Solid Edge Embedded Client Best Practices

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Chapter

1 Solid Edge Embedded Client Best Practices

With any application, there are techniques that are considered to be *recommended* or *best practices* for accomplishing tasks. This document describes practices and processes that UGS recommends you follow when working with the Solid Edge Embedded Client.

Chapter

2 *Provide a Private Cache for Each User*

When working with Solid Edge Embedded Client, each user should have access to an assigned computer and individual cache.

> The location of the cache should be on the physical disk of the local machine. This is a personal cache and must not be shared by multiple users.

However, when this is not possible, you can use shared computers which have individually assigned cache configurations. In this instance, you should set up private caches for each user in a network location that can be accessed from any work location.

The following steps are a procedure for implementing a remote-mounted cache configuration:

Step 1: Log onto the operating system of the computer.

Step 2: Create a mapped network drive utilizing the method recommended by your specific operating system.

Step 3: Start Solid Edge Embedded Client.

**Step 4:** Create a new part file and login to Teamcenter when prompted.

> If Teamcenter is not enabled, ensure that the Teamcenter add-in is installed and selected. To do this, on the Applications menu, point to point to Add-Ins, and then click Add-In Manager. On the Add-In Manager dialog box, ensure that Teamcenter is selected in the Available Add-Ins list, and click OK

Step 5:   Click Tools ® Options then click the File Locations tab on the Options dialog box.

Step 6:   Select SEEC Cache and click Modify.
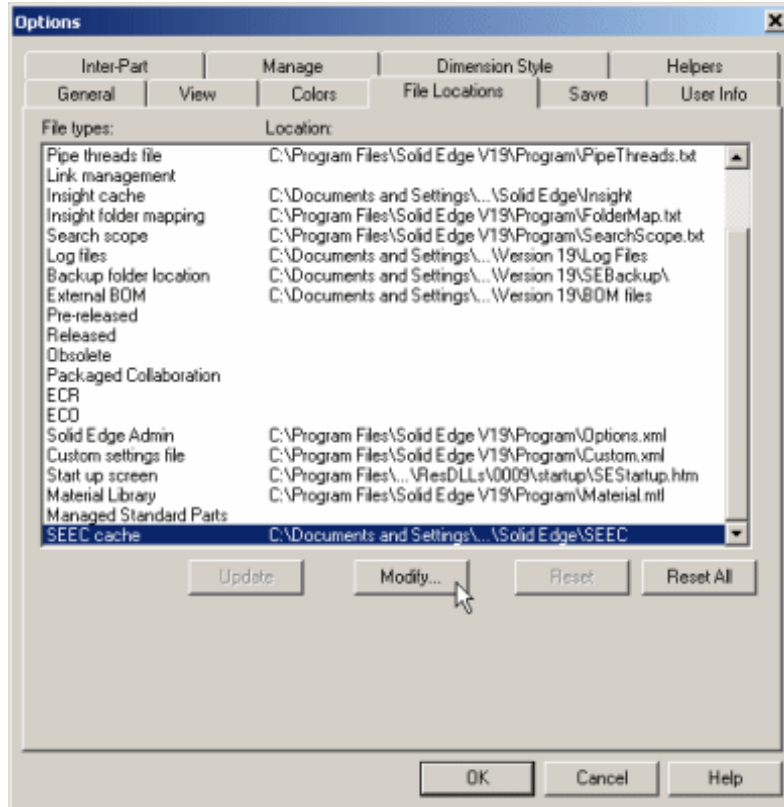
Step 7:   Browse to the mapped drive and select the cache root folder.

Step 8:   Click OK to exit each dialog.

Follow the process for each system to create the same mapped drive and set the SEEC cache using the File Locations tab.

If the mapped drive changes, you will need to reconfigure the mapped drive on each computer that uses the remote-mounted cache configuration.

Chapter

3 *Assembly Best Practices*

Opening large, managed assembly documents can be time-consuming. The application spends time running a query to determine the assembly structure based on the Teamcenter Revision Rule, checking versions, validating permissions, and transferring the files to your system. You can actively control how some of this time is spent to make working with large assembly documents on a day-to-day basis as efficient as possible.

Depending on your circumstances, you might need to work with all of the files referenced by an assembly, or you might only need to work with a few of them.

