

**NAME**

stk, snow – A Scheme interpreter using the Tk toolkit

**SYNOPSIS**

**stk** [*options*] [*arg arg ...*]

**snow** [*options*] [*arg arg ...*]

**OPTIONS**

**stk** interpreter accepts several command-line options which may be abbreviated, as long as the abbreviation is unambiguous (e.g. **-h**, **-he**, **-hel** are three possible abbreviations for the **-help** option).

**-display** *display* Display (and screen) on which to display window.

**-file** *fileName* Read commands from *fileName* rather than standard input. The last element in *fileName* will be used as the title for the application and name of its interpreter for **send** commands (unless overridden by the **-name** option).

**-geometry** *geometry*  
Initial geometry to use for window.

**-name** *name* Use *name* as the title to be displayed in the window, and as the name of the interpreter for **send** commands.

**-new-colormap** Specifies that the main window should have a new private colormap instead of using the default colormap for the screen.

**-sync** Execute all X server commands synchronously, so that errors are reported immediately. This will result in much slower execution, but it is useful for debugging.

**-visual** *visual* Specifies the visual to use for the window. *Visual* may be one of the following: *best*, *directcolor*, *grayscale*, *greyscale*, *pseudocolor*, *staticcolor*, *staticgray*, *staticgrey*, *truecolor*, or *default*

**-no-tk** Don't initialize the Tk toolkit

**-load** *fileName* Evaluate expressions contained in *fileName* before reading expressions from standard input.

**-image** *fileName* Restore the state saved in *fileName* by the *dump* primitive (Note: For now, *dump* works only on SunOS 4.1.x, Linux 1.x (a.out format) and FreeBSD).

**-cells** *number* Set the default size for the heap to *number* cells. The given number is also the amount of cells used when extending the heap. Default value is 20000.

**-interactive** Tell the interpreter that it is used interactively (even if it doesn't think so).

**-help** Print a summary of the command-line options and exit.

**--** Pass all remaining arguments through to the script's **argv** variable without interpreting them. This provides a mechanism for passing arguments such as **-name** to a script instead of having **wish** interpret them.

**DESCRIPTION**

**Stk** is a Scheme R4RS interpreter which provide a simple access to the X11 Tk toolkit. If the **-no-tk** option is provided to the interpreter, the Tk library is not initialized and no main window is created. If **stk** is invoked with no **-f** option then it reads Scheme expressions interactively from standard input. It will continue processing commands until all windows have been deleted or until end-of-file is reached on standard input.

**Snow** is a *light* version of the **stk** interpreter which does not provide support for the Tk toolkit. This interpreter does not recognize the options **–display**, **–geometry**, **–sync new-colormap**, **visual** and **–no-tk** which are meaningless without Tk. This interpreter is called, rather than the standard one, when the shell **DISPLAY** variable is not initialized.

If the **–file** option is provided to Tk, then **stk** reads Scheme forms from the file named in the **–file** option. These forms will normally create an interactive interface consisting of one or more widgets. When the end of the command file is reached, **stk** will continue to respond to X events until all windows have been deleted.

The **–interactive** option forces the interpreter in interactive mode. In this mode, standard output and standard error are unbuffered. Use this option when you launch **stk** from **emacs**.

## VARIABLES

Following Scheme variables are set when **Stk** starts:

- \*argc\*** Contains a count of the number of *arg* arguments (0 if none), not including the options described above.
- \*argv\*** Contains a Scheme list whose elements are the *arg* arguments (not including the options described above), in order, or an empty list if there are no *arg* arguments.
- \*program-name\*** Contains *fileName* if it was specified. Otherwise, contains the name by which **stk** was invoked.

## SCRIPT FILES

If you create a STk script in a file whose first line is

```
#!/usr/local/bin/stk -f
```

then you can invoke the script file directly from your shell if you mark it as executable. This assumes that **stk** has been installed in the default location in */usr/local/bin*; if it's installed somewhere else then you'll have to modify the above line to match.

## ENVIRONMENT VARIABLES

**stk** uses the following shell variables:

- STK\_LIBRARY** This variable indicates where the library files are located. This variable allows to overload the default value of the Scheme variable *\*stk-library\** which is automatically calculated by the interpreter.(i.e. *stk* or *snow*).
- STK\_LOAD\_PATH** This variable serves to initialize the *\*load-path\** Scheme variable. This variable is a list of paths to try when in a load command.
- STK\_HELP\_PATH** This variable serves to initialize the *\*help-path\** Scheme variable. It must contain a list of documentation directories. This variable is used by the help procedure.

**FILES***./init.stk**\$STK\_LIBRARY/STk/init.stk*

When **stk** starts running, it tries to load the file *init.stk* in the current directory. If this file is not present, it tries to load this file in the **STk\_LIBRARY** directory (the value of **STk\_LIBRARY** is automatically computed to be in a sibling directory of the interpreter executable).

*~/stkrc*

Standard *init.stk* file tries to load the file *~/stkrc*. This file can be used to store function definitions or variables settings that you want to be executed at each interpreter invocation.

**SEE ALSO***wish(1)*