same way. But the the yeah project folder. So the what I'm yeah, what I'm talking about is if you create a new project then you will yeah you will give it a name and yes and and that's exactly the name. Yeah. That's exactly the name I'm talking about. Yeah. Yeah. And if you put the sample project that would be a problem. But if you put sample project one.

That's OK, that's fine. Project. You know Archimedes, then you know that would be fine. Yeah, that would be fine. Yeah. OK. Going back to the permissions, So as you see here we have permissions. So I'm logged in as an admin here. So I can give permissions, you can give them individually, but you can also work with roles, so new roles only an account admin can create.

So a new role, take a look here. Yeah, a new role will be for example. So I think we have already here some for for testing. Yeah. Purpose. Some plant designer, right. Plants. Really. Yeah. So two. Yeah, exactly. Those you the, the to have them in the list. Yeah, they can only be created here. And that's the account admin level. So you would need to probably ask the account admin if you're not account admin yourself, Yeah.

So that's one thing. Then the next thing is you can on your if you give access to this plan city folder, so you uploaded it with plan city. And then the next thing is you you give permissions and you can give them on a in a in a widow base but also on a company base or a role base. And role base is really recommended because you can combine several roles. So you cannot do that with companies but you can do it with role. So if you have a look here.

In the permissions you can add here, yeah you can add for example this plant designer. So you see I'm I find this plant designer. Yeah I could add here the plant designer and and the permission level. Permission level could be on this yeah yeah okay. So here it already already gets interesting.

27:03
So here you could give him permissions, view and download. So that is enough to open a project from plan 3D. Yeah, but then you see it's a plan 3D Ed tour then yeah, okay. You say okay, but I also want to give him so he has to work on the plan 3D files. Of course he needs to have edit permissions on the Plan 3D models then. So you could go here now on the plan 3D models folder and.

27:35
Wait, I think I missed a step because I should see the plant designer now here on this level as well. Yeah. Ohh. The plant city. Ah, yeah, yeah. Wait, wait. I think sometimes it takes a little some seconds until it shows up. Let me see if I can see it now. Yeah, I see it now. So here on this folder level, I can give it edit permission to this role right here. Yeah, edit permission. You see 33 blue bars? Okay.

28:02
Same thing I could do here with isometrics or source well all the folders that he needs, but maybe not with spec sheets, because maybe I don't want him to be able to update spec sheets. Yeah, and now this, yeah yeah. And then the user in the user. So here in the project admin.

28:24
I can then add this user whoever it is this role you see here we have the roles and you can you can select several roles like you can find roles so here or we can add as well yeah yeah so here we have it two selected now so you see here this guy now Alexander has plant editor and that's it. So now he has access to these folders and and that's a good thing because if there are new.

28:53
Project members then you'll only give them the role and then all you know all the setup that you did previously here giving access to this edit access to this folder but don't giving edit access to the root folder. So that makes them only being able to open the project working on a plan city file creating Isos if you have enabled the ISO upload creating also if you have.

29:16
But not not changing the configuration. So that's not possible. If they don't have edit rights on the root for the level, what is? What is this? Insights and all What does it? OK, you're going to show now. So I this one here. Yeah, well insights, cost management. So what What are these functions inside is like dashboard. You understand everything. What is happening? How many how many projects are there? What are the drawings uploaded? Everything. What are how many are the.

29:45
Well, there are many, many, many, many, many, many, many functionalities that you find on the ACC platform. So you don't necessarily use it. So that's something that you need to decide what are you using on this project. So we are right now only talking about docs, we only use this, this document management part to have this correlation project. But there are yeah many other features, for example model coordination there you can bring together the.

30:15
Like in novice works you can bring the models together into a central model. Yeah and yeah I I don't

need to show you let's it's we can have if you like we can have introductions into each of these modules. Except cost. Yeah, except cost. Why? Why Why except this cost it's more the the design collaboration for at the moment is is yeah where we need to focus.