When you are not yet sure how many files within an assembly you need to work with, or when you know for sure that you only need to work with a few of them, you should open assemblies with Hide All Components and judiciously open and show only those subassemblies you need to work with.

When you know you need to work with all or most files in a large assembly, you should use the Solid Edge revision rule that reduces the work by validating only the selected assembly document and then uses the version of files in your cache to optimize performance.

Use Hide All Components to Efficiently Work with Large Assemblies

When working with a portion of a large assembly, you can control how much of the assembly is downloaded to cache by hiding the components you do not need.

> Solid Edge Draft requires the entire Assembly structure. This workflow is not supported when you detail assemblies in the Draft environment.

You should open the assembly with all components hidden, and then use Assembly PathFinder to navigate, expand, and show only the components you need. Opening the assembly with all components hidden, only the direct first-level children of the assembly being opened are downloaded to cache.

Read the Assembly PathFinder structure to decide which components you need next, and select the Expand command or click the + to download the next level of the assembly to the cache as needed. Once you expand the levels of the assembly you want to work with, you can then show the parts and subassemblies with optimum performance.

If the entire subassembly branch is required, you can select Expand All, resulting in a download of all required documents.

Step 1: Start Solid Edge with Teamcenter enabled.

Step 2: Choose File® Open.

Step 3: Select an assembly and set the Hide All Components option.
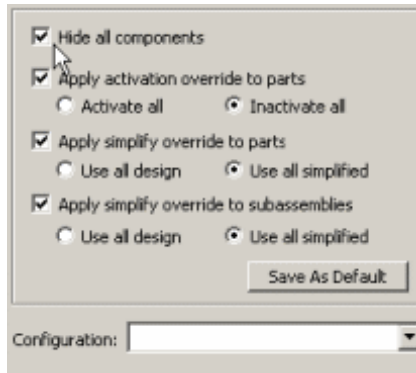
Step 4: Click Open and Assembly PathFinder displays the first level of the assembly.

Step 5: Right click a subassembly and on the shortcut menu, click Expand.

The next level of that branch is downloaded to cache, enabling navigation at that level.

To open all of the components within a subassembly, click the Expand All command on its shortcut menu.

When you have expanded the assembly structure, you can then show the components in the most efficient manner.

Use Version from Cache to Optimize Performance with Large Assemblies

When you know you need to work with all or most files in a large assembly, you should use the versions of files in your cache to optimize performance.

Solid Edge Embedded Client utilizes a local cache when working with managed Teamcenter documents. The performance cost of running a query to determine an assembly structure based on the Teamcenter Revision Rule, checking the versions, validating permissions and transferring documents increase as the assembly size increases. When you work with the same data all day and you know the information is up-to-date, you can improve performance by using the Solid Edge Revision Rule *Version from Cache*. With this option, the version information is validated and the documents are check out, but no file transfers need take place. With Solid Edge Embedded Client, the cache is persistent between sessions. Using the data in the cache optimizes performance.
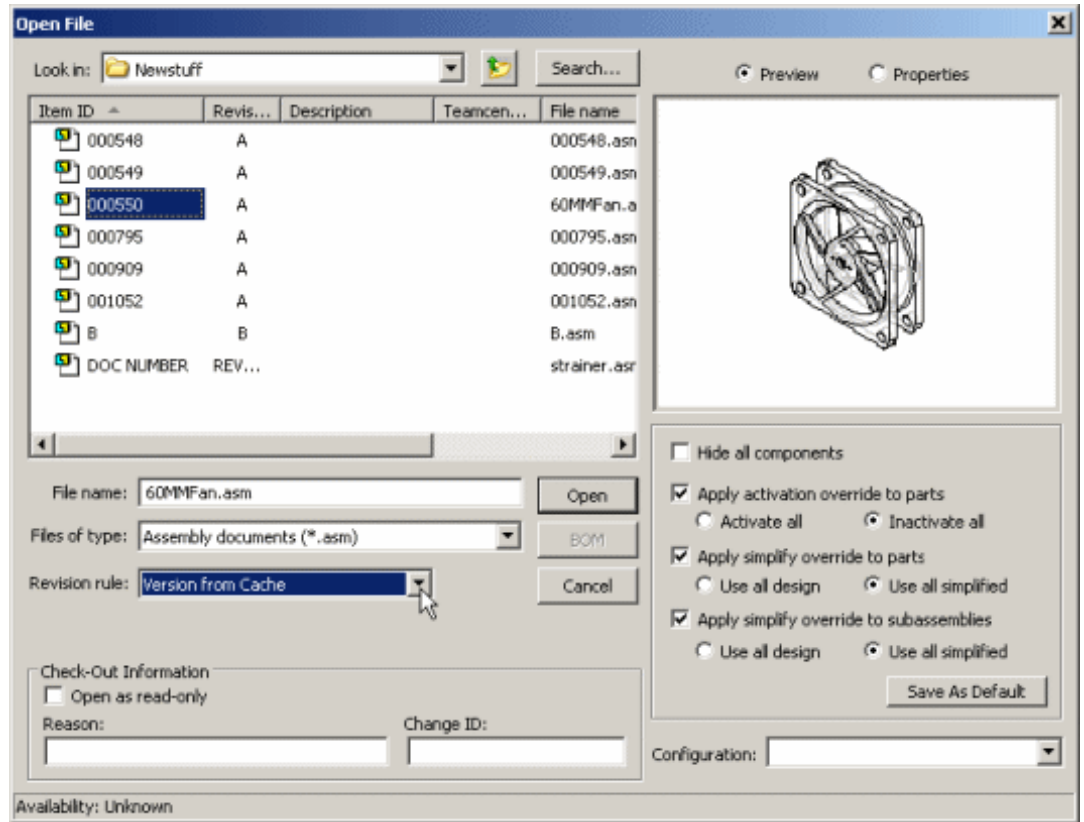
Step 1: Start Solid Edge with Teamcenter enabled.

