Solid Edge 101 EAA Webinar Q/A

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| Can the EAA version be used to create an electrical diagram for a aircraft project? | You can create Wires, Cables and Bundles and route them through your assembly. Using Solid Edge Electrical Routing. Components and Connections can be added coming from an ECAD application. (.cmp and .con)<br>You can also generate nail boards from the wire harness. |
| Can you do the same thing as what you did with STEP file model with a STL file? | No. STL files are faceted data... not solids. There is no "planar face" or "cylinder" in an STL |
| Is win 10 PRO required? | It is certified to run on Windows 10 or Windows 11 Enterprise or Professional. It will likely load on other flavors of those, but if you have an issue loading or running, it would not be addressed or fixed. |
| I have a tool maker who wants .STP format or solidworks .PRT format. Do I just use the STP? | Yes, you can export a model to STEP |
| I work in a large aerospace company where we use NX. Can you give a brief contrast between NX and Solid Edge | NX is an enterprise-wide solution. Solid Edge has portfolio products to address some of the functionalities that you can get with NX. The Solid Edge mechanical CAD functionality is very close to what you have with NX and IMO, easier and more intuitive. |
| Can you scan a photo and add dimensions and create a model? | No. A scan would not generate vectors that Solid Edge would recognize as curves or lines to generate profiles. You can however import an image (.jpg, .bmp, .png, .tiff, etc.) onto a plane and then carefully trace over the image using lines, arcs, and curves to generate a profile to extrude or revolve. |
| Will this work on Apple IOS hardware? | No. Solid Edge will not load on a MAC. The only workaround is to use a Windows Emulator on a MAC, but I have no experience doing this and it is not supported if you have a problem. |
| Can both English and metric appear at the same time? | Yes. There is an option to show both |
| Will the system determine the capacity of the fuel tank after the changes? | Check out my YouTube video on this subject: https://www.youtube.com/watch?v=m_qUuDsoFyY |

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| Are there videos for training? | Yes. See attachment for how to access for free. |
| Is there sheet metal functionality with bend allowances and fold/unfold? | Absolutely! Solid Edge has the strongest Sheet Metal functionality on the market... especially with synchronous workflows. You can generate flat patterns and takes into account bend allowances. It is included in the EAA version. |
| I use a 2D CNC router. Do I need to send it to Alphcam (my program) to assign the router bits for output to the machine? | Yes – Solid Edge is not a CAM package. |
| What are the computer requirements to run the software? | https://solidedge.siemens.com/en/resources/system-requirements/ |
| Can I export part files for 3D printing? Perhaps I can print directly for SE? | Yes, you can export Solid Edge files as STL or 3MF, but this does not go straight to a 3D printer. 3D printers require slicing software to generate the g-code the printer needs to operate. It sets the layer thickness, wall line count, fill pattern and density, and any required support material as well as the layout of the parts to be 3D printed. Most 3D printers have their own slicing software or recommend one. I personally use CURA, which is free. |
| Does Solid Edge have a steep learning curve? | That is not the same answer for every user. If you have CAD experience it is super easy. If you are brand new to CAD, it will take some time and practice to understand and learn the commands and what they do. I recommend using the attached document to access the free training and start with the Quick start videos. |
| When printing, is a water mark placed on the drawing? | Yes, Drawings that are printed or saved as PDF will have a faint watermark along the bottom of the drawing to discourage use for commercial purposes. This would violate the license agreement. |
| Can the model files generated in Solid Edge be stored locally or only in the cloud? | This is your choice. By default, they are stored locally. |
| Can SolidWorks models be imported and turned synchronous? | Yes! You have the option that when you import a file to automatically open it into the synchronous environment. |

