Setting up Solidworks

IDeATe Laser Micro Part 1a

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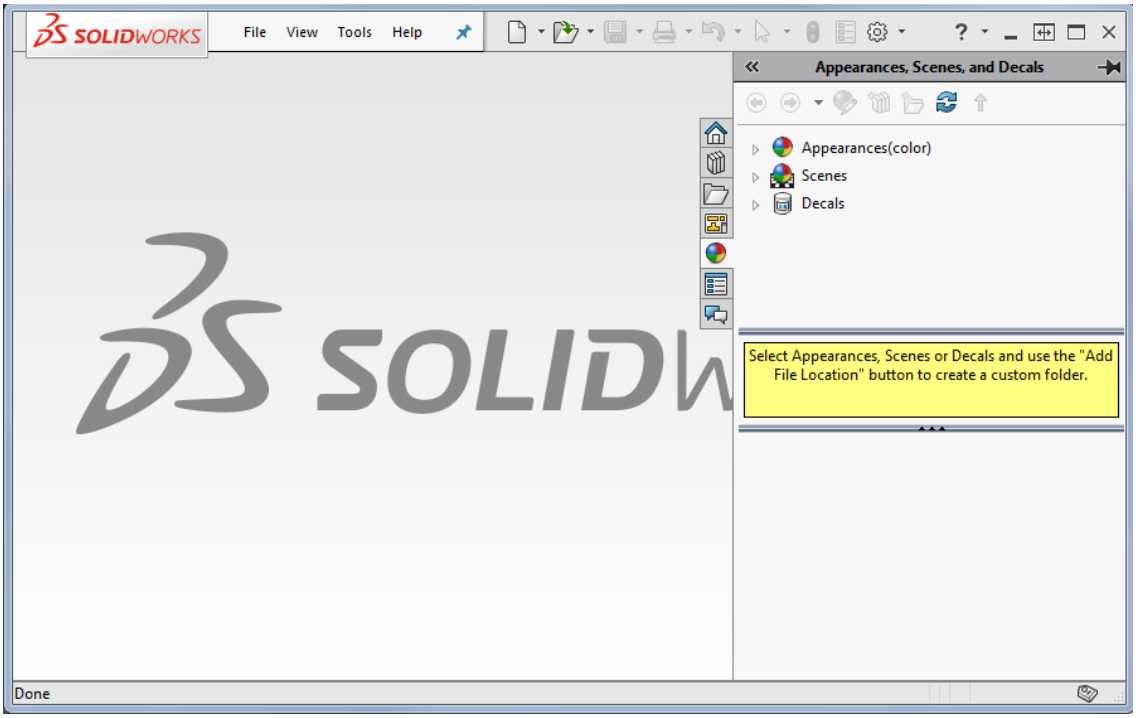
1. Getting Started

You can install SolidWorks on your personal laptop because the SolidWorks license covers all CMU students. The instructions and download files are on the IDeATe resources page:

https://resources.ideate.cmu.edu/equipment/cad-creating-parts/free-cad-software-available-to-cmu-students/