Step 2: Click File® Open and select the assembly.
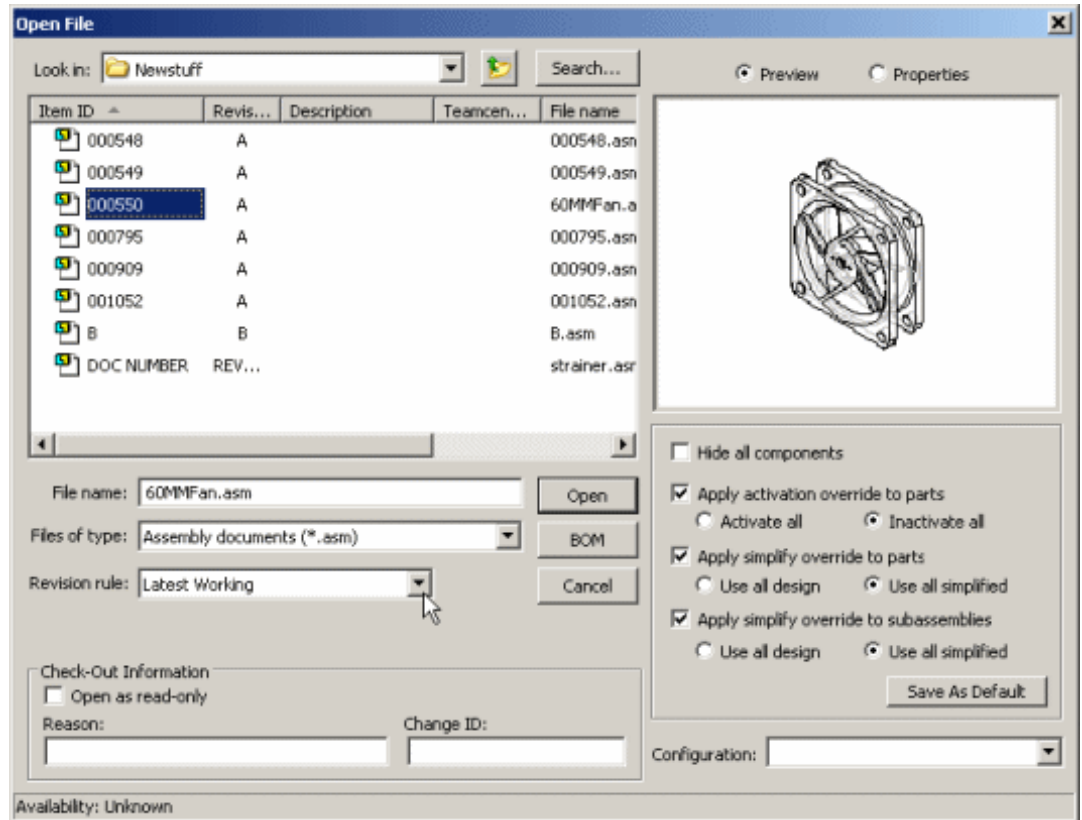
Step 3: Set the Revision Rule to Latest Working and click Open.

