

**NAME**

trad - graphical user interface to Radiance rad(1) program

**SYNOPSIS**

**trad** [ **rfile** ]

**DESCRIPTION**

*Trad* is a graphical user interface to *rad(1)*, which controls the operation of the basic Radiance scene compiling, rendering and picture filtering programs. Trad also includes links to a few utilities for displaying and converting results, but most of what it does can be done by editing a small text file, called the "rad input file". Scene creation still requires the use of a text or graphical editor, or translation from some external CAD format.

*Trad* is based on the Tcl/Tk *wish(1)* "windowing shell" written by John Ousterhout. (See below for instructions on installing this package if you do not have it already.)

The *trad* interface divides the rendering problem into seven screens: File, Scene, Zone, Views, Options, Action and Results. The File screen is used to load and save rad input files (a.k.a. project files). The Scene screen is used to name the Radiance input files associated with a particular project. The Zone screen is used to assign *rad* variables specific to the section of the model being rendered. The Views screen is used to define specific views to be rendered and set the picture file names and dimensions. The Options screen is used to adjust rendering quality and other parameters. The Action screen is used to initiate interactive and batch renderings. The Results screen is used to display, convert and print the rendered Radiance pictures.

If *trad* is called with no rad input file name on the command line, it will start with the File screen and you must enter a valid project file before you will be allowed to continue. If *rfile* is given, then *trad* attempts to open this file. If no such file exists, *trad* assumes you are creating a new file by this name and goes to the Scene screen so you may identify the appropriate Radiance input files. If the file exists but not all renderings have been finished, *trad* goes first to the Action screen, assuming you will want to do something. If the file exists and all renderings have completed and are up-to-date, *trad* goes to the Results screen so that you may examine the final pictures.

*Trad* includes an extensive help facility, which may be accessed either by pressing the "HELP" button and searching through the category and topic menus, or by holding the Control key and pressing the left mouse button on the mysterious widget (i.e. the button, entry window, or list box you are curious about).

**INSTALLING TCL/TK**

The Tcl/Tk package is available by anonymous ftp from ftp.sml.com (204.153.12.45) in the /pub/tcl directory. (Tcl stands for "Tool Command Language," and is pronounced "tickle".) *Trad* is based on Tk release 4.0, which in turn is based on Tcl release 7.4. Although *trad* uses only the *wish* program from this package, *wish* itself depends on additional Tcl and Tk libraries, and the two toolkits must be compiled one after the other.

To compile the Tcl/Tk package, download the files "tcl7.4.tar.Z" and "tk4.0.tar.Z" and uncompress and untar them. Then, follow the instructions in the README file in the tcl7.4/ directory to configure the Makefile for your system and install the software. (Usually, it is best to do this as root or have it done by your system administrator if you do not have root privileges.) Then, do the same in the tk4.0/ directory.

*Trad* should run without modification once this is done correctly.

**AUTHOR**

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*wish* and Tcl/Tk language by John Ousterhout

**SEE ALSO**

oconv(1), pfilt(1), rad(1), rpict(1), rview(1), wish(1), ximage(1)