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# CAD Manager's Newsletter (#463)

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## The Future Risks of Fileless Cloud CAD

You read the news, share photos, stories and opinions online. Now your design files and work may be in the cloud. Should you be concerned?

Let's ponder a day in the future world of Fileless Cloud CAD: You log into your cloud-based software, start making edits to your design files and saving your work to the cloud as you go. As you work, you never think about what format your design data is in or even where it resides because your software provider has thoughtfully taken care of all that for you. I mean, why worry about little details like this in your CAD systems — you never worry about it with your online banking or other cloud applications, right? This is the future that CAD vendors are increasingly touting — no more CAD files or questions of formats to be concerned about.



Image source: [Tierney/stock.adobe.com](#)

Do you see a problem with this future CAD scenario? I sure do. In this edition of the CAD Manager's Newsletter, we'll start a discussion about how this future world of cloud-based fileless systems could negatively impact your company and what you should be thinking about to mitigate the risk. Here goes.

### Whose Property is Your Design, Really?

Let's start the discussion by asking some fundamental questions about how your design data is formatted and stored and how that might change in a future world of fileless cloud CAD. Take a bit of time to really think about these questions in the context of today and the possible future because understanding who owns your design data is a huge security concern for your company:

**Who will control access to your design tools?** Will your design software run from your own machine using locally installed software or will it reside on the software vendor's server as a service?

**Where will your design files reside?** On your computer/network or at a cloud location owned by your software vendor?

**Who will control the information format?** Will you have a choice in how your data is formatted/saved or will it all be maintained in a proprietary software vendor format?

**Can work be done offline?** Will you be able to work on and save local files in case of an Internet outage or must you log into the software vendor's site to do all work?

Jet down your answers to these questions and let's draw some initial conclusions.

### Who's Really in Control

The more you found yourself answering "software vendor" to the above questions, the more at risk your company is. Why? Consider the following scenarios:

**Company A** runs their CAD tools from locally installed software on their own high-power workstations saving all their design information to local area network servers inside their own trusted IT center. Their software supports a variety of industry-standard output formats such as DWG, DGN, IFC, and DXF, so they can collaborate with a variety of subcontractors, manufacturers, and architects as they wish.

**Company B** is in *Fileless Cloud CAD Land* — having switched to a purely cloud-based software tool that maintains the data in a proprietary format with limited or no export functionality so collaborating with outside agents becomes difficult unless those outside agents use the same system.

If you've been in CAD/BIM for more than a few years you almost certainly had your formative CAD experiences in a **Company A** scenario and many of you still work in this mode today. While maintaining local software on workstations and tracking files on networks is a big part of a CAD manager's job, it is the only way to truly be in control of the company's CAD design assets. So, why is it then that the CAD software industry is trying so hard to rid us of our local software and files to push us into the **Company B** scenario?

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## Tools and Resources

### Handy Guide to 3D Printing

Xometry, a custom manufacturing on demand company offers an online guide to 3D printing. Xometry's *Complete Guide to 3D Printing* guides you through the basics of 3D printing through post processing options, and everything in between.

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### Top Classes From AU 2020 Online

Last November, Autodesk debuted its first global, all-digital Autodesk University 2020. The AU Team announced its Best of AU 2020 Speaker Awards, based on attendee interest and engagement. You can find these, plus a variety of other AU classes online, including AutoCAD Tips and Tricks, CAD management, and software demos. [Read more »](#)

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