This will open the document and populate the cache for your working session.

Step 4: On a subsequent working session using the up-to-date data, open the assembly using the Revision Rule Version from Cache.

Step 5:   Click Open. All subassemblies will be configured to use what is already downloaded to cache, minimizing the impact to performance.

Chapter

4   Manually Clear Cache Before Redefining Cache Location

To optimize performance, documents from Teamcenter are downloaded once to the local machine when accessed and then only downloaded again if they are out-of-date. The local download area is called a *cache* and is a folder in the Windows file system where a copy of the files is kept. Beginning with V19, the cache location is predefined as *%APPDATA%\Unigraphics Solutions\Solid Edge\SEEC*.

> Changing the predefined cache location removes the existing contents of the cache.

When you have a need to change the predefined location for cache, you should schedule the change at the beginning of a project, use Cache Assistant to check in all files you want to keep in Teamcenter, and manually clear your cache using the Reset button in the Cache Assistant, which is located on the Manage menu.

**Step 1:**   Start Solid Edge with Teamcenter enabled.

Step 2:   On the startup screen, choose Manage® Cache Assistant. Connect to Teamcenter if prompted.

Step 3:   Evaluate the contents of the cache. Check in all items that are currently checked out. If you have items checked out that you do not want in Teamcenter, use the shortcut menu option Undo Check-Out.

> Repeat this process for each cache folder in the Connection field of the Cache Assistant dialog.

Step 4:   Click Reset. You are notified that resetting connections will perform several tasks.
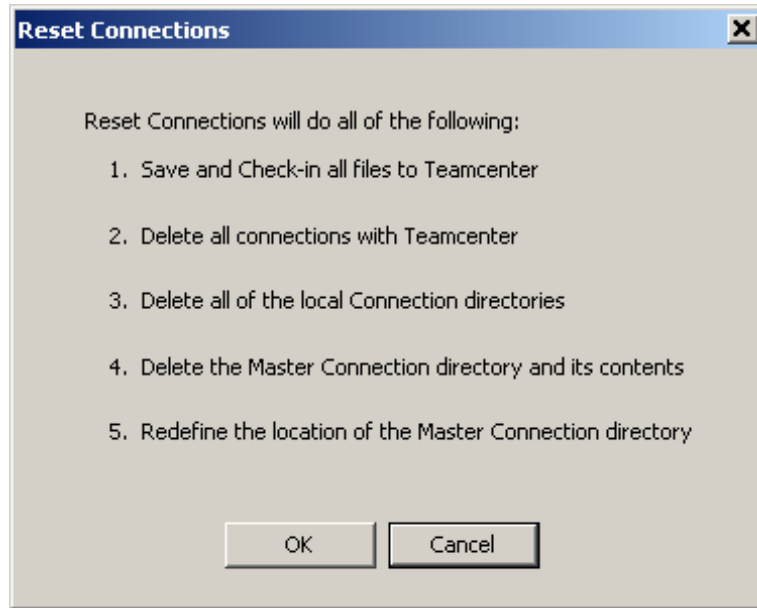
Step 5:   Click OK then verify your intention to reset the cache by clicking Yes. Close the Cache Assistant dialog box.

Step 6:   From the startup screen under Create, choose any environment to open a new document.

Step 7:   Choose Tools® Options® File Locations.

Step 8:   Highlight the SEEC Cache entry and click Modify. The Browse for Folder dialog displays.

Step 9:   Define the new location for the cache.

It is recommended that the location of the cache be on the physical disk of the local machine. This is a personal cache and must have exclusive permission for access. It is not to be shared with other users.

Step 10:   Select OK on the Browse for Folder dialog box.

Step 11:   Select OK on the Reset Connections dialog box.

Step 12:   Select OK on the Options dialog box.

Step 13:   Close the open document.