30:45

Not energies Okay, but you know I mean that that extends through peer review and you know all these sort of things other people working on projects, checking in and out. I mean I think you know we can obviously extend it, but I think yeah if it based on based on things that are new and asking people to change if we introduce too many things at once.

31:12

They could be, it's gonna be a problem. But they could be. If if we do the collaboration and we move forward with that and people are able to do drawings, they're able to help people out with drawings or designs or taking, you know, information from the the design manager or whatever it may be, you know, to create schedules or whatever it may be, it it opens that project up because the design information is the heart of the project.

31:38

You know, without that there's not much of a project apart from our big cost in a contract or something. So the idea is to open this out so that Khalil can assist. I can assist anyone can go into a project and help and all it is, is that Khalil says I need extra resource to work on this project. We've got deadlines. I need another two people. I can assign them two people and he can then enable the access on his project for those two people and then they can help do designs, standard drawings, whatever it.

32:08

May be relevant to that project, yeah so just just very short why not cost Because I'm not an accountant. I don't, I'm lacking accountant. But yeah we that was just personally I can cover all these take off also not because it's new module I'm not familiar with but as you can see you don't have to activate these modules for the users.

32:32

So if you say we're starting with plans on ACC now, but yeah, really just to have a collaboration platform, then yeah, you can just disable all these for the for the users. So we just do collaboration and coordination maybe and then that's all we need to work with for the moment, Yeah. And then we can start opening up. Once people are familiar with that, we can say right now you can do build or now you can do takeoff, etc. Yeah. But just to give you an idea. So the good thing is.

32:59

This is browser based, you know it's a web browser, but still you can like watch the models, Yeah in in 3D so that's yeah something that could be beneficial. So to to some to to some little extent you might want to use functionality on docs on the document management. As you can see here we have issues where we address issues and you know assign it to somebody from the project so to some to some minimum level you might want to use it.

33:29

But yeah, we could give you introductions in in all of these all of these functions if you like in different codes. But here we simply what we are talking about right now is really how can we have a project

based on docs. The user don't necessarily need to know about this browser you know because about this browser interface because.

33:52
The users maybe in the 1st place they are just been told okay, you open your project from here and then as you know there will be some additional buttons, right? There will be some, yeah, there will be some additional symbols and so on and and and these things they need to know what are the symbols for, what are the buttons for what I need to do. And as you know, there are not so many different, it's not so much different from the network project from a local project.

34:23
Just some things we need to I I want to say in this context. So yeah and you know this already if I for example upload a file from here from the so if the the user know or happen to know about this browser interface, if they think OK I can also upload files here so plan city will not know about this so.

34:44
If you want to have a functional project, you always operate it from here, right from the project manager. If you have a, you need a new file. You operate locally, you don't upload to the cloud, you operate locally and then you let Plant 3D synchronize it to the cloud.

35:01
Exactly. What you do is here, you open your collaboration project. So that's not much different from opening a project exactly. From, yeah, from the net, from the local network where it's just a different button. You see here's open, open, correlation work. So then then you see there there's not much different because here you are the files, as always. Then if you open a file, you double click here. OK do you see this little window that you don't know about this window, but that will show you like the progress when it downloads.

35:31
And and then you see, OK, there's a symbol now and it's showing checked out. OK. So there are other symbols. They they have. Yeah some meaning. So then you start working as as as usual. Yeah. Then you you need to know. OK I can well that's maybe good to know that you have some user options here. So do you want to and and the standard is checking in when the drawing is saved.

35:58
Yeah, or but that's that. Yeah, that's not always what you want. Because if you, it's always taking some time because it will also upload then when you save. Yeah. So you you might change the setting when the drawings close. So once a day or so you you upload it into the cloud. Yep. But but yeah, you need to be aware like if you don't upload it to the cloud, nobody else from the project will get the updates ever right. So we'll, yeah, see the updates ever. So that's of course something that.

