

The SNAP Kiosk System

The SNAP Kiosk system provides an intuitive user interface to allow users to perform analysis without a detailed knowledge of SNAP or the underlying analysis codes. This system includes the a hierarchical graphical model selector (Kiosk.exe) that allows the user to select from a pre-defined set of models. It also includes the Kiosk Builder (Kiosk Builder.exe) application that assists the model developer in organizing and describing each model for the user. And finally, the SNAP Kiosk system uses the ModelEditor in a special "Views Only" or "Kiosk" mode to open and use the models included in the kiosk.

The expected work-flow when using the SNAP Kiosk System is illustrated in Figure 1 and a simplified walk-through is given below.

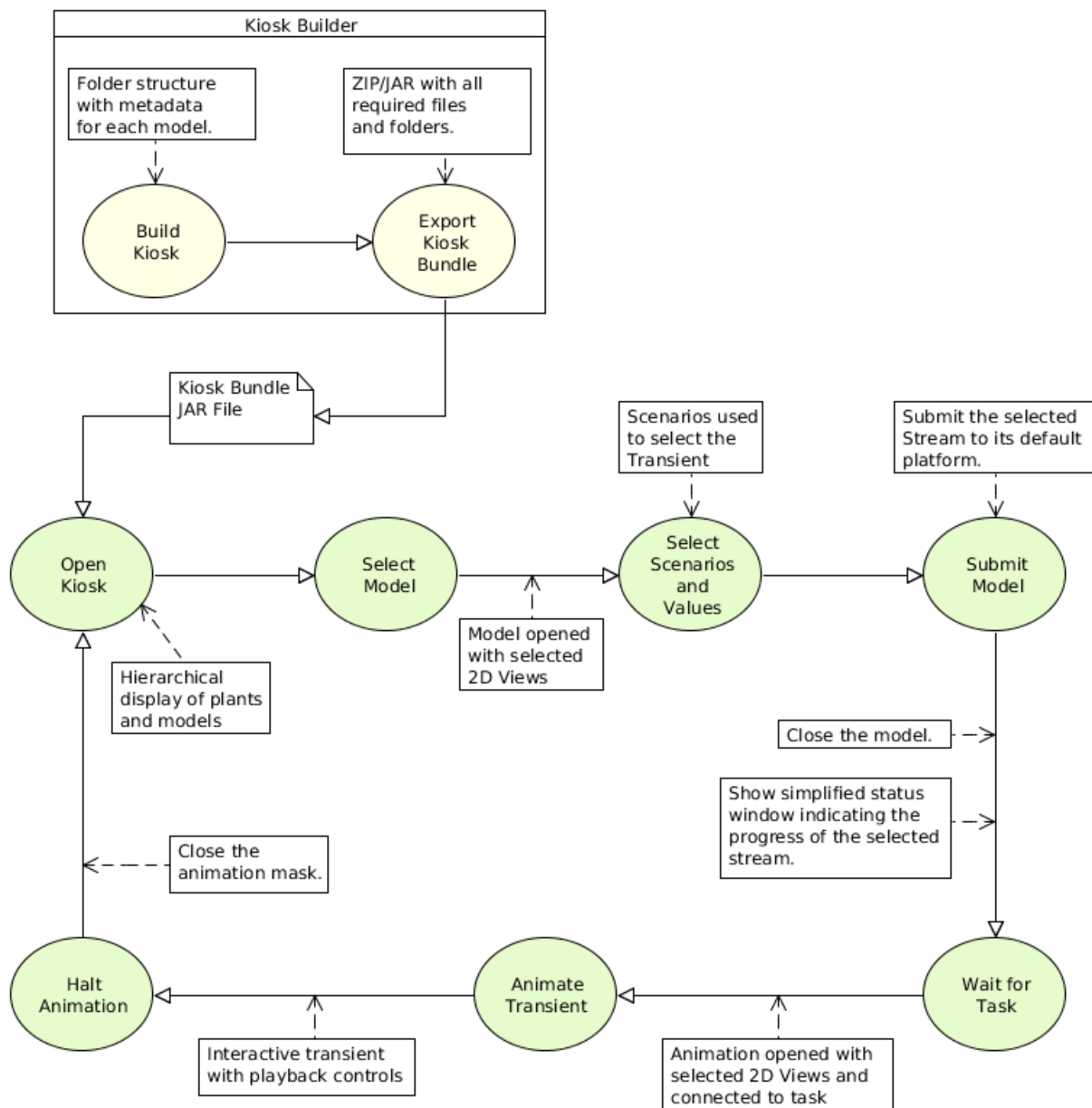


Figure 1: SNAP Kiosk System Work-Flow

1. Organize the models that will be included into a folder hierarchy by plant, transient, etc.

a) Create a folder that will contain all of the models for the kiosk: the *Kiosk Folder*

This folder organization will be honored by the Kiosk Builder and Kiosk display. It should be structured fit in the context in which the Kiosk will be used (by physical plant, transient type, etc.).

b) Copy the files that make up each model into sub-folders of the kiosk folder.