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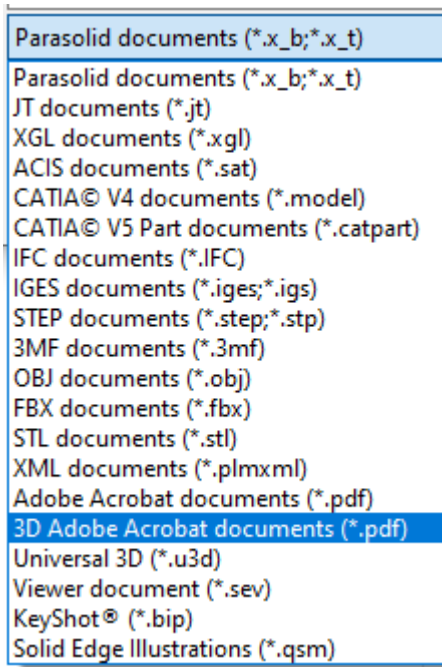
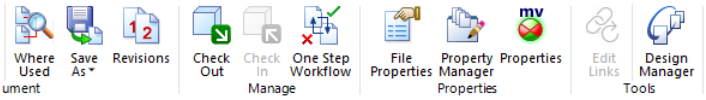
| Is what I design accessible to other people without my consent or knowledge? | The short answer is No. Files are stored locally, and it is up to the user to share files with others. |
| Can you make your model show motion? | Absolutely. In an assembly you can add virtual linear, rotational and variable table motors, and then simulate motion dependent upon the assembly relationships between the parts in the model. |
| 3D PDF support? | Yes. Save As:<br>  |
| Any PLM / PDM such as Siemens Team Center available to manage the CAD files? | While Solid Edge works with Teamcenter, it is not free and not available with this free version. There are built-in data management capabilities that can be used.<br>  |
| Why called “Synchronous”? | Please watch the replay of the webinar. I explain this at the beginning. |
| Can it import .stl and .dxf files? | Yes – both can be opened in Solid Edge |
| Does sketch have to be "fully defined" to give 3D model without errors? | No. The sketch does not have to be fully defined. It just needs to create a closed loop to use as a profile for a feature. Remember, with synchronous the sketch is no longer relevant once a solid is |

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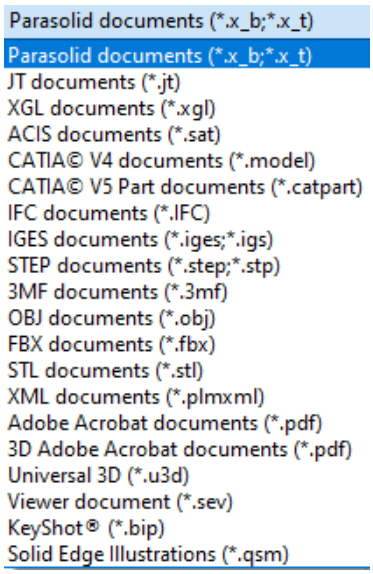
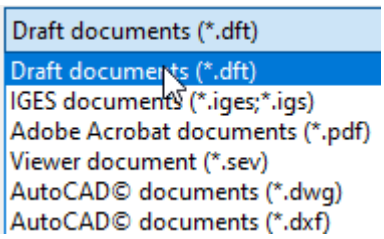
| | created. The solid model becomes the definition. The sketch could even be deleted entirely and the solid will stay intact. | |
| What file export options are there? | 3D:<br>  <br> | 2D:<br>  <br> |
| Text extrusion does it look correct? | Yes. You can extrude in a vector direction, or normal to a face. | |
| Can Solid Edge help reconcile imported models that may have tolerance or open polygon issues, for example? | Yes. Solid Edge has an optimization tool to help with this. It also has powerful surfacing capabilities to patch imperfections and “holes” that may prevent generating a solid model. | |
| Linkage to structural analysis? | Yes. Solid Edge Simulation (FEA) | |
| EAA version output mechanical properties - weight of the solid, etc? | Yes – Once a material is assigned you can generate physical properties. | |