1.1 Run SolidWorks

Login to the Cluster computer. Search for, then run: **SolidWorks 2017**



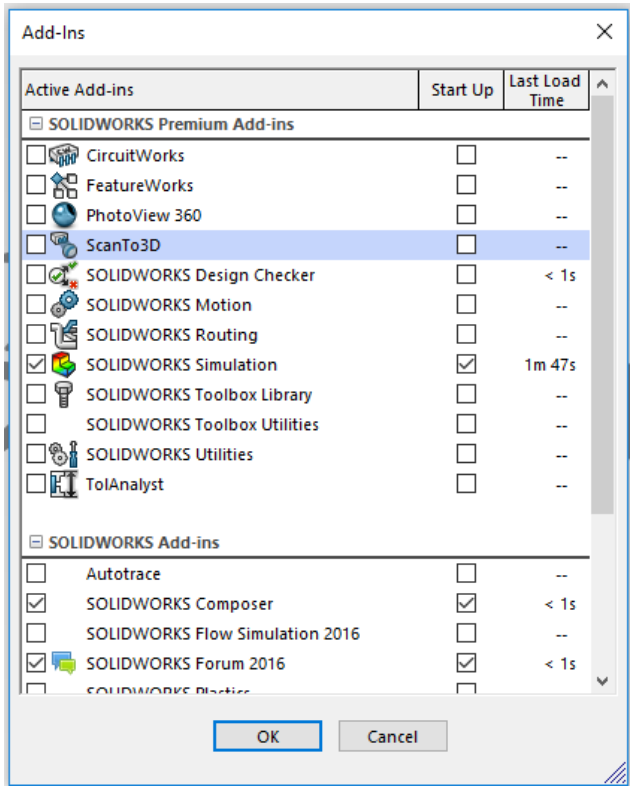
1.2 Surf the SolidWorks menus

Whenever you open a new software package, you should surf the menus just to see the sorts of things the software can do. Check out the buttons and menus. Note the menu bar in the upper left flies in and out. If you use the menus a lot, you can pin the menu bar open by clicking the blue thumb tack.

1.3 SolidWorks add-ins

SolidWorks has many **add-in** modules that can slow down the startup process and can slow down the application itself. Since we won't be using any of the add-ins, you can turn them off. Here's how to turn off **Simulation**.

Select **Tools → Add-ins.** You will get a pop-up window with all the available add-ins. There are two sets of checkboxes: one shows the currently active add-ins. The other enables you to prevent the add-ins from being loaded at startup. Go through the Active Add-ins checkboxes and un-check all the active add-ins. Be sure to look at the available add-ins in case you need one later.



1.4 Document templates

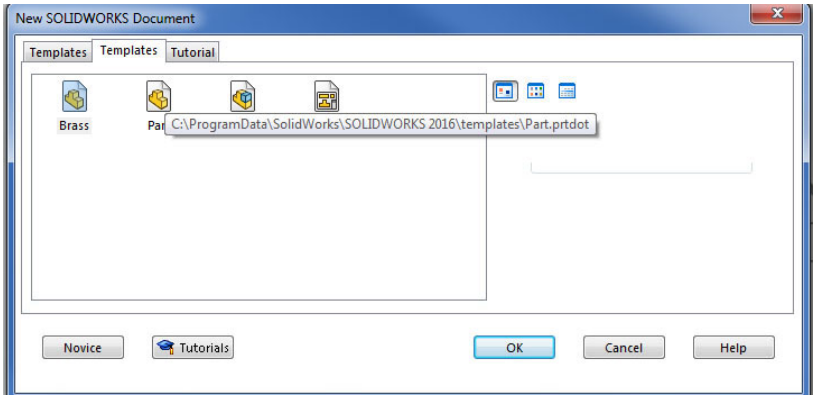
Templates allow you to store default settings for different types of drawings. For example, you might have one template for floorplans and a different template for mechanical assemblies. Templates can include settings for Document Properties like:

- grid spacing
- extension line and break line gap
- balloon bent leader length
- text scale and text display size
- material density

We will be creating a part in inches in this lab, so let's create a new template that uses IPS (inches, pounds, seconds) units.

Select **File → New →Templates → Part** (double click on part). The screen shot of the popup window is on the next page.