***Note:** The examples in this document use the Samples folder included with the SNAP installation as the Kiosk Folder. Not all of these models are properly setup for use in a Kiosk context. Where necessary, the TRACE "Stand Pipe" example will be used as it includes the bare minimum requirements of a model MED and Animation Mask MED.*

2. Open the SNAP Kiosk Builder.

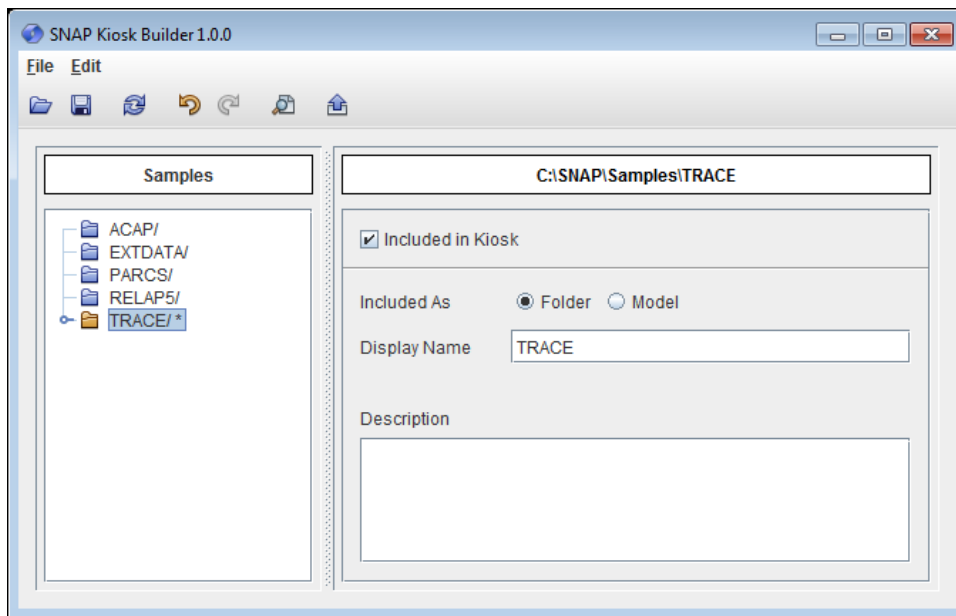


Figure 2: SNAP Kiosk Builder

The Kiosk Builder user interface (shown in Figure 2) consists of two parts split down the center by a drag-able separator. The left side is the folder Navigator tree and the right is the Properties panel displaying the properties of the node selected in the Navigator.

3. Select the *Kiosk Folder* created in Step 1 by pressing the **Open** button on the main toolbar.

The top of the Navigator displays the name of the selected Kiosk Folder. Below is a tree display of the folders contained in the Kiosk Folder. The icon for each node in the tree indicates whether the node is an included folder (📁), an excluded folder (📁), or a model (📄).

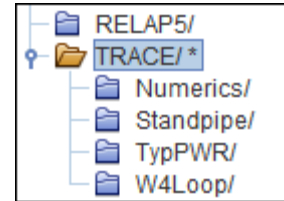
The top of the Properties panel is the full path to the node selected in the Navigator with its properties displayed below. The displayed properties include **Included in Kiosk** check-box, **Included As** radio buttons, **Display Name** field, **Description** Field, and **MED File** combo box.

4. Select each of the nodes in the Navigator that should be included in the Kiosk and check the **Included in Kiosk** check-box.

The **Included in Kiosk** check-box determines whether this folder (or Model) will be included

in the Kiosk Bundle (*.mekiosk) or the preview. The **Included As** radio buttons determine whether the selected node will be treated as a folder (containing other folders or models) or a model that can be opened. Below these are the **Display Name** and **Description** that will be displayed to the user in the Kiosk.

When a node is included as a Folder its sub-folders will appear in the Navigator. These folders can then be included as either folders or models.



5. Select a Model Editor Document (*.med) file for each included model.

For models, the **MED File** property is available to select the Model Editor Document (MED) file that should be opened. The file selected for this property will be opened in the ModelEditor in "Views Only" mode when the model is selected in the Kiosk.