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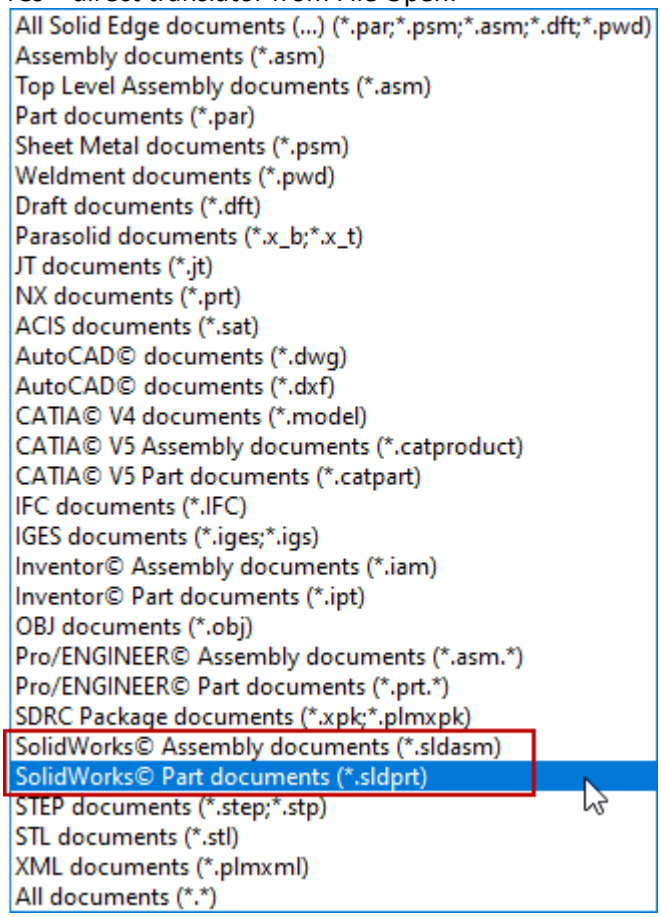
| Can you load SolidWorks models | Yes – direct translator from File Open:<br>  <br> |
| Is SE an appropriate platform to learn CAD? If so, how do we get some very basic step by step instruction? Is there a textbook? | Yes. Start with the free learning videos. See the attached document to access the Xcelerator Academy. |
| Is there a tool for making gears? | Yes. Solid Edge has an environment called Engineering Reference where you can generate gears and other mechanical components:<br>Shafts, Cams, Spur Gears, Bevel Gears, Worm gears, sprockets, compression springs, Extension springs, synchronous pulleys, Beams and columns. |

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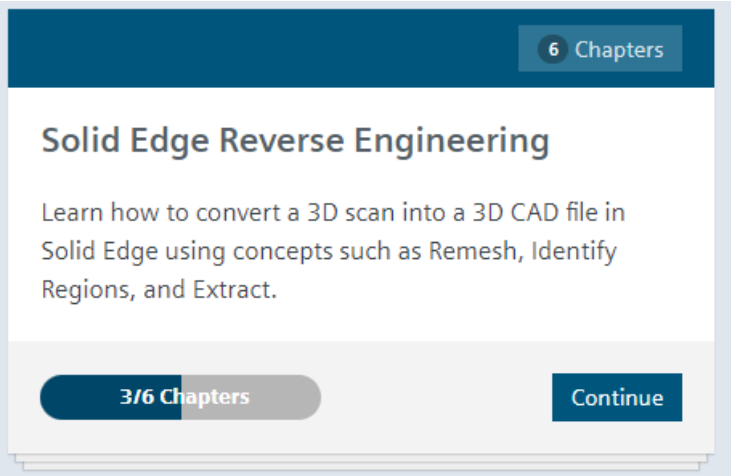
| Can Solid Edge convert .STL to a Solid Edge part? | Not automatically. There is no “silver bullet” to auto-convert STL to a solid. Solid edge does include a host of reverse Engineering tools to transform faceted data to analytical planar and cylindrical surfaces. Those then must be extended and trimmed together and stitched into a solid. It is a labor-intensive process. There is a training class on this subject in the Xcelerator Academy. See attachment for access.<br>  |
| I have Windows 7. Is Solid Edge functional in that OS? | No. Solid Edge 2023 will not load on windows 7.<br>Solid Edge stops certifying new releases against an operating system shortly after Microsoft drops mainstream support for it. Microsoft dropped mainstream support for Windows 7 in January 2015. Microsoft dropped mainstream support for Windows 8.1 in January 2018. As a result, Solid Edge no longer installs on Windows 7 or Windows 8.1. |
| Can I also do a 2D drawing in this software, such as a wiring schematic? | Absolutely! Solid Edge has a Drafting environment for creating model drawings as well as any 2D data you want to generate, like schematics. It comes with a library of hundreds of schematic symbols and a specific command for creating the connectors. |
| I've been using Autodesk's 3DS Max to model my plane in Microsoft Flight Simulator. Could I use Solid Edge to do this instead? | I don’t know what format the simulator will import, but my gut says “No”. Solid Edge is a mechanical CAD program, not a graphical design program. |

Thanks for attending!
Doug Stainbrook
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