36:27
Needs to be known. And then yeah, if you don't if you don't try to bypass the the the project manager here, that's pretty safe. Another button that's you should use this as a touch button to attach Xrefs. Yeah, so is that in the project manager? No, that's here in the collaborate. So again, yeah, I yeah, I opened this drawing again just to show that.

36:56
So here we have this attach button. This attach yeah button let's only offers you files from the project

no? So this is the same method is when you're working in the orthographic. So when you when you're When you're taking the orthographic, no. You select the drawings you want to put in the orthographic and that can be your X references or whatever.

37:25
Yeah, but typically, no, there's only working with the in the plant 3D environment, which typically only working with the plant 3D, not the xref because we incorporate that xref in through the orthographic output. Well, that's right. I'm talking about now I'm in the 3D part. So I'm, I'm talking, yeah about OK, I have, I have a a a 3D drawing, but I'm yeah, working on but.

37:54
Of course my project is split into many files, so I need to attach another file, yeah, which in this case, so in this case, yeah. And that's actually what I'm not using this for. I'm using here there's a touch button for so I can find my some other file that I also know, for example this one.

38:18
And then I touch it with this button. The good thing is it will create every you know the the path as a relative path that's needed. So there are the right settings already given if I'm using this button. So again, first of all I only find the files that I'm supposed to find. So if for example if I would touch a file from my local drive, then nobody else could see it because it's on my local drive. So here yes can so.

38:45
So just to clarify, when I when I put an xref on locally, for example, I put the xref in the plant 3D project manager structure, yeah, so I'll typically you've got area one I would create, I would create a folder in there for example called Xref and then in my xref models or drawings we'd go into that folder.

39:10
And then I can attach them if I do an orthographic output or a little bit, but it's in that project manager structure, if that makes sense. Yeah, exactly. So it only this works. So you're safe? Yeah, if you're working from here, If you create a new, yeah, drawing here, or if you add a drawing from your local drive, it will create a copy of this drawing, but it will add this drawing into your, you know, into your. It goes in your local plant 3D project folder.

39:40
Which then synchronizes to ECC. Yeah exactly. We create a copy and 1st in the local folder and then yeah, I wanted to show this because maybe so that will get clear if I just need to find a drawing that works on my project here. Same units. OK this one you see it now comes with a special symbol. It means OK, it's now in your local.

40:04
Folder, but it's not on the cloud yet because it didn't check it in. But I can check it in now and then it's it will go to the cloud. So now if we take a look here on the cloud, let's see what was the file name. Drawing one was an area one. Yeah. Now it's coming here, you'll see. Yeah. Yeah. It's. Yeah. List. Yeah. It doesn't have much content this one last file, yeah.

40:32
Yeah, exactly. Now it's just a common. It's it's a normal project file now, so I can just work with it. Yeah. The key is to keep any reference drawings and things like that within the project manager, not just

attaching them from your local drive into the drawing. Like doing an xref with. If you type xref now and got something for your local drive and put it into the model space, that wouldn't be reflected on the project manager exactly if you just.

41:02
Go here and take a file from local and attach it. That will work for you in that moment, but it will not work for anybody else. So that's one thing. Let's see what I wanted to say is yeah, one important thing and it needs to be communicated to the users. We were talking about the Desktop connector, which is useful in many contexts.

41:28
But don't confuse it with your local space. So if you so first of all you are safe when you are working in the in the project manager, yeah, so if you open the files from here, nothing can happen, yeah, okay. But sometimes the users they are doing, yeah, they don't know about all this and what they do is they for example attach.

41:58
Drawings not from here, but they they're touched in from the desktop connector, yeah, and that can lead to problems. So that's not expected. That's not recommended there. I mean there can be, there can be workflows where you are using the desktop connector, but it's very advanced because you need to consider so many things in order to make that work nicely, yeah. So for example, if you have a point load stored on on ACC and you want to use it, my recommendation would be well.

