The Library Tool

VehicleSim browsers include a tool to manage groups of datasets in a library. You can access the tool with the Tools menu item **Library** Tool, which will bring up the window shown in Figure 1. The window has control to assemble an arbitrary group of datasets from any library that can then be modified or exported to an expanded Parsfile (for import by another user).

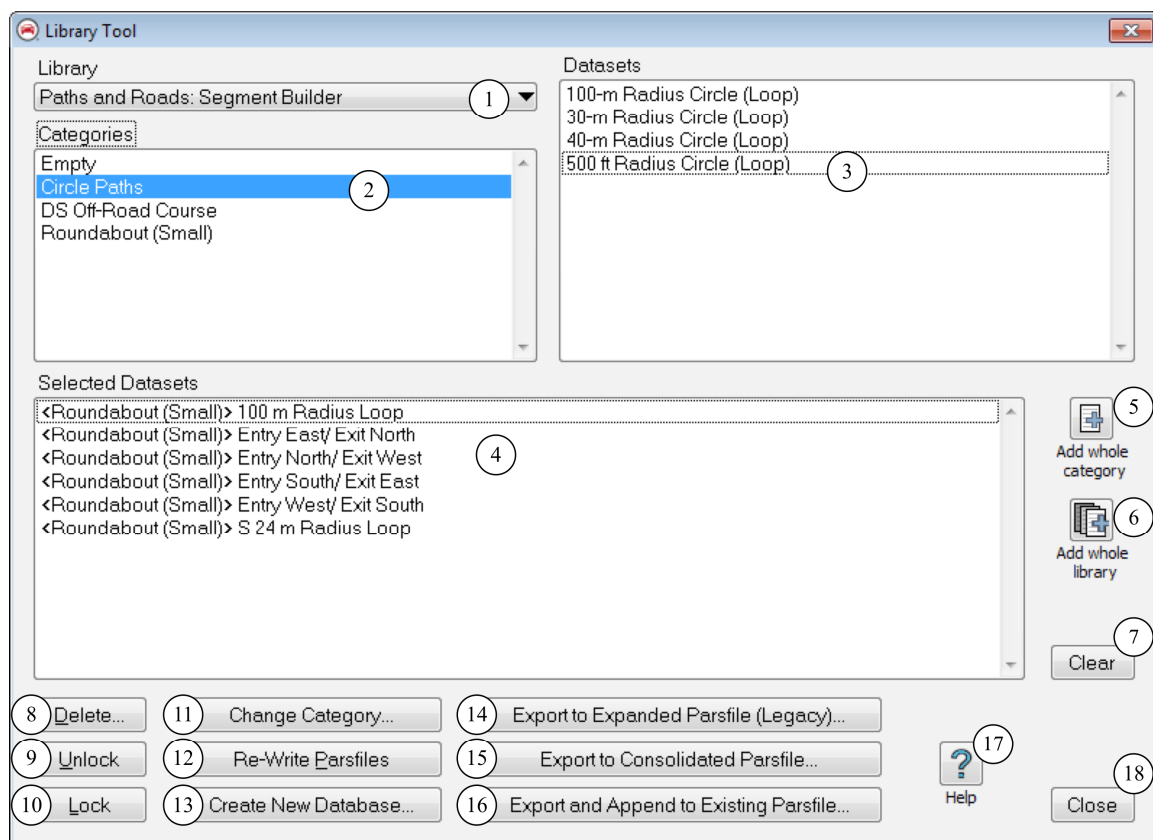You can also access the tool by clicking on the **Lib Tool** button:

Figure 1. Library Tool.

User Controls

The controls on the Library Tool window are described below by number.

(1) Drop-down control used to select a library. When the window first appears, the library associated with the current screen is selected. However, you can use this to bring up a list of all libraries and select a different one.

(2) **Categories** field. This lists categories of datasets in the current library. Click on a category to see all the associated dataset names in the adjacent field (3). Double-click on a category to move all of its datasets into the **Selected Datasets** field (4).

(3) **Datasets** field. This lists datasets in the selected category (in field (2)). Double-click on a dataset name to move it to the **Selected Datasets** field (4).

(4) **Selected Datasets** field. All datasets in this field will be affected when you click on one of the buttons at the bottom of the window. Double-click on a dataset name to remove it from this list.

(5) **Select whole category** button. Click this to add all datasets in the current category (those shown in the **Datasets** field (3)) to the **Selected Datasets** field (4).

(6) **Select whole library** button. Click this to add all datasets in the library to the **Selected Datasets** field (4).

(7) **Clear** button. Click this to clear the **Selected Datasets** field (4).

(9) **Delete** button. Click to delete all of the selected datasets. You will be prompted to confirm that you really want to do this. (Be careful. Once deleted, there is no easy way to get the data back.)

(10) **Unlock** button. Click to unlock of the selected datasets.

(11) **Lock** button. Click to lock of the selected datasets.

