Assembly Load Options

This Tech Tip looks at ways in which you can open assemblies for faster loading.

Assembly Open As

Opening large assemblies can sometimes take a bit of time to load, so there are a few settings that can help with performance.

The tools that have been around for a while that help with performance, inactivated parts and simplified parts/assemblies, have been grouped in the solid edge options, "Open Assembly As" tab and can be used to define how each of these can be configured when an assembly is opended, depending on the size of the assembly – small, medium or large.

Users can define Small, Medium, and Large assemblies using their own criteria or the default values defined for you. Small assemblies are defined by being less than the amount entered. Large Assemblies are defined by being more than the amount entered. Medium Assemblies are defined by a range between the small and large values. The size (number of unique parts) is going to differ for each user and may be a lot lower for some if they have use complex parts.

Once you have defined the size of your assemblies, you can then configure how to display the files – active/inactive, as design/simplified, etc. The default for opening assemblies is to auto-select, but you can force solid edge into opening as one of the 3 settings or just use how it was last saved.

In the File Open dialog box, you can access these settings by selecting an assembly and you can change from the default option with the drop-down selector.

Also, by clicking on the More button you can override the defaults for active/inactive and as design/simplified.

If you use configurations, then you can also use a specific configuration to open the assembly with.

Assembly Preview

Siemens have added a new Assembly Preview option with Solid Edge 2022 to further enhance the ability to open assemblies more efficiently.

Once again, looking at the Options, General Tab, you will see there is an option to save the geometry and assembly structure data to the assembly. Note that this saves data to top-level assembly only and saved data will increase assembly file size.
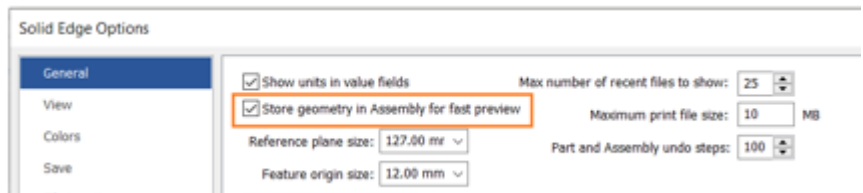
There is also a setting in the Assembly Open As tab to read saved data into Preview only if the assembly is determined to be a large assembly and only top-level assembly is opened.

When you open what has been configured to be a large assembly (and you have the above option checked) will use the Assembly Preview to quickly open the assembly.

When you open an assembly in Preview mode, you will notice that there is a new environment for Previewing Assemblies that includes:
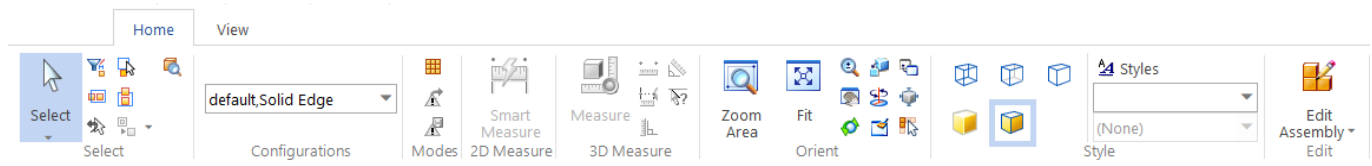
- Selection
- Configurations
- View Manipulation
- Style

You will be able to locate parts graphically and with the assembly pathfinder.
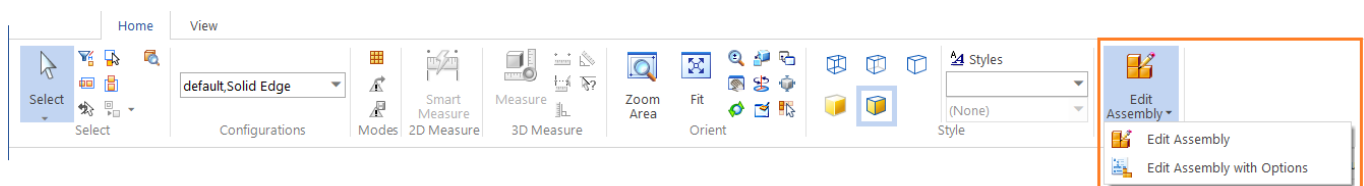
There are 2 options in the Edit Assembly from Preview

- Edit Assembly
- Edit Assembly with Options

To Edit the assembly in the Assembly Environment.

- Only load what is shown in preview.
- Reduced load times because of reduced content.
- Can load more later if needed.

Open in Preview

Hide to Reduce
Scope for Load

Edit the
Assembly