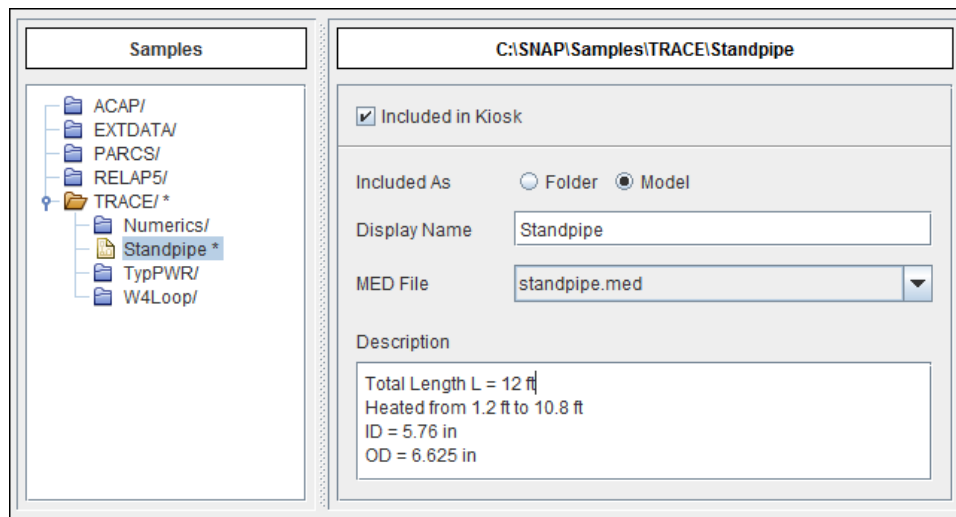


Figure 3: Example Model Properties

Note: Models can be made up of any number sub-folders and files (including MED files). The entire contents of the model's folder will be included in the Kiosk Bundle. This allows model auxiliary files and Animation Masks to be included directly in the bundle.

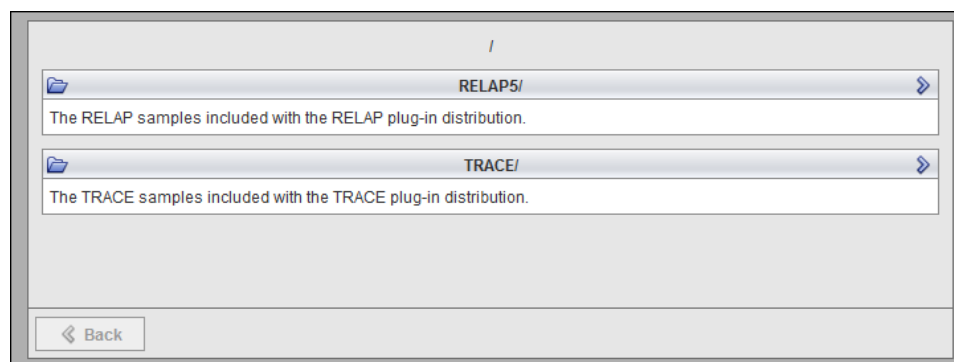


Figure 4: Example SNAP Kiosk – Top Level

6. Preview the hierarchy in the SNAP Kiosk by pressing the **Preview** (🖨️) button on the main toolbar.

This will open the SNAP Kiosk to select from the folders and models available in the Kiosk folder. Note that this is a Kiosk application and as such does not include an **Exit** button. It can

be closed either by right-clicking on the application in the task bar and selecting **Close** or by pressing **Alt-F4**.

7. Select the desired folder or sub-folder by clicking on the folder's "Heading."

The "Heading" of a folder or model entry is the button-like strip that includes the name and icon of the folder or model. The TRACE folder was selected for the example in Figure 5 below.

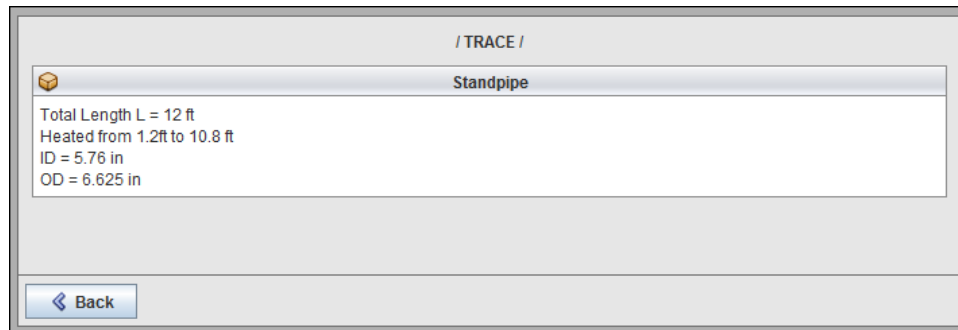


Figure 5: Example SNAP Kiosk – TRACE Sub-Folder

8. Select the desired model entry.

This will open the model in the ModelEditor's "Views Only" mode, shown in Figure 6.