42:27
Attach it from the from the desktop connector temporarily. But then if you if you check in the drawing again so detach it, detach it again so it will not cause any trouble. But yeah there are some advanced workflows where you can use the desktop connector also as an attachment. But I wouldn't start with this, I would start with the this, this is the workflow. This is the workflow that I've been using.

42:54
Whereby you put your extras into your project manager and then they're associated with the project. Yeah, because it leads me on to the next question. With the orthographic DWG tab below the source files, does that synchronize to it as well? Yeah, yeah. So as well as the yeah, as well as the Isos. So if you create also drawing here, yeah.

43:20
You see, it checks out. It it, it has the same, it has the same level of, yeah, safety because now it's checked out. So if you do something, yeah, here, if you. So if you were to edit that, for example, yeah. And then within that ortho mode, it gives you the option to, you know, your 3D model selection or something like that. Yeah. Yeah. And it's not loaded yet. Yeah. Yeah, this one here. So yeah.

43:47
Within this you've got the Yeah, that you get the select the reference box, so you've got the same that's just and then that. That's. That's why that's what I'm saying. It's the same as the author generator because you're then just selecting the drawings within the project files. Yep. But you won't get an external file showing up on your hard drive in here, so you can't put it in your author.

44:12
And that's why I use that workflow. But let's say it it, it seems that it, you know, if you're doing extras

on your drawing, it works in the same fashion as doing this. So that's yeah, it can, it can work if you're using the attach option. So yeah, that's what I mean. The attach option basically follows that same sort of workflow around that as in you put in your models you want.

44:38
My idea would be rather using the overlay function and then finally selecting the individual models here, but okay, that's up to you. If you say you have a what workflow which is safe, which works, then yeah, what What would be the advantage of the overlay sorry, versus the attach? So there was some. Well, first of all you you have more control, you just see things better.

45:05
So for example, yeah, if you make a selection here of your also files, you'll see exactly what files are you selecting and because the Xres you will not see, you know, it's have a better control. OK. But yeah, I mean it's it's just like how you organize yourself. If you have a good documentation on how you're doing it, if you are using a touch, if you are using a different yeah way of working, then that's totally fine. I mean that's up to you, yeah.

45:32
And yeah, it's, it's good. It's all good. We have some options. Yeah. Yeah, that's the this thing with Card is that, you know, there's a hundred different ways to draw a line. Yeah. And every set, every person you meet will have one of those 100 versions, and then you meet another 101 person, he'll have a completely different way of doing it. So yeah, no, no, that's fine. It's just.

45:56
It's just these these sort of fundamentals around the workflows about, you know, where we keep our Xrefs, where we keep things. And like I say, I mean, I'm very keen that we keep it in the project manager because then it's always associated with our project and then we can also do version control on that Xref as well. Yep, to make sure the final stays intact.

46:19
Yeah, maybe one thing about going back to previous versions. Yeah, there there are two workflows and there are two workflows and to be honest, I'm in favor of the one workflow, but there are some specialists saying, okay, they had customers complaining about that this workflow isn't safe. So it.

46:49
So I I can, I can show you both maybe you just, yeah, make some tests and find out yourself which yeah is better for you. So so that doesn't take too long there to check that and that's quite good. So and then that's it. Synchronizing there. Yeah. Depends on the model, depends on the project size, depends on. Yeah, your connection and so on. No, no, it's appreciate that. So if you see here on ACC, you see the the drawings you see the versions.

47:17
So they're all accessible for downloads, right. All the older versions, yeah. And you can, you can make current. That doesn't help with Plan 3D. So make current helps on the document management if you're working with something that is not OK, so. So where you've got there in your list, you've got version 32 is the latest. Yeah, yeah, that's the current version. But if for example, actually, yeah, we've we've done something.