(11) **Change Category** button. Click to bring up a dialog box prompting you for a new category name for all of the selected datasets. You will still have an option to cancel if you decide not to create a new category name.

(12) **Re-Write Parsfiles** button. Click to re-write all of the Parsfiles (data files with the extension PAR) for all the datasets listed in the **Selected Datasets** field (4). This is used if there are problems or inconsistencies in datasets that were manually edited or imported improperly.

(13) **Create New Database** button. Click to create a new database that contains all the datasets listed in the **Selected Datasets** field (4), plus any datasets and supporting files used in those datasets. If you click this button, you will be prompted for several options:

1. If you are selecting datasets from the **Run Control** library, you will be asked whether to include the current Preferences dataset into the new database.

2. You will be asked whether you should keep a single window and switch to the new database, or add a new window for the new database while keeping the current window open. If you keep the current window open, you will retain all of the Undo history in the current database.

3. You will be asked to provide a location for the new database.

The browser will then create the new database and switch to it. Depending on the number of datasets you have selected, this will take several seconds to over a minute.

This button is equivalent to generating a Consolidated Parsfile that contains all of the selected datasets, and then using the **File** menu item **New Database from a Consolidated Parsfile**, and then choosing the file you just created. The Consolidated Parsfile is automatically named and then automatically deleted when the new database is created, so it save you a few steps.

⑭ **Export to Expanded Parsfile (Legacy)** button. Click to create an expanded Parsfile (extension PAR) containing all of the selected datasets, plus all of the datasets referenced in links. (You will be prompted to name and locate the new file.) The expanded Parsfile can then be imported into another database to create all of the required datasets.

The expanded Parsfile made with this button includes only the contents of the Parsfiles for the selected datasets. Images, animator shapes, Simulink MDL files, etc. are not included.

Mechanical Simulation recommends always using Consolidated Parsfile button ⑮ rather than this legacy feature.

⑮ **Export to Consolidated Parsfile** button. Click to create a new Consolidated Parsfile (extension CPAR) containing all of the selected datasets, plus all of the datasets referenced in links, plus all supporting files used by the animator and browser (animator shapes, 2D images, audio, data files for TNO and FTire tire models, etc.). The CPAR file also includes top-level Simulink MDL files that are specified in datasets from the **Models Simulink** library.

You will be prompted to name and locate the new file. The Consolidated Parsfile can then be imported into another database to create all of the required datasets, including pictures linked files that are used by the vehicle models installed with the VS product.

If you are selecting datasets from the **Run Control** library, you will be asked whether to include the current Preferences dataset in the Consolidated Parsfile.

Be aware that the Consolidated Parsfile does not include files that are mainly handled by external software, such as Simulink secondary MDL and M files, VB source code, C source code, etc. If you have integrated other software with your VS database, you should ensure that the extra support files are copied separately if they would be needed in another database.

Another way to transfer files needed by external software is to use the `*CPAR_INCLUDE` keyword in a miscellaneous yellow field to specify a file that you wish to include in the Consolidated Parsfile.

⑯ **Export and Append to Existing Parsfile** button. This performs a similar function to the above two export buttons ⑮ and ⑯. However, instead of creating a new CPAR file with the exported data, the information is appended to an existing file.

This button provides a convenient means for making a single CPAR file based on datasets that would otherwise be unrelated. For example, you can include a set of Procedures and a set of vehicle Models that are not necessarily connected in specific datasets.

If you are selecting datasets from the **Run Control** library and appending them to an existing CPAR file, you will be asked whether to include the current Preferences dataset.

The type of file that is selected determines whether the export includes resource files. Appending to a Consolidated Parsfile (extension CPAR) will include the extra resource files that are included in a Consolidated Parsfile ⑯; appending to an expanded Parsfile (extension PAR) includes only text information (data, notes, and external Parsfiles) ⑮.

⑰ **Help** button. Click to view this documentation in a PDF browser.

⑱ **Close** button. Click to close the window.

Making New Databases

The primary use for this tool is to select datasets that will be used to create a new database that contains more than one **Run Control** dataset and the associate linked datasets.

> **Note** If you want to make a new database that is based on a single **Run Control** dataset, there are two options available from the **File** menu, which you can use after navigating to the **Run Control** dataset of interest. One is **New Database from this Dataset** (third item down). The other is to first make a Consolidated Parsfile using the menu item **Export Consolidated Parsfile** (in the third group of items), and then use **File** > **New Database from a Consolidated Parsfile**. The second option takes extra steps, but provides a CPAR file that can be archived or sent to other users.

On the other hand, if you want to make a database with multiple runs, or with a set of datasets that you want to be available (e.g., Plot Setup datasets), then this tool allows you to specify sets of datasets from multiple libraries. For the first group, use the **Export to Consolidated Parsfile** button ⑮ and give the CPAR file a name. For each additional library, select the datasets of interest and use the **Export and Append to Existing Parsfile** button ⑯.

When you export datasets from the **Run Control** library, you will be asked whether to include the current Preferences dataset into the new database. This is usually a good idea.