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## Inventor, Fusion 360, or AutoCAD? You Don't Have to Choose!

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### Learning Objectives

- Learn how to select the right design tools for the application.
- Discover the possible workflows between AutoCAD, Inventor, and Fusion 360.
- Learn how to connect existing design tools together for more-efficient workflows.  
Learn how to reuse 2D data more effectively and prepare for a transition to 3D design tools.

### Description

Choosing which software tool to use isn't always easy. Understanding which tool is best for the job is critical when developing new designs. Additionally, not understanding how tools work together can cause unnecessary rework, project delays, and unsatisfactory design performance. This instructional demonstration will help you understand how Inventor software, Fusion 360 software, and AutoCAD software work as independent design tools as well as in connected workflows.

### Speaker



Technical Marketing Manager @Autodesk

Marketing professional with 25+ years of experience solving customer challenges, educating users, communicating value and telling stories that inform and inspire.

Technical specialties: Inventor, AutoCAD, Fusion 360, CFD, FEA...

## Knowing what software to use and when to use it!

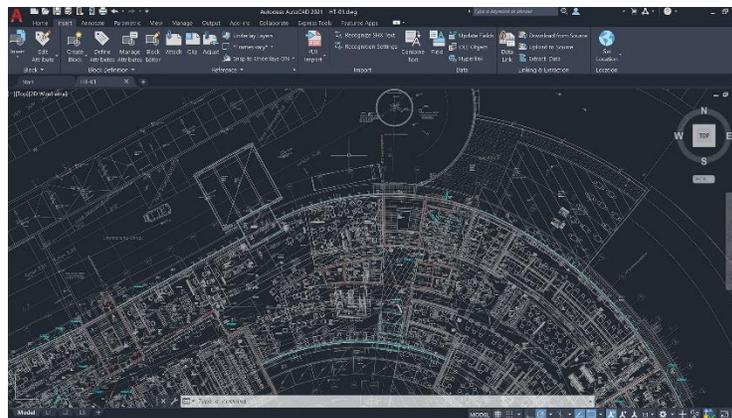
Knowing how to use software is extremely important. Something more important is when to use the right software and how to connect those tools together. This class discusses when and why you would use AutoCAD, Inventor or Fusion 360. We'll also discuss when you might use them together.

### 2D with AutoCAD

The first software we're going to discuss is AutoCAD. AutoCAD is over 34 years old, comes in over 6 different flavors and has specific tools for mobile and web applications.

Toolsets/Apps:

- Architecture
- Electrical
- Map 3D
- Mechanical
- MEP
- Plant 3D
- Raster Design
- AutoCAD mobile
- AutoCAD web



Reasons why to stay using AutoCAD:

- Currently rely on a specialty toolset
- Legacy 2D data is still relevant
- Systems that rely on 2D drawings
- Workforce only knows AutoCAD

Reasons to consider moving from 2D with AutoCAD to 3D:

- New design requirements require 3D
- Sophisticated designs need a greater level of detail
- Design information required before fabrication (center gravity, mass, volume...)
- Automate the documentation process
- downstream applications require 3D models (CAM, nesting, simulation...)
- Visualization pre and post sales

### 3D with Inventor or Fusion 360

When you make the move to 3D the decision gets a little more complicated because you have more options, you could use Inventor or Fusion 360. And the challenges on the surface these tools look very similar, they're both 3D parametric modelers, you can create parts, assemblies, and generate drawings. They both have built-in tools for things such as sheet metal and nesting, CAM and other fabrication processes. So, how do you choose when to use Inventor and when to use Fusion 360 if they kind of do the same thing? The answer is actually pretty simple you use both. If you're running the product design and manufacturing collection you get Fusion 360 as a part of that subscription.