47:46

It's obviously saved. But then we say, well actually no, we're gonna go back to version 30. Yeah, well first of all, my currents would, wouldn't, wouldn't have. It just helps here in the browser that you see the you you would see on top. Now version 29 if you press this button. But Transity doesn't know about it. I see. So that's by the way the same thing that I was mentioning this before with the project. Man, you shouldn't delete or rename or add no drawings. So you if you do that here, Transity will not know about it.

48:16
So you do it in project manager. The same here with make current will not work, but you can download the source file and in the so-called unsafe workflow would be to just replace this. So you check it out. You check out this drawing with the usual way so you don't open it, but you check it out. So that's possible.

48:46
Like this, right? So it's not open, but it's checked out. So then you download this version here from the browser with the download source file. It will you download it to some random place, but then you replace it here in your local space and here just to show you where the local space is. Local space is here at Local App Data.

49:12
So that's percent local app data is a shortcut where you get into this folder here update the local and then Autodesk then autocut plans 3D and coloration cache. So here you find the project and in my preferred workflow but yeah it's somebody call it risky is to replace this file here. Once you did it yes you you open it with here double click it will ask you then to there will be a message coming you will say yeah.

49:41
Merge data. If you say merge, in my opinion the drawing data doesn't match the database or something at that effect. It's like when you do a recover. So if you're working locally and you do a recover on a dollar, a dollar, say file, yeah, you get the, it doesn't match. Do you want to update the database or something? Yeah.

50:03
Yeah exactly. So that's yeah, that's you say then merge and then you yeah can check it back in and then you you have it. But yeah again just to tell you the whole story is somebody said OK, they did it and some objects were broken or something. So that is yeah of course the worst thing that can happen. So that's why I'm telling you what the the other thing that's that they recommend is to take.

50:27
Away the drawing here from the project. Yes, like yeah, remove, remove drawing, remove drawing. But you know what it what it will cause, it would cause that links to other drawings will be broken. Broken. Yes, and and it will completely delete the full history of of your files, right. So now yeah, so if you remove the drawing, it doesn't just archive it, it it completely removes and breaks it. It's.

50:56
It does remove. Well, let me, let me think it. Well, the file goes finally here into this project Recycle bin. Yes. And it gets a time stamp and a name in it. In. In. Yeah. So that's where you can see at least who did it. Yeah. And finally it the the, the word, the the history is also still there. Yeah.

51:19
But it's there's no way to get it, you know, the whole thing back into you. You would need to then put it back in manually and sort out all the broken links. Yeah, unless you do that. Unless you you you download all the versions and then.

51:35
Yeah, create replace them with with the risky workflow again and and that's the sort of thing we need to be aware of so that we can try and avoid it I think if need be. But again, we're working with a reasonably small group initially so it's maybe not such a problem. But yeah, obviously as that expands then maybe we need to start saying actually this isn't allowed, that isn't allowed, etc.

52:01
Yeah, and so this this folder here, it could be accessible by users if you like. It's up to you how you give permissions. Yeah. Just to let you know, like this is there's another, so this is the plant City recycle bin, but there's another recycle bin. If I delete from here, for example, that if I delete this, yeah, drawing from here, it will go then into the into the ACC recycle in the docs recycle bin, yes. And from there you cannot delete it, so.

52:29
Files might disappear from your project, but you will always be fully fully capable of finding them and like well recovery as we discussed is not the easiest no so no but I mean the very far that within that there you know I mean part of the process is that yes we have drawings and some become superseded but it doesn't mean that it's necessarily removed from the project.

52:57
It maybe just moves out of the working folder set and then to superseded folder for example, you know, which maintains all its links etc. So yeah, I mean if if it's still being used within the project then it's a live drawing etc. So I don't see that being a big issue. I think we can work with that, yeah. So yeah, just telling you yeah the the whole story. So.

53:27
I'm just running short on time here Martin. I've got an yeah, it's time. Time is over. So you have you're running time. Unfortunately I could keep going like this for hours. I'm sure we. But it's just unfortunate that we do have time. Let me so do we have these do you have these slides?