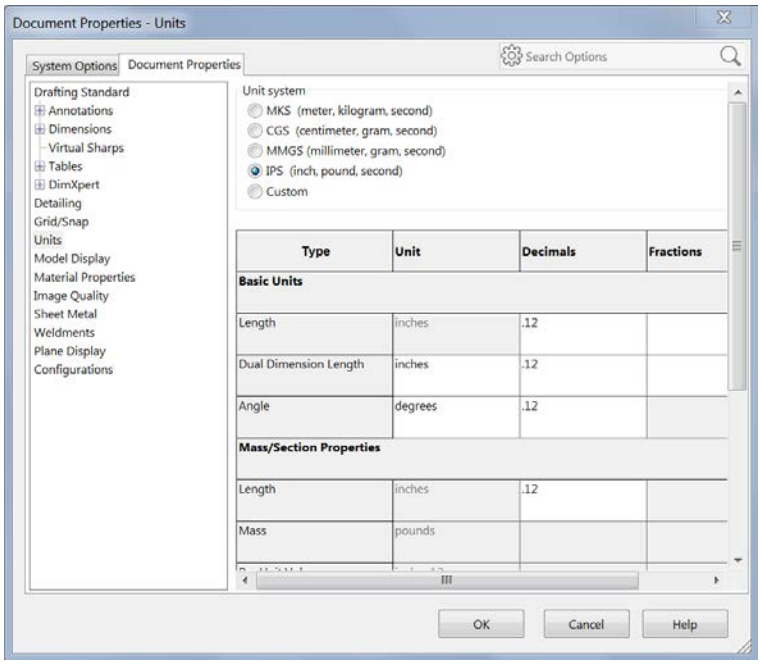
Note: You may have the Template tab after you select **File → New** or you may need to press the **Advanced** button in the lower left corner of the window.



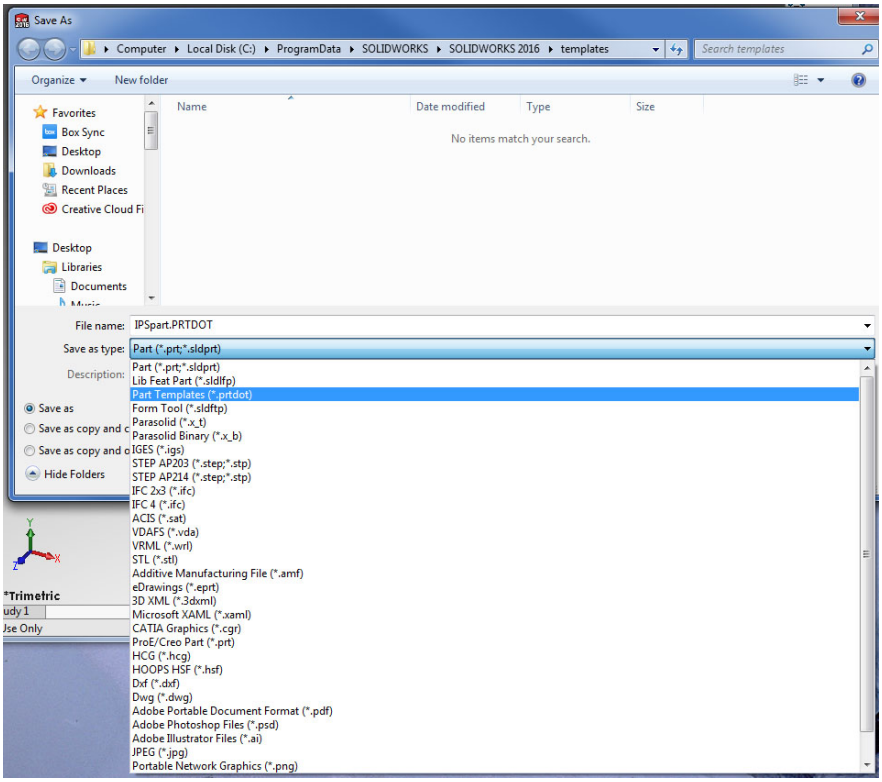
You will get a blank screen. That's OK because now you have all the menus that let you define part properties. Next, select **Tools → Options → Document Properties → Units → IPS** (inch, pound, second).

Note: **Tools** is a pull down menu in the upper left of the main window. **Options** is the next to the last line in the pull down menu for Tools. **Document Properties** is a tab in the Options popup window. **Units** is an option on the left side of the Document Properties window and **IPS** is a radio button in the Units window.

After you select IPS, click on OK.



Finally, to save the template, select **File → Save As → Part Templates** (*.prtdot). I saved mine as IPSpart.prtdot.



Now that you have the SolidWorks window set up, you can start creating parts