SOLIDWORKS Template Management

Question

Are brand-new template files required each time you upgrade SOLIDWORKS to a new major version?

Answer

In general, you gain no specific advantage by re-creating templates from scratch in the newest version of SOLIDWORKS.

However, SolidWorks is continually improving, and in some cases, this includes fundamental improvements to how features operate or how their data is saved to files.

To take advantage of changes introduced in each major release, we recommend resaving your templates to update them to the latest version.

If your template files contain **Cosmetic Threads** or **Sheet Metal Features** that have been saved inside your template files, please review the recommendations below:

Cosmetic Threads

Changes made in SOLIDWORKS 2019 improved the quality and performance of Cosmetic Threads.

Key Take-aways:

- Simply resaving a file does not update any existing, pre-SOLIDWORKS 2019 Cosmetic Threads.
- New parts created with new templates use the new Cosmetic Thread architecture.
- New parts created with legacy templates (those containing Cosmetic Thread features created before SOLIDWORKS 2019) do not use the new architecture and so do not take advantage of the performance or quality improvements.
- You can upgrade these legacy template files, as well as legacy part documents, to the new architecture using the **Upgrade Cosmetic Threads** command (see recommendation below).

Details:

> For more details, please refer to our "2019 What's New" document or the "Upgrading Legacy Cosmetic Threads" topic in our help content.

Recommendation:

1. Select **Tools** > **Options** > **System Options** > **General** > **Allow cosmetic threads for upgrade**.
2. Open your template, right-click the top item in the FeatureManager design tree, and select **Upgrade Cosmetic Threads**. Note that this menu item does not appear after the cosmetic threads are updated.
3. Save the template. Note that files based on these updated templates will take advantage of the new architecture to improve the quality and performance of Cosmetic Threads.

Sheet Metal

Changes made in SOLIDWORKS 2013 improved the quality, performance, and fundamental behaviour of Sheet Metal.

Key Take-aways:

- You cannot update Sheet Metal features from SOLIDWORKS 2012 or earlier.
- Old template files, and part files, from SOLIDWORKS 2012 or earlier keep the original sheet metal behaviour.
- Simply saving a part file to the new version does not automatically upgrade the legacy Sheet Metal features. However, template files are slightly different:

    a.   Legacy templates with NO existing Sheet Metal features:
    The new Sheet Metal architecture is automatically applied by SOLIDWORKS 2014 onwards to new parts created using legacy templates which don't have any existing Sheet Metal features. Quality, performance, and functional improvements are automatically applied to new parts created from such templates.

    b.   Legacy templates WITH pre-existing Sheet Metal features:
    If new parts are created with legacy templates, and those templates contain existing Sheet Metal features created before SOLIDWORKS 2013, the new architecture improvements are NOT applied to these newly created parts.

Details:

For more details, please refer to our "2013 What's New" document or the "Examination of the FeatureManager Design Tree" topic in our help content.

Recommendation:

Verify if Sheet Metal features from before 2013 exist in your template files.

1. If none are present, new Sheet Metal features created in part files based on these templates use the new architecture if you are using SolidWorks 2014 or later. Note, per the best practices above, you should still consider saving the templates in the latest version of SolidWorks.
2. If Sheet Metal features from SolidWorks 2012 or earlier are present, contact Technical Support to discuss options for upgrading files to the new architecture. Note that support will be dependent on the quantity of files involved.