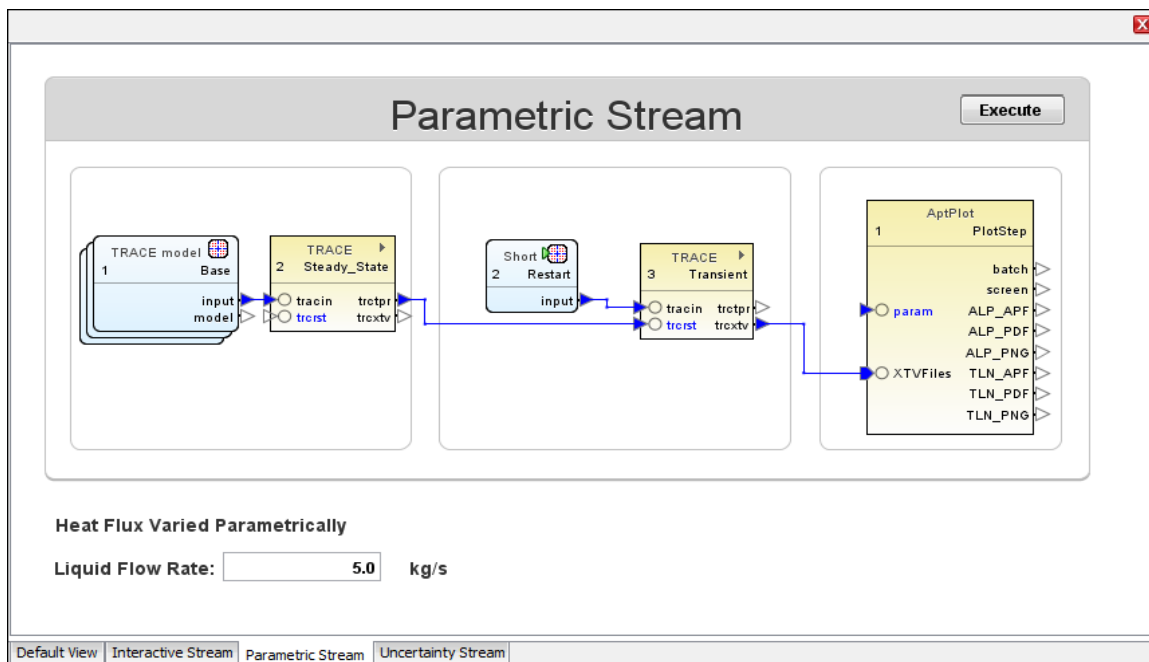


Figure 6: ModelEditor Views-Only Mode – Stand Pipe

Graphical elements in the view (such as user defined numerics) can be used to configure the model to support specific transient scenarios. The model can then be submitted/executed using any of the job streams present in the views. Job streams appear as click-able buttons in 2D Views (e.g. "Parametric_Stream" above). After submitting a model its views will be closed and the animation mask's views will be opened to allow the job to be animated and controlled.

9. Close the ModelEditor and the SNAP Kiosk.

*The ModelEditor can be closed by pressing the **Exit** () button. This button will also close any open models and terminate any currently executing Job Streams submitted by that ModelEditor session.*

*Again, since the Kiosk is intended to be a Kiosk, it can only be closed by right-clicking on the application in the task bar and selecting **Close** or by pressing **Alt-F4**.*

10. Export a Kiosk Bundle (*.mekiosk) from the Kiosk Builder by pressing the **Export** () button on the main toolbar.

This will export an archive (ZIP) file containing the entire Kiosk Folder and the information entered in the Kiosk Builder. This file can be opened directly by the SNAP Kiosk either on the command line or by selecting it when the SNAP Kiosk opens.

11. Copy the Kiosk Bundle (*.mekiosk) to the target computer.
12. Open the Kiosk Bundle in the SNAP Kiosk (Kiosk.exe).

Note: *The SNAP Kiosk operates the exact same way whether it is using a folder or a Kiosk Bundle (*.mekiosk) file for input. A Kiosk Folder can be opened directly by entering the path to the folder on the SNAP Kiosk (Kiosk.exe) command line.*