#### Things Inventor does really well

Inventor is a desktop on premises application. This means if your organization prohibits information going to the cloud inventor becomes the obvious choice. Because Inventor is a desktop application it does particularly well with assemblies of all sizes. Inventor integrates directly with Autodesk Vault for data management for processes that include check-in and check-out and engineering change orders. Inventor has built in tools with iLogic for automation that allow you to customize your designs and build families of product lines. This is not an exhaustive list of everything Inventor does these are the things that just come to mind when I think about the differences between Inventor and Fusion 360.



#### Things Fusion 360 does really well

Fusion 360 is a cloud based locally installed product design and simulation tool. It runs locally but data is stored in Fusion Teams on the cloud. As I mentioned before if your data can't leave the building Fusion 360 may not be the best option for you. Fusion 360 has built-in data management allowing for versioning and collaboration with other members of your team. Fusion 360 has built-in environments for CAM, simulation, PCB electronics, and generative design. This is just a small snapshot of all of the different capabilities that Fusion 360 has.

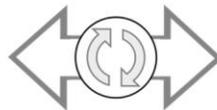


## Inventor and Fusion 360 working really well together

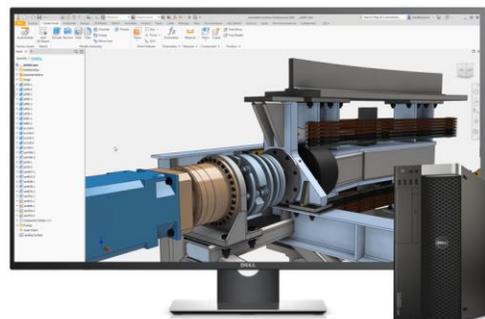
With Fusion Team, Desktop Connector, and AnyCAD you can use either product and connect them together associatively.

### AnyCAD With Fusion 360 and Inventor

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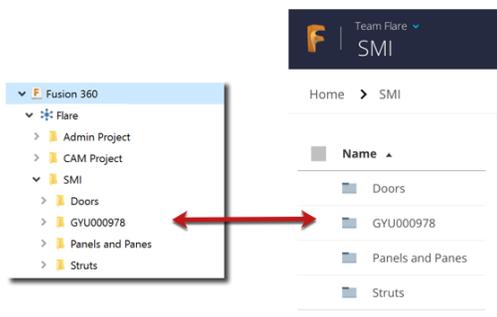
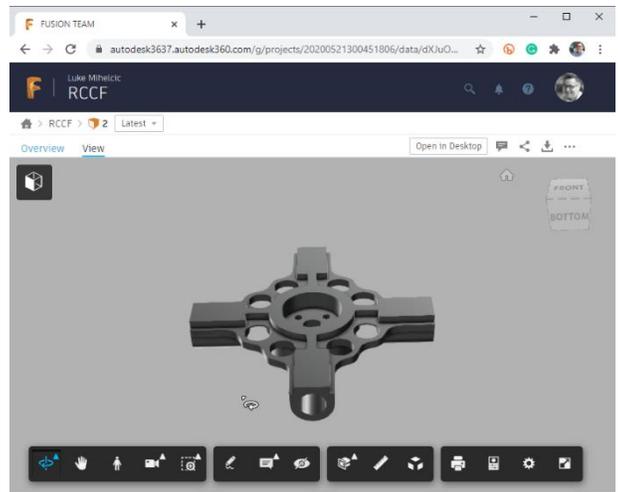


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### What is Fusion Team and Desktop Connector?

If you have a subscription of Fusion 360 or the product design and manufacturing collection which has Fusion 360 inside of it then you have Fusion Team. Fusion team provides a centralized workspace in the cloud for your projects. Fusion team puts all of your data in one place connected to the people working on the data. This class focuses on how we can connect to Fusion team and create a replicated location on your hard drive with a Desktop Connector. So, what is desktop connector? Desktop Connector is a service that replicates the folder structure in Fusion Team to your local hard drive. This allows you to share files virtually anywhere and it supports AnyCAD file references.



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